

Susquehanna River Basin Commission

a water management agency serving the Susquehanna River Watershed



May 20, 2015

TO ALL CONCERNED:

At the March 5, 2015 Commission meeting, the draft minutes of the December 5, 2014, Commission meeting were approved as written. Please attach this notice to your copy of the December 5, 2014, minutes.

- DRAFT -

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

**MINUTES OF THE
SUSQUEHANNA RIVER BASIN COMMISSION
March 5, 2015
#2015-01**

The meeting was held at the Hershey Lodge, 325 University Drive, Hershey, Pennsylvania. Chairman Lynch called the meeting to order at 9:00 a.m.

ROLL CALL

Commissioners Present

**Alternate Commissioners
and Advisors Present**

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

Ms. Kelly J. Heffner, Deputy Secretary for Water Management, Pennsylvania Dept. of Environmental Protection (PADEP)

Mr. Saeid Kasraei, Program Administrator, Water Supply Program, Maryland Dept. of the Environment (MDE) (via teleconference)

Col. J. Richard Jordan, III, District Engineer, U.S. Army Corps of Engineers (USACE), Balt. Dist. (via teleconference)

Staff Present

Mr. Andrew Dehoff, Executive Director

Mr. Andrew Gavin, Deputy Executive Director

Ms. Marcia Rynearson, Director, Administration & Finance

Ms. Stephanie Richardson, Secretary to the Commission

Ms. Paula Ballaron, Manager, Policy Implementation & Outreach

Mr. Todd Eaby, Manager, Project Review

Mr. Brydon Lidle, Manager, Information Technology

Mr. Jason Oyler, Regulatory Counsel

Also Present

Ms. Rhonda Manning, PADEP

1. Opening Remarks from the Chair

Chairman Lynch provided an opening statement outlining the rules of conduct for the meeting and introduced the other commissioners, noting that Commissioners Jordan and Kasraei were participating via teleconference. The Chairman noted that Agenda Item 2, Presentation: Investigation of *Didymo* in the Susquehanna River Basin, was tabled due to the inclement weather conditions.

2. Minutes of December 5, 2014, Commission Meeting

On a motion by Commissioner Heffner, seconded by Commissioner Jordan, the minutes of the regular business meeting of December 5, 2014, were unanimously approved as written.

3. Revised FY-2016 Budget

Director of Administration and Finance Marcia Rynearson presented a revised budget for FY-2016, which covers the period July 1, 2015, to June 30, 2016, and a resolution (Exhibit A) to adopt same. This revised budget contains revenues and expenses for the general fund and the water management fund, which was first presented and approved June 2014. She noted that in this revised budget the revenue and expenses have changed due to receipt of additional grants and increased expenses due to increases in contractual costs for subcontractors and water management projects that are anticipated and an increase in employee pension benefit costs.

On a motion by Commissioner Heffner, seconded by Commissioner Jordan, the Commission unanimously adopted the resolution submitted by the Director of Administration and Finance.

4. Contracts and Grants

The Director of Administration and Finance Marcia Rynearson presented the following requests:

a. Grant Amendment Ratification - Amend the Surface Water Monitoring Agreement (Pennsylvania Department of Conservation and Natural Resources)

A request that the Commission ratify the signing of this grant amendment. The initial grant provided for staff to conduct routine monitoring activities on State Forest Lands, including water quality grab samples, aquatic macroinvertebrate surveys, fish population assessments and periphyton assessments. It also included assessment of water quality data, streamflow, habitat, and biological studies at select locations, and the installation of datasonde stations at three additional locations. This amendment extends these monitoring activities to an additional two years. Under this agreement Pennsylvania Department of Conservation and Natural Resources will provide \$215,000.

b. Grant Ratification – Rausch Creek Mine Evaluation and Discharge Transport Project (Pennsylvania Department of Environmental Protection, Bureau of Conservation and Restoration)

A request that the Commission ratify the signing of this grant agreement. The Rausch Creek Treatment Plant (RCTP) was built in 1973, and was designed to intercept and treat the entire flow of Rausch Creek prior to mixing it downstream with Pine Creek. During periods of heavy rainfall flows exceed what the plant is capable of treating. The Commission, through mine pool mapping work completed by the Eastern PA Coalition for Abandoned Mine Reclamation (EPCAMR), has become interested in the potential of using the Brookside Mine Pool, which is drained by the Valley View Tunnel outfall, as a source of consumptive use mitigation/low flow augmentation water. Consequently, the Brookside Mine Pool could be utilized as an underground storage reservoir, storing water during times of heavy precipitation, possibly reducing flood flows, and discharging water during periods of drought to reduce the ecological impacts of drought flows and supply water to downstream water users.

Phase I of this project, which is funded through the Pennsylvania AMD Set-Aside Grant Program, will investigate the feasibility and cost of various options designed to transport flows, treat or convey discharges, and utilize the Brookside Mine Pool for consumptive use mitigation/low flow augmentation storage. Subcontractors, at a cost not to exceed \$100,000, will be used to assist with additional mine mapping, water quality analysis and drilling. Pending the outcome of this project, a Phase II proposal would be prepared to fund construction of the preferred option(s). Pennsylvania Department of Environmental Protection will provide \$440,559 and SRBC will provide \$85,535 for a total of \$536,094 to complete this project.

c. Contract Approval – Graymont Streamflow Augmentation Project

A request that the Commission authorize the execution of an agreement with Graymont for the Graymont Streamflow Augmentation Project. In March 2014, the Commission issued a Solicitation for Projects (SFP) involving Water Sources for Consumptive Use Mitigation. The Commission received six SFP submittals, which were reviewed for completeness and technical merit in accordance with published SFP criteria. The Graymont Streamflow Augmentation Project was determined to be the most feasible water storage project of the six submittals received, based on the following: significant preliminary engineering completed to date, availability of existing data, secured land ownership overlying the mines, relatively good water quality, significant 90-day yield estimates, and ongoing agency coordination.

Staff have been coordinating with Graymont and their consultant (ARM Group) to outline a phased framework for project development and to develop a draft task list and cost estimate for executing work under the initial phases. Phase I work will include development of a (1) consolidated, existing data summary, (2) work plan for supplemental site characterization, and (3) study agreement between the Commission and Graymont. Phase II work involves a suite of activities related to site characterization and preparation of documents to support permitting, including (1) well drilling, (2) groundwater and surface water monitoring, (3) water quality monitoring, (4) wetland delineation, (5) aquatic resource surveys, (6) T&E species evaluation, and (7) data compilation to support permit applications. It is staff's desire to enter into a cost-sharing agreement with Graymont to cover the Phase II supplemental site characterization work.

The Commission will cover 50 percent of the cost of Phase II at a cost not to exceed \$350,000 with Graymont providing \$350,000 for a total of \$700,000.

On a motion by Commissioner Heffner, seconded by Commissioner Kasraei, the Commission unanimously adopted the recommendations of the Director of Administration and Finance with respect to ratification of the grant amendment, ratification of the grant, and contract agreement.

5. Resolution 2015-02: Support Use of Dry Cooling Technology

Deputy Executive Director Andrew Gavin presented a resolution (Exhibit B) for consideration encouraging the use of dry cooling technologies for power generation and other facilities for the conservation of the waters of the Susquehanna River Basin.

Commission Heffner moved that the resolution be adopted with addition of the following language in the third paragraph on the first page, which would read: Whereas, it has been the practice of the Commission to encourage pre-application meetings between project sponsors and Commission staff to determine utilization of the most appropriate cooling technology given the water availability within a particular hydrologic setting. The motion was seconded by Commissioner Kasraei and the Commission unanimously adopted the resolution.

6. Regulatory Program Actions

a. Compliance Action

Regulatory Counsel Jason Oyler presented the following settlement offer for the Commission's consideration:

- Cabot Oil & Gas Corporation; \$50,000 in lieu of civil penalties. There was no demonstrated environmental harm.

b. Report on Delegated Settlements

Mr. Oyler also reported that there had been one delegated settlement executed in the previous quarter with Talisman Energy USA in the amount of \$8,000 for passby flow violations. There was no demonstrated environmental harm in this event; however, it was noted that passby flow violations are the type of violation that carry a greater chance of having environmental harm, which was considered in setting the settlement amount.

c. Docket Actions

As presented by Project Review Manager Todd Eaby, the Commission had before it a staff memorandum containing details and recommendations regarding the following list of project applications:

1. Leonard and Jean Marie Azaravich (Meshoppen Creek), Springville Township, Susquehanna County, Pa. (Exhibit C1)
2. Carrizo (Marcellus), LLC (Mosquito Creek), Karthaus Township, Clearfield County, Pa. (Exhibit C2)
3. Chesapeake Appalachia, LLC (Susquehanna River), Braintrim Township, Wyoming County, Pa. (Exhibit C3)
4. Chief Oil & Gas LLC (Martins Creek), Hop Bottom Borough, Susquehanna County, Pa. (Exhibit C4)
5. EQT Production Company (West Branch Susquehanna River), Greenwood Township, Clearfield County, Pa. (Exhibit C5)
6. Keister Miller Investments, LLC (West Branch Susquehanna River), Mahaffey Borough, Clearfield County, Pa.
7. Keystone Clearwater Solutions, LLC (West Branch Susquehanna River), Curwensville Borough, Clearfield County, Pa. (Exhibit C6)
8. Linde Corporation (Lackawanna River), Fell Township, Lackawanna County, Pa. (Exhibit C7)
9. Samson Exploration, LLC (Plum Grove Cameron 5 Strip Mine Pond), Shippen Township, Cameron County, Pa. (Exhibit C8)
10. Shadow Ranch Resort, Inc. (Tunkhannock Creek), Tunkhannock Township, Wyoming County, Pa. (Exhibit C9)
11. Shrewsbury Borough, York County, Pa.
12. Shrewsbury Borough, York County, Pa.
13. Southwestern Energy Production Company (Martins Creek), Brooklyn and Harford Townships, Susquehanna County, Pa. (Exhibit C10)
14. SWEPI LP (Cowanesque River), Westfield Township, Tioga County, Pa. (Exhibit C11)
15. Warwick Township Municipal Authority, Warwick Township, Lancaster County, Pa. (Exhibit C12)

Highlight = Staff recommending tabling.

Staff had reviewed all comments received at the January 29, 2015, public hearing and written comments received through February 9, 2015, and had conducted coordinated reviews with the agencies of the member jurisdictions. Of the 15 projects listed above, 3 were recommended for tabling, including Nos. 6, 11, and 12. All remaining projects were recommended for approval.

Commissioner Heffner moved that the Commission adopt the recommendations of staff regarding the settlements with Cabot Oil & Gas and Talisman Energy USA, Inc., and for the 12 project applications. This motion was seconded by Commissioner Jordan and unanimously adopted by the Commission.


Chairman Lynch noted that Agenda Item 8, Notice to Appear and Show Cause has been tabled in part due to weather conditions and for further discussions with the applicant. It was also noted that a new Notice to Appear will be issued for the next business meeting scheduled for June 4, 2015.

7. Adjournment

There being no further business before the Commission, on a motion by Commissioner Heffner, seconded by Commissioner Jordan, Chairman Lynch adjourned the meeting at 9:21 a.m. The next regular meeting of the Commission is tentatively scheduled for June 4, 2015, in Baltimore, Maryland.

June 4, 2015

Date Adopted



Stephanie L. Richardson

RESOLUTION NO. 2015-01

A RESOLUTION of the Susquehanna River Basin Commission (the "Commission") revising the Fiscal Year (FY) 2016 budget.

WHEREAS, in June 2014, the Commission adopted a preliminary budget covering the period July 1, 2015, to June 30, 2016 (FY-2016), and submitted that budget to the member jurisdictions for their consideration; and

WHEREAS, after due consideration by the member jurisdictions and the receipt of other fiscally related information affecting the final formulation of the FY-2016 budget, it is necessary to revise that budget before it takes effect on July 1, 2015.

NOW THEREFORE BE IT RESOLVED THAT:

1. The FY-2016 budget is hereby revised in accordance with the revisions presented this day to the Commission by the Director of Administration & Finance.
2. This resolution shall be effective immediately.

Dated: March 5, 2015


Kenneth P. Lynch, Chair
New York

RESOLUTION NO. 2015-02

A RESOLUTION of the Susquehanna River Basin Commission encouraging the use of dry cooling technology for power generation and other facilities for the conservation of the waters of the Susquehanna River Basin (the “basin”).

WHEREAS, the Susquehanna River Basin Commission (the “Commission”) has always encouraged water conservation, particularly when that use is consumptive with respect to the waters of the basin; and

WHEREAS, the reported basinwide consumptive use for power generation is approximately 93 million gallons per day, or 73 percent of all reported consumptive use in the basin; and

WHEREAS, it has been the practice of the Commission to encourage pre-application meetings between project sponsors and Commission staff to determine utilization of the most appropriate cooling technology given the water availability within a particular hydrologic setting; and

WHEREAS, the Commission recognizes that an increasing number of power generation facilities, most recently combined cycle natural gas powered plants, are utilizing dry cooling technology to reduce the environmental footprint in the basin, and are demonstrating overall efficiencies in operations that are equivalent to wet cooling processes; and

WHEREAS, it has been the practice of Commission staff to encourage project sponsors to consider dry cooling based on the technology’s greatly reduced water need; and

WHEREAS, the Commission recognizes that securing consumptive use makeup water has become an increasing challenge due to increasing and competing demands in the basin, which can be exacerbated with proposed facility locations in higher quality and headwater settings; and

WHEREAS, consumptive use requests for power generation are increasingly occurring in portions of the basin where water resources may be limited or have competing demands, and uninterruptible sources of supply are not available; and

WHEREAS, the Commission’s Comprehensive Plan provides that power generation facilities should be required to evaluate the costs, benefits, trade-offs and drawbacks of various cooling and water conservation techniques, and fully evaluate options for providing effective consumptive use mitigation; and

WHEREAS, the Commission anticipates that the utilization of dry cooling technology will reduce the water demand of such facilities providing increased flexibility in locating facilities in proximity to fuel sources and electrical transmission lines; and

WHEREAS, use of dry cooling technology reduces impacts to aquatic ecosystems through the reduction of thermal impacts associated with large industrial volume discharges; and

WHEREAS, it is the desire of the Commission to promote and encourage the use of dry cooling technology in order to reduce the burden of consumptive uses in the basin, reduce dependence on large volume sources, avoid potential for alteration of natural stream regimen, effects on water quality and other uses of the watercourse.

NOW THEREFORE BE IT RESOLVED THAT:

1. With due regard for all approval standards, applicable laws, and other safeguards, the Commission will prioritize the review of projects utilizing dry cooling processes for reducing consumptive water use.

2. As appropriate, the Commission will require project sponsors proposing consumptive water use for the purposes of cooling to consider the use of dry cooling technologies.

3. As appropriate, the Commission will require project sponsors not utilizing dry cooling technology to submit for Commission review a rigorous alternatives analysis as justification consistent with 18 C.F.R. § 806.21(b) and Part III, B. 18 of the Commission's Comprehensive Plan.

4. As appropriate, the Commission will consider relaxing applicable passby flow conditions to projects providing upstream flow augmentation in order to provide for uninterrupted operations.

5. As appropriate, the Commission will consider application of allowable discretion under applicable Commission regulation and policy in reviewing and approving alternate consumptive use mitigation and passby flow thresholds consistent with 18 C.F.R. § 806.22.

6. This resolution shall be effective immediately.

Dated: March 5, 2015


Kenneth P. Lynch, Chair
New York



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20150301

Approval Date: March 5, 2015

ADLIB RESOURCES, INC.

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

Section 1. Approval

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

This approval is a renewal and modification of Commission Docket No. 20101206 that was originally approved December 16, 2010, with a peak day withdrawal rate of 0.249 million gallons per day (mgd) and special flow protection requirements. The project sponsor has requested an increase in the peak day withdrawal rate and an associated increase in the instantaneous withdrawal rate. Following technical review, and consistent with applicable regulatory standards, Commission staff recommended that the approved rates of withdrawal be increased to 0.500 mgd and 375 gallons per minute (gpm), herein referred to as the modified rates. Commission staff also recommended that the special flow protection requirements be modified to reflect current policy. This approval incorporates those recommendations.

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

Section 2. Project Information

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

Project Information	
Project Sponsor:	ADLIB Resources, Inc.
Approval Type:	Surface Water Withdrawal
Original Docket No.:	20101206
Authorized Water Use Purpose:	Bulk Supply for Hydrocarbon Development and Related Incidental Uses

Project Information (continued)	
Municipality:	Springville Township
County:	Susquehanna County
State:	Pennsylvania

Section 3. Source Information

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

Source Information	
Approved Source:	Meshoppen Creek
Subbasin:	Middle Susquehanna
Watershed Boundary Dataset (WBD):	0205010608 (Meshoppen Creek)
Water Use Designation:	Cold Water Fishery (CWF)
Withdrawal Location (degrees):	Lat: 41.677560 N Long: 75.887820 W
Site Flow Statistics (cfs):	Q7-10 = 1.4; Average Daily Flow = 46
Drainage Area (square miles):	31.5
Aquatic Resource Class*:	2
Special Flow Protection Required:	Yes
cfs – cubic feet per second	
*Refer to Commission Policy No. 2012-01 (Low Flow Protection Policy Related to Withdrawal Approvals)	

Section 4. Approved Withdrawal Quantities and Limitations

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

Approved Withdrawal Quantities and Limitations		
Peak Day Withdrawal Amount (mgd):	0.500 (Not to Exceed, When Available)	
Maximum Instantaneous Withdrawal Rate (gpm):	375 (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	14	181
February	16	211
March	36	446
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>
April	--	--
May	20	258
June	8.8	118
July	4.9	71
August	3.6	55
September	3.5	53
October	4.8	69
November	11	144
December	17	216
1 cfs = 448.8 gpm		USGS – U.S. Geological Survey
* Flow Protection Threshold		-- – No special flow protection required

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

Section 5. Standard Conditions

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

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

3. 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 at the modified rates. If subsequent design review by the permitting agency requires modification to the intake design, the project sponsor shall submit to the Commission the approved permit for the modified intake structure. Thereafter, any modifications proposed by the project sponsor for the permitted intake

structure shall be submitted for review and approval by Commission staff in accordance with Commission Regulations 18 CFR §806.21 and §806.23.

6. The project sponsor shall keep daily records of the project's withdrawal and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any alternative measuring, monitoring, or accounting procedure requested by the project sponsor shall be submitted for review and, if appropriate, approval by Commission staff prior to implementing or modifying existing equipment or procedures. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

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

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

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

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

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

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

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

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

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

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

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

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

Section 6. Special Conditions

19. Effective April 1, 2015, 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 April 29, 2014; therefore, the next meter certification is due no later than April 29, 2019. Certification of meter accuracy shall be provided to the Commission no less frequent than once every five (5) years from the date of the last certification.

22. Modification of the intake structure will require that general or individual permits from the jurisdictional permitting agency be acquired prior to installation of the intake. The project sponsor shall provide the Commission with a copy of the permit prior to operating the withdrawal at the modified rates.

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 authorization for such new use to the Executive Director. The project sponsor shall not supply water for such use unless and until such authorization is granted, and pursuant to any supplemental terms and conditions contained in such approval.

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 April 1, 2015, and shall remain effective until March 31, 2019. As specified in Commission Regulation 18 CFR §806.31(e), if the project sponsor submits an application on or before September 30, 2018, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

28. Commission Docket No. 20101206 shall remain effective through March 31, 2015, whereupon it shall expire.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on March 5, 2015.

Dated: March 6, 2015


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20150302

Approval Date: March 5, 2015

CARRIZO (MARCELLUS), LLC

Surface Water Withdrawal (Peak Day) of up to 0.720 mgd from Mosquito Creek

Section 1. Approval

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

This approval is a reactivation of an expired project originally approved by Commission Docket No. 20100301 on March 18, 2010, with a peak day withdrawal rate of 0.720 million gallons per day (mgd) and special flow protection requirements. The project sponsor has not requested any changes to the project. Commission staff recommended that 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:	Carrizo (Marcellus), LLC
Approval Type:	Surface Water Withdrawal
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses
Municipality:	Karthaus Township
County:	Clearfield County
State:	Pennsylvania

Section 3. Source Information

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

Source Information	
Approved Source:	Mosquito Creek
Subbasin:	West Branch Susquehanna
Watershed Boundary Dataset (WBD):	0205020106 (Mosquito Creek)
Water Use Designation:	High Quality Cold Water Fishery (HQ-CWF)
Withdrawal Location (degrees):	Lat: 41.123000 N Long: 78.114400 W
Site Flow Statistics (cfs):	Q7-10 = 2.5; Average Daily Flow = 119
Drainage Area (square miles):	71.5
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):	0.720 (Not to Exceed, When Available)	
Maximum Instantaneous Withdrawal Rate (gpm):	500 (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 01544500; Kettle Creek at Cross Fork, 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	36	73
February	--	--
March	--	--
April	--	--
May	--	--
June	23	47
July	10	22
August	10	22

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	10	22
October	10	22
November	18	37
December	44	87
1 cfs = 448.8 gallons per minute (gpm)		USGS – U.S. Geological Survey
* Flow Protection Threshold		-- – No special flow protection required

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

Section 5. Standard Conditions

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

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

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

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

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

6. The project sponsor shall keep daily records of the project's withdrawal and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any alternative measuring, monitoring, or accounting procedure requested by the project sponsor shall be submitted for review and, if appropriate, approval by Commission staff prior to implementing or modifying existing equipment or procedures. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

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

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

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

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

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

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

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

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

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

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

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

Section 6. Special Conditions

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

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

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

21. The project sponsor shall keep daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project for use in hydrocarbon development, including daily quantities supplied. The project sponsor also shall keep daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project for uses other than hydrocarbon development authorized pursuant to Special Condition 22, including daily quantities supplied.

22. Prior to supplying water for any use not authorized pursuant to Section 2 of this approval, the project sponsor shall first submit a request for authorization for such new use to the Executive Director. The project sponsor shall not supply water for such use unless and until such authorization is granted, and pursuant to any supplemental terms and conditions contained in such approval.

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


Section 7. Term

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

25. This approval is effective until March 4, 2019. As specified in Commission Regulation 18 CFR §806.31(e), if the project sponsor submits an application on or before September 4, 2018, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on March 5, 2015.

Dated: March 6, 2015


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. 20150303

Approval Date: March 5, 2015

CHESAPEAKE APPALACHIA, LLC

**Surface Water Withdrawal (Peak Day) of up to 3.000 mgd
from the Susquehanna River**

Section 1. Approval

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

This approval is a renewal of Commission Docket No. 20110303 that was originally approved March 10, 2011, with a peak day withdrawal rate of 3.000 million gallons per day (mgd) and special flow protection requirements. The project sponsor has not requested any changes to the project. Commission staff recommended that the special flow protection requirements be modified to reflect current policy. This approval incorporates those recommendations.

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

Section 2. Project Information

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

Project Information	
Project Sponsor:	Chesapeake Appalachia, LLC
Approval Type:	Surface Water Withdrawal
Original Docket No.:	20110303
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses
Municipality:	Braintrim Township
County:	Wyoming County
State:	Pennsylvania

Section 3. Source Information

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

Source Information	
Approved Source:	Susquehanna River
Subbasin:	Middle Susquehanna
Watershed Boundary Dataset (WBD):	0205010614 (Lower Susquehanna River)
Water Use Designation:	Warm Water Fishery (WWF)
Withdrawal Location (degrees):	Lat: 41.629914 N Long: 76.191763 W
Site Flow Statistics (cfs):	Q7-10 = 649; Average Daily Flow = 11,920
Impairment:	Mercury; Polychlorinated Biphenyl (PCB)
Drainage Area (square miles):	8,552
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):	3.000 (Not to Exceed, When Available)	
Maximum Instantaneous Withdrawal Rate (gpm):	2,084 (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 01531500; Susquehanna River at Towanda, 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	970	889

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	735	675
September	675	620
October	852	782
November	--	--
December	--	--
1 cfs = 448.8 gallons per minute (gpm)		USGS – U.S. Geological Survey
* Flow Protection Threshold		-- – No special flow protection required

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

Section 5. Standard Conditions

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

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

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

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

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

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

measuring, monitoring, or accounting procedure requested by the project sponsor shall be submitted for review and, if appropriate, approval by Commission staff prior to implementing or modifying existing equipment or procedures. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

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

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

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

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

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

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

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

protect public health, safety, welfare, or the environment, pursuant to Commission Regulation 18 CFR §806.32.

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

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

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

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

Section 6. Special Conditions

19. Effective April 1, 2015, 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 exceeds such flow protection threshold.

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

21. The date of the last meter certification was May 27, 2014; therefore, the next meter certification is due no later than May 27, 2019. Certification of meter accuracy shall be provided to the Commission no less frequent than once every five (5) years from the date of the last certification.

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

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

from the project for uses other than hydrocarbon development authorized pursuant to Special Condition 24, including daily quantities supplied.

24. Prior to supplying water for any use not authorized pursuant to Section 2 of this approval, the project sponsor shall first submit a request for authorization for such new use to the Executive Director. The project sponsor shall not supply water for such use unless and until such authorization is granted, and pursuant to any supplemental terms and conditions contained in such approval.

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


Section 7. Term

26. This approval shall be effective April 1, 2015, and shall remain effective until March 31, 2019. As specified in Commission Regulation 18 CFR §806.31(e), if the project sponsor submits an application on or before September 30, 2018, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

27. Commission Docket No. 20110303 shall remain effective through March 31, 2015, whereupon it shall expire.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on March 5, 2015.

Dated: March 6, 2015


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20150304

Approval Date: March 5, 2015

CHIEF OIL & GAS LLC

Surface Water Withdrawal (Peak Day) of up to 0.360 mgd from Martins Creek

Section 1. Approval

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

This approval is a renewal of Commission Docket No. 20110304 that was originally approved March 10, 2011, with a peak day withdrawal rate of 0.360 million gallons per day (mgd) and special flow protection requirements. The project sponsor has not requested any changes to the project. Commission staff recommended that the special flow protection requirements be modified to reflect current policy. This approval incorporates those recommendations.

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

Section 2. Project Information

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

Project Information	
Project Sponsor:	Chief Oil & Gas LLC
Approval Type:	Surface Water Withdrawal
Original Docket No.:	20110304
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses
Municipality:	Hop Bottom 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:	Martins Creek
Subbasin:	Middle Susquehanna
Watershed Boundary Dataset (WBD):	0205010612 (Tunkhannock Creek)
Water Use Designation:	Cold Water Fishery (CWF)
Withdrawal Location (degrees):	Lat: 41.700968 N Long: 75.766738 W
Site Flow Statistics (cfs):	Q7-10 = 2.0; Average Daily Flow = 64.8
Drainage Area (square miles):	44.4
Aquatic Resource Class*:	2
Special Flow Protection Required:	Yes
cfs – cubic feet per second	
*Refer to Commission Policy No. 2012-01 (Low Flow Protection Policy Related to Withdrawal Approvals)	

Section 4. Approved Withdrawal Quantities and Limitations

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

Approved Withdrawal Quantities and Limitations		
Peak Day Withdrawal Amount (mgd):	0.360 (Not to Exceed, When Available)	
Maximum Instantaneous Withdrawal Rate (gpm):	250 (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	20	175
February	23	205
March	--	--
April	--	--
May	--	--
June	12	112
July	7.0	65

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	5.1	49
September	4.9	47
October	6.7	63
November	15	138
December	24	210
1 cfs = 448.8 gallons per minute (gpm)		USGS – U.S. Geological Survey
* Flow Protection Threshold		-- – No special flow protection required

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

Section 5. Standard Conditions

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

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

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

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

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

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

measuring, monitoring, or accounting procedure requested by the project sponsor shall be submitted for review and, if appropriate, approval by Commission staff prior to implementing or modifying existing equipment or procedures. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

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

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

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

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

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

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

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

protect public health, safety, welfare, or the environment, pursuant to Commission Regulation 18 CFR §806.32.

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

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

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

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

Section 6. Special Conditions

19. Effective April 1, 2015, 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 September 5, 2013; therefore, the next meter certification is due no later than September 5, 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.

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

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

from the project for uses other than hydrocarbon development authorized pursuant to Special Condition 24, including daily quantities supplied.

24. Prior to supplying water for any use not authorized pursuant to Section 2 of this approval, the project sponsor shall first submit a request for authorization for such new use to the Executive Director. The project sponsor shall not supply water for such use unless and until such authorization is granted, and pursuant to any supplemental terms and conditions contained in such approval.

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


Section 7. Term

26. This approval shall be effective April 1, 2015, and shall remain effective until March 31, 2019. As specified in Commission Regulation 18 CFR §806.31(e), if the project sponsor submits an application on or before September 30, 2018, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

27. Commission Docket No. 20110304 shall remain effective through March 31, 2015, whereupon it shall expire.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on March 5, 2015.

Dated: March 6, 2015


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20150305

Approval Date: March 5, 2015

EQT PRODUCTION COMPANY

**Surface Water Withdrawal (Peak Day) of up to 0.900 mgd
from the West Branch Susquehanna River**

Section 1. Approval

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

This approval is a reactivation of an expired project originally approved by Commission Docket No. 20100302 on March 18, 2010, with a peak day withdrawal rate of 0.900 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 that 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:	EQT Production Company
Approval Type:	Surface Water Withdrawal
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses
Municipality:	Greenwood Township
County:	Clearfield County
State:	Pennsylvania

Section 3. Source Information

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

Source Information	
Approved Source:	West Branch Susquehanna River
Subbasin:	West Branch Susquehanna
Watershed Boundary Dataset (WBD):	0205020104 (Upper West Branch Susquehanna River)
Water Use Designation:	Warm Water Fishery (WWF)
Withdrawal Location (degrees):	Lat: 40.897221 N Long: 78.677102 W
Site Flow Statistics (cfs):	Q7-10 = 27.9; Average Daily Flow = 557.8
Drainage Area (square miles):	315.4
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):	0.900 (Not to Exceed, When Available)	
Maximum Instantaneous Withdrawal Rate (gpm):	625 (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 01541000; West Branch Susquehanna River at Bower, 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	102	104
July	68	70

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	53	55
September	43	45
October	48	50
November	78	80
December	150	152
1 cfs = 448.8 gallons per minute (gpm)		USGS – U.S. Geological Survey
* Flow Protection Threshold		-- – No special flow protection required

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

Section 5. Standard Conditions

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

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

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

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

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

6. The project sponsor shall keep daily records of the project's withdrawal and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any alternative measuring, monitoring, or accounting procedure requested by the project sponsor shall be submitted for review and, if appropriate, approval by Commission staff prior to implementing or modifying existing equipment or procedures. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

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

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

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

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

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

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

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

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

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

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

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

Section 6. Special Conditions

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

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

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

21. The project sponsor shall keep daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project for use in hydrocarbon development, including daily quantities supplied. The project sponsor also shall keep daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project for uses other than hydrocarbon development authorized pursuant to Special Condition 22, including daily quantities supplied.

22. Prior to supplying water for any use not authorized pursuant to Section 2 of this approval, the project sponsor shall first submit a request for authorization for such new use to the Executive Director. The project sponsor shall not supply water for such use unless and until such authorization is granted, and pursuant to any supplemental terms and conditions contained in such approval.

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

Section 7. Term

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

25. This approval is effective until March 4, 2019. As specified in Commission Regulation 18 CFR §806.31(e), if the project sponsor submits an application on or before September 4, 2018, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on March 5, 2015.

Dated: March 6, 2015


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

4423 North Front Street • Harrisburg, Pennsylvania 17110-1788

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Docket No. 20150306

Approval Date: March 5, 2015

KEYSTONE CLEARWATER SOLUTIONS, LLC

**Surface Water Withdrawal (Peak Day) of up to 1.500 mgd
from the West Branch Susquehanna River**

Section 1. Approval

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

This approval is a renewal of Commission Docket No. 20101204 that was originally approved December 16, 2010, with a peak day withdrawal rate of 2.000 million gallons per day (mgd) and special flow protection requirements. The project sponsor has requested renewal at a reduced peak day withdrawal rate of 1.500 mgd. Commission staff recommended that the special flow protection requirements be modified to reflect current policy. This approval incorporates those recommendations.

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

Section 2. Project Information

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

Project Information	
Project Sponsor:	Keystone Clearwater Solutions, LLC
Approval Type:	Surface Water Withdrawal
Original Docket No.:	20101204
Authorized Water Use Purpose:	Bulk Supply for Hydrocarbon Development and Related Incidental Uses
Municipality:	Curwensville Borough
County:	Clearfield County
State:	Pennsylvania

Section 3. Source Information

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

Source Information	
Approved Source:	West Branch Susquehanna River
Subbasin:	West Branch Susquehanna
Watershed Boundary Dataset (WBD):	0205020104 (Upper West Branch Susquehanna River)
Water Use Designation:	Warm Water Fishery (WWF)
Withdrawal Location (degrees):	Lat: 40.972037 N Long: 78.520199 W
Site Flow Statistics (cfs):	Q7-10 = 45.3; Average Daily Flow = 685.2
Drainage Area (square miles):	368.2
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):	1.500 (Not to Exceed, When Available)	
Maximum Instantaneous Withdrawal Rate (gpm):	1,042 (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 01541200; West Branch Susquehanna River near Curwensville, 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	152	155
July	105	108

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	74	77
September	66	69
October	83	86
November	167	169
December	--	--
1 cfs = 448.8 gallons per minute (gpm)		USGS – U.S. Geological Survey
* Flow Protection Threshold		-- – No special flow protection required

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

Section 5. Standard Conditions

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

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

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

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

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

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

measuring, monitoring, or accounting procedure requested by the project sponsor shall be submitted for review and, if appropriate, approval by Commission staff prior to implementing or modifying existing equipment or procedures. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

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

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

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

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

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

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

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

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

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

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

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

Section 6. Special Conditions

19. Effective April 1, 2015, 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 exceeds such flow protection threshold.

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

21. The date of the last meter certification for the existing meter was April 2, 2014; therefore, the next meter certification is due no later than April 1, 2019. Certification of meter accuracy shall be provided to the Commission no less frequent than once every five (5) years from the date of the last certification.

22. Any changes to existing meter(s) will require that 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 following installation of the meter until Commission staff has approved the implementation of the approved metering plan and notified the project sponsor of such approval.

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 authorization for such new use to the Executive Director. The project sponsor shall not supply water for such use unless and until such authorization is granted, and pursuant to any supplemental terms and conditions contained in such approval.

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 April 1, 2015, and shall remain effective until March 31, 2019. As specified in Commission Regulation 18 CFR §806.31(e), if the project sponsor submits an application on or before September 30, 2018, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

28. Commission Docket No. 20101204 shall remain effective through March 31, 2015, whereupon it shall expire.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on March 5, 2015.

Dated: March 6, 2015


Stephanie L. Richardson

SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20150307

Approval Date: March 5, 2015

LINDE CORPORATION

**Surface Water Withdrawal (Peak Day), Variable,
of up to 0.905 mgd from the Lackawanna River**

Section 1. Approval

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

This approval is a renewal of Commission Docket No. 20101207 that was originally approved December 16, 2010, with a peak day withdrawal rate of 0.905 million gallons per day (mgd) and special flow protection requirements. The project sponsor, in order to minimize flow protection conditioning, revised the requested withdrawal rates that vary monthly for July through October. Commission staff recommended that the variable monthly rates be approved as requested and that special flow protection requirements be modified to reflect current policy. This approval incorporates those recommendations.

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

Section 2. Project Information

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

Project Information	
Project Sponsor:	Linde Corporation
Approval Type:	Surface Water Withdrawal
Original Docket No.:	20101207
Authorized Water Use Purpose:	Bulk Supply for Hydrocarbon Development and Related Incidental Uses

Project Information (continued)	
Municipality:	Fell Township
County:	Lackawanna 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:	Lackawanna River
Subbasin:	Middle Susquehanna
Watershed Boundary Dataset (WBD):	0205010701 (Lackawanna River)
Water Use Designation:	High Quality Cold Water Fishery (HQ-CWF)
Withdrawal Location (degrees):	Lat: 41.587578 N Long: 75.489465 W
Site Flow Statistics (cfs):	Q7-10 = 11; Average Daily Flow = 120
Wild Trout Classification:	Class A Wild Trout
Drainage Area (square miles):	62.4
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
Method for Monitoring Flow Protection:	Off-site monitoring of USGS Real-Time Gage 01534500; Lackawanna River at Archbald, Pennsylvania

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>
January	0.905	700	44	78
February	0.905	700	45	80
March	0.905	700	81	142
April	0.905	700	106	186
May	0.905	700	71	125
June	0.905	700	37	66
July	0.756	525	30	53
August	0.612	425	30	53
September	0.576	400	30	53
October	0.648	450	30	53
November	0.905	700	40	70
December	0.905	700	57	101
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. The project sponsor shall maintain metering on the withdrawal in accordance with Commission Regulation 18 CFR §806.30.

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

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

6. The project sponsor shall keep daily records of the project's withdrawal and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any alternative measuring, monitoring, or accounting procedure requested by the project sponsor shall be submitted for review and, if appropriate, approval by Commission staff prior to implementing or modifying existing equipment or procedures. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

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

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

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

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

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

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

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

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

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

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

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

Section 6. Special Conditions

19. Effective April 1, 2015, 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 exceeds such flow protection threshold.

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

21. The date of the last meter certification was February 5, 2014; therefore, the next meter certification is due no later than February 5, 2019. Certification of meter accuracy shall be provided to the Commission no less frequent than once every five (5) years from the date of the last certification.

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

23. The project sponsor shall keep daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project for use in hydrocarbon development, including daily quantities supplied. The project sponsor also shall keep daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project for uses other than hydrocarbon development authorized pursuant to Special Condition 24, including daily quantities supplied.

24. Prior to supplying water for any use not authorized pursuant to Section 2 of this approval, the project sponsor shall first submit a request for authorization for such new use to the Executive Director. The project sponsor shall not supply water for such use unless and until such authorization is granted, and pursuant to any supplemental terms and conditions contained in such approval.

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

Section 7. Term

26. This approval shall be effective April 1, 2015, and shall remain effective until March 31, 2019. As specified in Commission Regulation 18 CFR §806.31(e), if the project sponsor submits an application on or before September 30, 2018, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

27. Commission Docket No. 20101207 shall remain effective through March 31, 2015, whereupon it shall expire.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on March 5, 2015.

Dated: March 6, 2015


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

4423 North Front Street • Harrisburg, Pennsylvania 17110-1788

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Docket No. 20150308

Approval Date: March 5, 2015

SAMSON EXPLORATION, LLC

**Surface Water Withdrawal (Peak Day) of up to 0.090 mgd
from Plum Grove Cameron 5 Strip Mine Pond**

Section 1. Approval

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

This approval is a renewal of Commission Docket No. 20110308 that was originally approved March 10, 2011, with a peak day withdrawal rate of 0.090 million gallons per day (mgd) and special flow protection requirements. The project sponsor has not requested any changes to the project. Commission staff recommended that the special flow protection requirements be modified to reflect current policy. This approval incorporates those recommendations.

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

Section 2. Project Information

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

Project Information	
Project Sponsor:	Samson Exploration, LLC
Approval Type:	Surface Water Withdrawal
Original Docket No.:	20110308
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses
Municipality:	Shippen Township
County:	Cameron 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:	Plum Grove Cameron 5 Strip Mine Pond
Subbasin:	West Branch Susquehanna
Watershed Boundary Dataset (WBD):	0205020202 (Driftwood Branch Sinnemahoning Creek)
Water Use Designation:	Unclassified – Abandoned and Flooded Surface Strip Mine Pond
Withdrawal Location (degrees):	Lat: 41.441622 N Long: 78.256475 W
Site Flow Statistics (cfs):	Q7-10 = 0.002; Average Daily Flow = 0.168
Impairment:	Abandoned Mine Drainage (AMD)
Drainage Area (square miles):	<0.1
Aquatic Resource Class*:	1
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):	0.090 (Not to Exceed, When Available)	
Maximum Instantaneous Withdrawal Rate (gpm):	125 (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 01542810; Waldy Run near Emporium, 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	0.7	1.1
February	0.7	1.1
March	1.6	2.3
April	2.4	3.4
May	1.2	1.7

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	0.4	0.7
July	0.2	0.4
August	0.2	0.4
September	0.2	0.4
October	0.2	0.4
November	0.4	0.6
December	1.1	1.6
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. The project sponsor shall maintain metering on the withdrawal in accordance with Commission Regulation 18 CFR §806.30.

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

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

6. The project sponsor shall keep daily records of the project’s withdrawal and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner

as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any alternative measuring, monitoring, or accounting procedure requested by the project sponsor shall be submitted for review and, if appropriate, approval by Commission staff prior to implementing or modifying existing equipment or procedures. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

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

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

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

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

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

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

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

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

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

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

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

Section 6. Special Conditions

19. Effective April 1, 2015, 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 November 21, 2013; therefore, the next meter certification is due no later than November 21, 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.

22. Within sixty (60) days from notice of this approval, the project sponsor shall submit a plan for review and, if appropriate, approval by Commission staff for monthly collection of water quality samples and discharge data from the mine pond over a period of one (1) year. The monthly water quality sampling shall be commenced within thirty (30) days of plan approval. Discretion under Commission Policy No. 2012-01 (Low Flow Protection Policy) has been exercised due to the identified AMD impairment, resulting in adjusted flow protection standards as provided in Section 4. To confirm ongoing AMD impairment, the samples shall be analyzed for abandoned mine discharge impairment parameters, which shall be identified in the proposed plan. The project sponsor shall submit the monthly data within sixty (60) days of the end of each calendar month. The project sponsor shall prepare and submit a single comprehensive annual report for staff review that provides a compilation of the entire water quality data set collected within sixty (60) days following the end of the yearlong collection period. Pursuant to Standard Condition 14, the Commission reserves the right to modify the flow protection standards set forth in Section 4 above in the event that the water quality sampling should not confirm ongoing AMD impairment at the withdrawal site.

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 authorization for such new use to the Executive Director. The project sponsor shall not supply water for such use unless and until such authorization is granted, and pursuant to any supplemental terms and conditions contained in such approval.

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 April 1, 2015, and shall remain effective until March 31, 2019. As specified in Commission Regulation 18 CFR §806.31(e), if the project sponsor submits an application on or before September 30, 2018, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

28. Commission Docket No. 20110308 shall remain effective through March 31, 2015, whereupon it shall expire.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on March 5, 2015.

Dated: March 6, 2015


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20150309

Approval Date: March 5, 2015

SHADOW RANCH RESORT, INC.

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

Section 1. Approval

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

This approval is a renewal of Commission Docket No. 20110310 that was originally approved March 10, 2011, with a peak day withdrawal rate of 0.999 million gallons per day (mgd) and special flow protection requirements. The project sponsor has not requested any changes to the project. Commission staff recommended that the special flow protection requirements be modified to reflect current policy. This approval incorporates those recommendations.

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

Section 2. Project Information

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

Project Information	
Project Sponsor:	Shadow Ranch Resort, Inc.
Approval Type:	Surface Water Withdrawal
Original Docket No.:	20110310
Authorized Water Use Purpose:	Bulk Supply for Hydrocarbon Development and Related Incidental Uses
Municipality:	Tunkhannock 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:	Tunkhannock Creek
Subbasin:	Middle Susquehanna
Watershed Boundary Dataset (WBD):	0205010612 (Tunkhannock Creek)
Water Use Designation:	Trout Stocked Fishery (TSF)
Withdrawal Location (degrees):	Lat: 41.550928 N Long: 75.915072 W
Site Flow Statistics (cfs):	Q7-10 = 18; Average Daily Flow = 577
Impairment:	Mercury
Drainage Area (square miles):	395
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):	1,042 (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	134	133
February	155	153
March	330	323
April	372	363
May	198	195
June	83	83
July	46	48

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	34	36
September	33	35
October	44	46
November	85	85
December	155	153
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. The project sponsor shall maintain metering on the withdrawal in accordance with Commission Regulation 18 CFR §806.30.

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

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

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

measuring, monitoring, or accounting procedure requested by the project sponsor shall be submitted for review and, if appropriate, approval by Commission staff prior to implementing or modifying existing equipment or procedures. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

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

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

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

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

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

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

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

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

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

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

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

Section 6. Special Conditions

19. Effective April 1, 2015, 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 exceeds such flow protection threshold.

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

21. The date of the last meter certification was April 2, 2014; therefore, the next meter certification is due no later than April 2, 2019. Certification of meter accuracy shall be provided to the Commission no less frequent than once every five (5) years from the date of the last certification.

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

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

records, and shall report the same to the Commission upon request, of all persons supplied water from the project for uses other than hydrocarbon development authorized pursuant to Special Condition 24, including daily quantities supplied.

24. Prior to supplying water for any use not authorized pursuant to Section 2 of this approval, the project sponsor shall first submit a request for authorization for such new use to the Executive Director. The project sponsor shall not supply water for such use unless and until such authorization is granted, and pursuant to any supplemental terms and conditions contained in such approval.

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


Section 7. Term

26. This approval shall be effective April 1, 2015, and shall remain effective until March 31, 2019. As specified in Commission Regulation 18 CFR §806.31(e), if the project sponsor submits an application on or before September 30, 2018, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

27. Commission Docket No. 20110310 shall remain effective through March 31, 2015, whereupon it shall expire.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on March 5, 2015.

Dated: March 6, 2015


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20150310**Approval Date: March 5, 2015**

SOUTHWESTERN ENERGY PRODUCTION COMPANY

**Surface Water Withdrawal (Peak Day) of up to 0.997 mgd
from Martins Creek**

Section 1. Approval

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

This approval is a renewal of Commission Docket No. 20110312 that was originally approved March 10, 2011, with a peak day withdrawal rate of 0.997 million gallons per day (mgd) and special flow protection requirements. The intake is located within a section of Martins Creek that had been impounded prior to the development of the project. The project sponsor did not request, and Commission staff did not recommend, any changes to the conditions of the original docket other than the removal of the 48-hour rule as part of passby compliance, due to the project sponsor's use of on-site flow monitoring for compliance with passby flows. Commission staff recommended that the special flow protection requirements be modified to reflect current policy. This approval incorporates those recommendations.

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

Section 2. Project Information

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

Project Information	
Project Sponsor:	Southwestern Energy Production Company
Approval Type:	Surface Water Withdrawal
Original Docket No.:	20110312
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses

Project Information (continued)	
Municipality:	Brooklyn Township
County:	Susquehanna County
State:	Pennsylvania

Section 3. Source Information

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

Source Information	
Approved Source:	Martins Creek
Subbasin:	Middle Susquehanna
Watershed Boundary Dataset (WBD):	0205010612 (Tunkhannock Creek)
Water Use Designation:	Cold Water Fishery (CWF)
Withdrawal Location (degrees):	Lat: 41.807003 N Long: 75.773914 W
Site Flow Statistics (cfs):	Q7-10 = 0.3; Average Daily Flow = 9.7
Drainage Area (square miles):	5.3
Aquatic Resource Class*:	1
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):	0.997 (Not to Exceed, When Available)
Maximum Instantaneous Withdrawal Rate (gpm):	693 (Not to Exceed)
Flow Protection Type:	Seasonal passby expressed as monthly values
Method for Monitoring Flow Protection:	Existing gage established for on-site flow measurement of passby flow below the spillway of the impounded section of Martins Creek
Passby Schedule:	
<i>Month</i>	<i>On-Site Flow Protection Rate (cfs)*</i>
January	3.3
February	3.8
March	8.4

Approved Withdrawal Quantities and Limitations (continued)	
Passby Schedule:	
<i>Month</i>	<i>On-Site Flow Protection Rate (cfs)*</i>
April	9.0
May	4.7
June	2.1
July	1.1
August	0.9
September	0.8
October	1.2
November	2.9
December	4.1
1 cfs = 448.8 gallons per minute (gpm)	
* Flow Protection Threshold	

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

Section 5. Standard Conditions

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

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

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

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

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

6. The project sponsor shall keep daily records of the project's withdrawal and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any alternative measuring, monitoring, or accounting procedure requested by the project sponsor shall be submitted for review and, if appropriate, approval by Commission staff prior to implementing or modifying existing equipment or procedures. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

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

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

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

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

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

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

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

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

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

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

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

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

Section 6. Special Conditions

19. Effective April 1, 2015, the project sponsor shall cease all withdrawals from the approved source when streamflow, as measured at the on-site monitoring location specified in Section 4, is less than the applicable flow protection thresholds specified in Section 4, and shall not reinstate withdrawals until the streamflow exceeds such flow protection thresholds.

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

21. The date of the last meter certification was April 25, 2012. Within sixty (60) days from the date of this approval, the project sponsor shall submit photographs of the meter, provide the serial number of the meter, and certify the measuring device to within five (5) percent of actual flow. Certification of meter accuracy shall be provided to the Commission no less frequent than once every five (5) years from the date of the last certification.

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

23. The project sponsor shall keep daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project for use in hydrocarbon development, including daily quantities supplied. The project sponsor also shall keep daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project for uses other than hydrocarbon development authorized pursuant to Special Condition 24, including daily quantities supplied.

24. Prior to supplying water for any use not authorized pursuant to Section 2 of this approval, the project sponsor shall first submit a request for authorization for such new use to the Executive Director. The project sponsor shall not supply water for such use unless and until such authorization is granted, and pursuant to any supplemental terms and conditions contained in such approval.

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


Section 7. Term

26. This approval shall be effective April 1, 2015, and shall remain effective until March 31, 2019. As specified in Commission Regulation 18 CFR §806.31(e), if the project sponsor submits an application on or before September 30, 2018, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

27. Commission Docket No. 20110312 shall remain effective through March 31, 2015, whereupon it shall expire.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on March 5, 2015.

Dated: March 6, 2015


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

4423 North Front Street • Harrisburg, Pennsylvania 17110-1788

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Docket No. 20150311

Approval Date: March 5, 2015

SWEPI LP

**Surface Water Withdrawal (Peak Day), Variable,
of up to 0.375 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 adverse impacts are anticipated by the operation of this project, and that the project is physically feasible and does not conflict with or adversely affect the Commission's Comprehensive Plan. Accordingly, the Commission hereby approves renewal of the project described herein in accordance with the conditions set forth below.

This approval is a renewal of Commission Docket No. 20101203 that was originally approved December 16, 2010, with a peak day withdrawal rate of 0.375 million gallons per day (mgd) and special flow protection requirements. The project sponsor, in order to minimize flow protection conditioning, revised the requested withdrawal rates that vary monthly for July through October. Commission staff recommended that the variable monthly withdrawal rates be approved as requested and that special flow protection requirements be modified to reflect current policy. This approval incorporates those recommendations.

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

Section 2. Project Information

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

Project Information	
Project Sponsor:	SWEPI LP
Approval Type:	Surface Water Withdrawal
Original Docket No.:	20101203
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses
Municipality:	Westfield 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:	Cold Water Fishery (CWF)
Withdrawal Location (degrees):	Lat: 41.917056 N Long: 77.562601 W
Site Flow Statistics (cfs):	Q7-10 = 0.7; Average Daily Flow = 64.8
Drainage Area (square miles):	53
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			
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	0.375	500	15	26
February	0.375	500	18	32
March	0.375	500	42	72
April	0.375	500	--	--

Approved Withdrawal Quantities and Limitations (continued)				
Withdrawal and Passby Schedule:				
<i>Month</i>	<i>Peak Day Withdrawal (mgd)</i>	<i>Maximum Instantaneous Withdrawal (gpm)</i>	<i>On-Site Flow Protection Rate (cfs)</i>	<i>Off-Site Monitoring Threshold for Flow Protection (cfs)*</i>
May	0.375	500	17	30
June	0.375	500	6.4	12
July	0.375	350	3.2	6.0
August	0.302	210	1.9	3.7
September	0.302	210	1.9	3.7
October	0.375	400	3.6	6.9
November	0.375	500	8.2	15
December	0.375	500	21	37
1 cfs = 448.8 gallons per minute (gpm)		USGS – U.S. Geological Survey		
* Flow Protection Threshold		-- – No special flow protection required		

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

Section 5. Standard Conditions

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

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

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

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

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

6. The project sponsor shall keep daily records of the project's withdrawal and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any alternative measuring, monitoring, or accounting procedure requested by the project sponsor shall be submitted for review and, if appropriate, approval by Commission staff prior to implementing or modifying existing equipment or procedures. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

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

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

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

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

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

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

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

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

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

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

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

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

Section 6. Special Conditions

19. Effective April 1, 2015, 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 exceeds such flow protection threshold.

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

21. The date of the last meter certification was August 1, 2013; therefore, the next meter certification is due no later than August 1, 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.

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

23. The project sponsor shall keep daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project for use in hydrocarbon development, including daily quantities supplied. The project sponsor also shall keep daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project for uses other than hydrocarbon development authorized pursuant to Special Condition 24, including daily quantities supplied.

24. Prior to supplying water for any use not authorized pursuant to Section 2 of this approval, the project sponsor shall first submit a request for authorization for such new use to the Executive Director. The project sponsor shall not supply water for such use unless and until such authorization is granted, and pursuant to any supplemental terms and conditions contained in such approval.

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


Section 7. Term

26. This approval shall be effective April 1, 2015, and shall remain effective until March 31, 2019. As specified in Commission Regulation 18 CFR §806.31(e), if the project sponsor submits an application on or before September 30, 2018, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

27. Commission Docket No. 20101203 shall remain effective through March 31, 2015, whereupon it shall expire.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on March 5, 2015.

Dated: March 6, 2015


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20150312

Approval Date: March 5, 2015

WARWICK TOWNSHIP MUNICIPAL AUTHORITY

**Groundwater Withdrawal (30-Day Average) of 0.288 mgd from Rothsville Well 2,
and Total System Withdrawal Limit (30-Day Average) of 0.288 mgd**

Section 1. Approval

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

The Warwick Township Municipal Authority's public water supply system currently includes one groundwater withdrawal of up to 0.240 million gallons per day (mgd) from Well 1. The Warwick Township Municipal Authority's water system will include two sources (Well 1 and Rothsville Well 2 [Well 2]), which are herein referred to as the "Total System." Based on the information provided by Warwick Township Municipal Authority, no other sources are used by the project.

Commission staff recommends that the requested withdrawal from Well 2 be approved and that a total system limit be established. The total system limit approved herein has been developed based on input received during project coordination conducted under an existing Memorandum of Understanding between the Commission and the Pennsylvania Department of Environmental Protection (PADEP). This approval incorporates those recommendations.

Commission staff has also coordinated with 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:	Warwick Township Municipal Authority
Approval Type:	Groundwater Withdrawal
Authorized Water Use Purpose:	Public Water Supply
Municipality:	Warwick Township
County:	Lancaster County
State:	Pennsylvania

Section 3. Source Information

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

Source Information	
Withdrawal Type:	Groundwater
Approved Source:	Rothsville Well 2
Subbasin:	Lower Susquehanna
Watershed Boundary Dataset (WBD):	0205030609 (Cocalico Creek)
Withdrawal Location (degrees)*:	Lat: -- Long: --
Special Flow Protection Required:	No
* Specific location information concerning discrete water-related project features has been withheld for security reasons.	

Section 4. Aquifer Testing

The constant-rate aquifer testing required by Commission Regulation 18 CFR §806.12 for groundwater withdrawals was completed with prior Commission approval. A 72-hour, constant-rate aquifer test of Well 2 was conducted from September 30, 2013 through October 3, 2013, pumping at an average rate of 200 gallons per minute (gpm). To evaluate potential impacts to existing water users or the environment, an extensive monitoring network was required that included eight wells. The monitored wells included six residential wells, one existing public water supply well (Well 1), and Well 2.

Significant drawdown during the aquifer test was observed in one private well (143 Rothsville Station Road). The well is not used for potable supply at the residence. The residence is connected to and provided potable water from the public water supply system. Water level projections using the test data indicate that this private well may experience significant adverse drawdown as a result of long-term operation of Well 2 at the requested withdrawal rate during conditions of no precipitation for a period of 90 days. Because the residence at 143 Rothsville Station Road utilizes the public water supply system for potable water and the private well is used for irrigation of a garden, Commission staff recommends that the project sponsor be responsible to provide mitigation if significant adverse impacts occur at the private well, rendering it unusable for irrigation to the garden as a result of operating Well 2.

Staff’s recommendation for requiring mitigation of impacts to this residential well is hereby incorporated herein with Special Condition 21.

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

Section 5. Approved Withdrawal Quantities and Limitations

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

Approved Withdrawal Quantities and Limitations	
30-Day Average Withdrawal (mgd):	0.288
Maximum Instantaneous Withdrawal Rate (gpm):	200 (Not to Exceed)
Total System Withdrawal Limit (30-Day Average) (mgd):	0.288

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	0.240	19890103	January 12, 2019

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 from the source listed in Section 3 shall not commence until Commission staff has approved the implementation of the approved metering plan and notified the project sponsor of such approval.

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

5. The project sponsor shall adhere to the groundwater elevation monitoring plan reviewed and approved by Commission staff for the sources listed in Sections 3 and 6. The project sponsor shall notify the Commission, in writing, and submit photographs of the water level monitoring equipment when it has been installed and certify the accuracy of the measuring devices. The groundwater elevation data shall be reported to the Commission quarterly, and as otherwise required. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any modifications proposed for the groundwater elevation monitoring plan shall be submitted for review and approval by Commission staff in accordance with Commission Regulation 18 CFR §806.30(a)(4). Modifications shall not be made until the project sponsor receives written approval of the amended plan.

6. The project sponsor shall keep daily records of the project's withdrawals from the sources listed in Sections 3 and 6 and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any alternative measuring, monitoring, or accounting procedure requested by the project sponsor shall be submitted for review and, if appropriate, approval by Commission staff prior to implementing or modifying existing equipment or procedures. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

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

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

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

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

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

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

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

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

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

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

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

Section 9. Special Conditions

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

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

21. Within ninety (90) days from the date of this approval and prior to initiating withdrawal from the source listed in Section 3, the project sponsor shall submit a plan for review and, if appropriate, approval by Commission staff to mitigate potential adverse impacts to the private well located at 143 Rothsville Station Road. The mitigation plan must include, but is not limited to, the following:

- a. Detailed description of the proposed mitigation activities;
- b. Schedule for implementation of the mitigation plan; and
- c. Copies of a signed mitigation agreement with the residential well owner.

In the event that the project sponsor fails to complete satisfactory mitigation or if mitigation actions are refused by the property owner, the Commission reserves the right to reopen any project approval or issue such additional orders, or otherwise modify or impose such additional conditions 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. Upon receipt of written Commission approval for the mitigation plan, the project sponsor may initiate withdrawal from the source listed in Section 3 in accordance with this docket.

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 March 4, 2030. As specified in Commission Regulation 18 CFR §806.31(e), if the project sponsor submits an application on or before September 4, 2029, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on March 5, 2015.

Dated: March 6, 2015


Stephanie L. Richardson