

SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20180902 Approval Date: September 7, 2018

BKV OPERATING, LLC

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

Section 1. Approval

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

This approval is a renewal and modification of Commission Docket No. 20140904 that was approved September 4, 2014, with a peak day withdrawal rate of 0.720 million gallons per day (mgd) and special flow protection requirements. The project sponsor has requested an increase in the peak day withdrawal and an associated increase in the instantaneous withdrawal rate for the months of December to May. Following technical review, and consistent with applicable regulatory standards, Commission staff recommended that the approved rate of withdrawal be increased for these months of up to 0.999 mgd and 694 gallons per minute (gpm). Commission staff also recommended special flow protection requirements consistent with current policy. This approval incorporates those recommendations.

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

Section 2. Project Information

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

Project Information				
Project Sponsor: BKV Operating, LLC				
Approval Type:Surface Water Withdrawal				
Past Docket No.:	20140904			
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses			

Project Information (continued)		
Municipality:	Jessup 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:	East Branch Wyalusing Creek				
Subbasin:	Middle Susquehanna				
Watershed Boundary Dataset (WBD):	0205010606 (East Branch Wyalusing Creek)				
Water Use Designation:	Cold Water Fishery (CWF)				
Withdrawal Location (degrees):	Lat: 41.817711 N Long: 75.948027 W				
Site Flow Statistics (cfs):	Q7-10 = 0.63; Average Daily Flow = 20.4				
Drainage Area (square miles):	17.1				
Aquatic Resource Class*:	2				
Special Flow Protection Required:	Yes				
cfs – cubic feet per second					
* Refer to Commission Policy No. 2012-01 (Low F	low Protection Policy Related to Withdrawal Approvals)				

Section 4. Approved Withdrawal Quantities and Limitations

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

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

Approved Withdrawal Quantities and Limitations (continued)						
Withdrawal and Passby Schedule:						
	Peak Day Withdrawal	Maximum Instantaneous	On-Site Flow Protection	Off-Site Monitoring Threshold for Flow		
Month	(mgd)	Withdrawal (gpm)	Rate (cfs)	Protection (cfs)*		
January	0.990	688	6.2	213		
February	0.999	694	7.3	243		
March	0.999	694	16	478		
April	0.999	694	17	514		
May	0.999	694	9.0	290		
June	0.720	500	4.4	152		
July	0.720	500	4.4	152		
August	0.720	500	4.4	152		
September	0.720	500	4.4	152		
October	0.720	500	4.4	152		
November	0.720	500	4.9	164		
December	0.999	694	7.5	247		
USGS- U.S. Geo 1 cfs = 448.8 gp * Flow Protection	om		<u>.</u>			

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

Section 5. Standard Conditions

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

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

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

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

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

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

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

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

9. In accordance with Commission Regulation 18 CFR § 806.30(b)(2), the project sponsor shall report violations of any withdrawal limits and any conditions of this approval within five (5) days of such violation or report loss of measuring or recording capabilities required under Commission Regulation 18 CFR § 806.30(a)(1) within five (5) days after any such loss.

10. In accordance with Commission Regulation 18 CFR § 806.6, if ownership of the project changes or if the project sponsor undergoes a name change, the project sponsor shall submit application for transfer or reissuance of this approval to the Commission within ninety (90) days of the change in ownership or project sponsor name change.

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

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

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

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

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

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

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

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

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

Section 6. Special Conditions

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

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

22. The date of the last meter certification was May 30, 2014; therefore, the next meter certification is due no later than May 30, 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.

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 or received approval pursuant to Commission Regulation 18 CFR § 806.22(f), as applicable.

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

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

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

Section 7. Term

27. This approval shall be effective October 1, 2018, and shall remain effective until September 30, 2023. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before March 31, 2023, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

28. Commission Docket No. 20140904 shall remain effective through September 30, 2018, 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 September 7, 2018.

Dated: September 10, 2018

Stephanee & Richardson

Stephanie L. Richardson