

Susquehanna River Basin Commission

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Docket No. 20180301 Approval Date: March 8, 2018

CABOT OIL & GAS CORPORATION

Surface Water Withdrawal (Peak Day), Variable, of up to 1.000 mgd from East Branch 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 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 the project described herein in accordance with the conditions set forth below.

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

Section 2. Project Information

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

Project Information					
Project Sponsor:	Cabot Oil & Gas Corporation				
Approval Type:	Surface Water Withdrawal				
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses				
Municipality:	Lenox Township				
County:	Susquehanna County				
State:	Pennsylvania				

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 Tunkhannock Creek				
Subbasin:	Middle Susquehanna				
Watershed Boundary Dataset (WBD):	0205010610 (East Branch Tunkhannock Creek)				
Water Use Designation:	Cold Water Fishery (CWF)				
Withdrawal Location (degrees):	Lat: 41.657558 N Long: 75.646628 W				
Site Flow Statistics (cfs):	Q7-10 = 2.5; Average Daily Flow = 79.9				
Wild Trout Classification:	Naturally Reproducing Wild Trout				
Drainage Area (square miles):	54.7				
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 E	Not to Exceed Values Contained in the			
•		"Withdr	"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:			Seasona	Seasonal passby expressed as monthly values			
Method for Monitoring Flow Protection: Off-s			Off-site	Off-site monitoring of USGS Real-Time Gage			
_			01534000; Tunkhannock Creek near				
			Tunkhai	Tunkhannock, Pennsylvania			
Withdrawal and Passby Schedule:							
	Peak Day	Maximum		On-Site Flow	Off-Site Monitoring		
	Withdrawal	Instantaneous		Protection	Threshold for Flow		
Month	(mgd)	Withdrawal (gpm)		Rate (cfs)	Protection (cfs)*		
January	0.728	506		21	157		
February	0.859	597		25	185		
March	1.000	695		55	394		
April	1.000	695		60	426		
May	1.000	695		31	229		
June	0.452	314		13	98		
July	0.500	348		15	109		
August	0.390	271		12	85		

Approved Withdrawal Quantities and Limitations (continued)							
Withdrawal and Passby Schedule:							
	Peak Day	Maximum	On-Site Flow	Off-Site Monitoring			
	Withdrawal	Instantaneous	Protection	Threshold for Flow			
Month	(mgd)	Withdrawal (gpm)	Rate (cfs)	Protection (cfs)*			
September	0.380	264	11	82			
October	0.500	348	15	109			
November	0.504	350	15	109			
December	0.874	607	26	189			
mgd – million ga	allons per day	USGS – U.S. Geological Survey					
1 cfs = 448.8 gal	1 cfs = 448.8 gallons per minute (gpm) * Flow Protection Threshold						

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

Section 5. Standard Conditions

- 1. The project sponsor shall comply with all Commission regulations, 18 CFR Parts 801, 806, and 808. This project is subject to the Annual Compliance and Monitoring fee as specified in the Commission's Regulatory Program Fee Schedule, which may be modified over the term of the approval.
- 2. The project sponsor shall adhere to the metering plan reviewed and approved by Commission staff. Any modifications proposed for the metering plan shall be submitted for review and, if appropriate, approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan.
- 3. Prior to any withdrawal from the source listed in Section 3, the project sponsor shall install and maintain metering in accordance with Commission Regulation 18 CFR § 806.30. The project sponsor shall notify the Commission, in writing, and submit photographs of the meter when it has been installed, provide the serial number of the meter, and certify the accuracy of the measuring device to within five (5) percent of actual flow. Withdrawals shall not commence until Commission staff has approved the implementation of the approved metering plan and notified the project sponsor of such approval.
- 4. The project sponsor shall maintain the totalizing meter and other flow and volume measuring devices, accurate to within five (5) percent, so as to provide an accurate record of withdrawals, and certify to the Commission once every five (5) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.
- 5. The project sponsor shall adhere to the intake design reviewed and approved by Commission staff, and shall obtain necessary general or individual permits from the jurisdictional permitting agency prior to use of the intake. The project sponsor shall provide the Commission with a copy of the permit prior to operating the withdrawal. If subsequent design review by the permitting agency requires modification to the intake design, the project sponsor

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

- 6. The project sponsor shall keep daily records of the project's withdrawal and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any alternative measuring, monitoring, or accounting procedure requested by the project sponsor shall be submitted for review and approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.
- 7. Prior to initiation of the withdrawal, the project sponsor shall post a sign that meets Commission specifications and displays required project description information. Signage specifications can be found at the Commission's website (www.srbc.net), along with example sign templates for reference. The sign shall be maintained for the duration of the approval. Such sign shall be posted at the point of entry or access to the project facility from a public right-of-way. If there is any restriction to access at such point that would prevent an interested person from legibly viewing such sign, then the project sponsor shall post the sign at the nearest location to such point, along the route of ingress and egress to same, where an interested person would have unrestricted access to legibly view such sign. The project sponsor shall submit photographs as proof of sign installation prior to initiation of the withdrawal.
- 8. The project sponsor or any other person representing the project sponsor shall allow authorized employees or agents of the Commission, without advance notice, at any reasonable time and upon presentation of appropriate credentials, and without delay, to have access to and to inspect all areas where the project is being constructed, operated, or maintained, or otherwise exercise all investigative powers authorized under Commission Regulation 18 CFR § 808.12.
- 9. 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. 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 project sponsor shall adhere to recommendations provided by PFBC for avoiding adverse impact to documented occurrences of a naturally reproducing wild trout population by avoiding instream construction from October 1 through December 31, unless otherwise approved by PFBC, in writing, and submitted to the Commission.
- 23. Except as authorized pursuant to Special Condition 25, the project sponsor shall only supply water for use in hydrocarbon development to persons who have properly registered this approval pursuant to Commission Regulation 18 CFR § 806.22(f)(12).
- 24. The project sponsor shall keep daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project for use in hydrocarbon development, including daily quantities supplied. The project sponsor also shall keep daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project for uses other than hydrocarbon development authorized pursuant to Special Condition 25, including daily quantities supplied.
- 25. Prior to supplying water for any use not authorized pursuant to Section 2 of this approval, the project sponsor shall first submit a request for minor modification under Commission Regulation 18 CFR § 806.18(c)(4) for such new use to the Executive Director. The project sponsor shall not supply water for such use unless and until such authorization is granted, and pursuant to any supplemental terms and conditions contained in such approval.
- 26. The project sponsor shall demonstrate to the satisfaction of the Commission that appropriate controls and treatment to prevent the spread of aquatic nuisance species are employed at the water withdrawal site.

Section 7. Term

- 27. 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.
- 28. This approval is effective until March 7, 2023. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before September 7, 2022, 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 8, 2018.

Dated: March 9, 2018

Stephanee Z Richardson
Stephanie L. Richardson