

Susquehanna River Basin Commission

a water management agency serving the Susquehanna River Watershed



October 31, 2012

TO ALL CONCERNED:

At the September 20, 2012, Commission meeting, the draft minutes of the June 7, 2012, Commission meeting were approved as written. Please attach this notice to your copy of the June 7, 2012, minutes.

- DRAFT -

SUSQUEHANNA RIVER BASIN COMMISSION
1721 N. FRONT ST.
HARRISBURG, PA 17102

**MINUTES OF THE
SUSQUEHANNA RIVER BASIN COMMISSION
September 20, 2012
#2012-03**

The meeting was held at the North Office Building, Pennsylvania Capitol Complex, Harrisburg, Pennsylvania. Chairman Summers called the meeting to order at 8:30 a.m.

ROLL CALL

Commissioners Present

Dr. Robert M. Summers, Secretary, Maryland Dept. of the Environment (MDE)

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

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

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

**Alternate Commissioners
and Advisors Present**

Jay Sakai, Director, Water Management Administration, MDE

Mr. Ned Wehler, PA Advisor

Staff Present

Mr. Paul O. Swartz, Executive Director

Mr. Thomas W. Beauduy, Deputy Executive Director

Ms. Stephanie L. Richardson, Secretary to the Commission

Mr. Richard A. Cairo, General Counsel

Ms. Paula B. Ballaron, Manager, Policy Implementation & Outreach

Mr. Andrew D. Dehoff, Manager, Project Review

Ms. Susan S. Obleski, Director, Communications

Ms. Marcia Ryneerson, Director, Administration & Finance

Also Attending

Mr. John Booser, PADEP

Mr. Daniel Bierly, USACE, Balt. Dist.

Ms. Roselle E. Henn, USACE NAD

1. Opening Remarks from the Chair

Chairman Summers provided an opening statement outlining the rules of conduct for the meeting.

2. Minutes of the June 7, 2012, Meeting

On a motion by Commissioner Heffner, seconded by Commissioner Jordan, the minutes of the regular business meeting of June 7, 2012, were unanimously approved as written.

3. Approval/Ratification of Agreements/Grants

Director of Administration and Finance Marcia Rynearson presented the following agreements/grants for Commission consideration.

a. Grant Approval – Chesapeake Bay Nutrient Monitoring Program (From Pennsylvania Department of Environmental Protection)

Under this grant, staff will assist PADEP by continuing to provide a long-term nutrient and suspended sediment database to track and better define nutrient loading dynamics, relate load fluctuations to changes in water discharge, supply nutrient concentration and loading data, and evaluate nutrient loading trends.

PADEP - \$131,200 SRBC - \$0 Total - \$131,200

b. Grant Approval – Development of Total Maximum Daily Loads for Selected Waterbodies in the Susquehanna River Basin (From Pennsylvania Department of Environmental Protection)

Under this grant, staff will assist PADEP by developing Total Maximum Daily Loads (TMDLs) for impaired waters in the Susquehanna River Basin and will support PADEP with respect to TMDL determination, public participation, preparation and submittal to USEPA, and in some cases, establishment of volunteer monitoring programs.

PADEP - \$205,500 SRBC - \$0 Total - \$205,500

c. Expansion and Support of the Remote Water Quality Monitoring Network (RWQMN)

Staff requests that the Commission approve authorization for the executive director to expend up to \$500,000 from third-party sources for the expansion and support of the RWQMN. This network of monitoring stations monitors water quality parameters in sensitive headwaters areas of the basin.

d. Grant Amendment Approval – Amend the Water Quality Protection and Pollution Prevention Grant to Include Funding for National Lakes Assessment (From U.S. Environmental Protection Agency)

Under this grant, staff will assist the USEPA with this national assessment of the condition of the nation’s waters by sampling at the six New York lakes and ponds listed below:

- West Branch Keuka Lake
- Long Lake
- Lake Champlain
- East Pine Pond
- Unnamed Lake (Croton River Watershed)
- Mud Pond

Commission staff will receive USEPA training and follow USEPA protocols in performing the survey work. All of the lakes will be sampled once; West Branch Keuka Lake and Lake Champlain will be re-visited for a second sampling.

USEPA - \$46,400 SRBC - \$17,600 Total - \$64,000

e. Grant Approval – Public Water System Assistance Initiative Project (From Pennsylvania Department of Environmental Protection)

Under this grant, staff will provide both global and focused education and system-specific guidance to small public water systems that meet eligibility requirements, lack financial and technical capabilities, and are subject to Commission groundwater withdrawal regulations. Staff will provide technical assistance related to the groundwater withdrawal application process and aquifer testing requirements, and will provide hydrogeologic guidance to assist in the development, management and protection of groundwater sources.

PADEP - \$125,000 SRBC - \$0 Total - \$125,000

f. Agreement Approvals – Latus Commercial Realty

Commission staff proposes to enter into two listing agreements with Latus Commercial Realty. The first agreement gives Latus an exclusive right to sell the Commission’s current headquarters building located at 1721 N. Front Street, Harrisburg, Pa. The second agreement is an exclusive right to lease up to 5,000 square feet in the building that the Commission will be purchasing next year located at 4423 N. Front Street, Harrisburg, Pa.

Ms. Rynearson recommended approval/ratification of all of the above described agreements/grants. On a motion by Commissioner Lynch, seconded by Commissioner Heffner, the Commission unanimously adopted the recommendations of Ms. Rynearson regarding these agreements/grants.

4. Regulatory Program Actions

The Commission had before it a staff memorandum containing the following list of project applications. The memo also contained staff’s recommendations with respect to 1) extension of application deadline associated with the conditional transfer of Hawk Valley Golf Course, Lancaster County, Pa. to Talon Holdings, LLC; and 2) issuance of a corrective docket to Nature’s Way Purewater Systems, Inc. (Covington Springs Borehole) (Exhibit A), Dupont Borough, Luzerne County, Pa. Project Review Manager Andrew Dehoff added a brief word of explanation on staff’s recommendations. In addition, Director of Administration and Finance Marcia Rynearson presented a staff proposal for partial waiver of application fees for withdrawn

applications. All projects on the following list were recommended for approval with the exception of Nos. 5, 14, 16, 19, 20 & 27, which were recommended for tabling.

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| <ol style="list-style-type: none"> 1. Borough of Adamstown, Adamstown Borough, Lancaster County, Pa. (Exhibit B1) 2. Anadarko E&P Company LP (Second Fork Larrys Creek), Mifflin Township, Lycoming County, Pa. (Exhibit B2) 3. Cabot Oil & Gas Corporation (Susquehanna River), Susquehanna Depot Borough, Susquehanna County, Pa. (Exhibit B3) 4. Cabot Oil & Gas Corporation (Susquehanna River), Great Bend Township, Susquehanna County, Pa. (Exhibit B4) 5. Caernarvon Township Authority, Caernarvon Township, Berks County, Pa. 6. Carrizo (Marcellus), LLC (Muddy Run), Gulich Township, Clearfield County, Pa. (Exhibit B5) 7-12. East Hempfield Township Municipal Authority, East Hempfield Township, Lancaster County, Pa. (Exhibit B6) 13. Enerplus Resources (USA) Corporation (West Branch Susquehanna River), East Keating Township, Clinton County, Pa. (Exhibit B7) 14. EQT Production Company (Pine Creek), Porter Township, Lycoming County, Pa. 15. EXCO Resources (PA), LLC (Larrys Creek), Mifflin Township, Lycoming County, Pa. (Exhibit B8) 16. Falling Springs Water Works, Inc. (Falling Springs Reservoir), Ransom Township, Lackawanna County, Pa. | <ol style="list-style-type: none"> 17-18. Forest Springs Water Company, Wayne Township, Schuylkill County, Pa. (Exhibit B9) 19. Gaberseck Brothers (Odin Pond 2), Keating Township, Potter County, Pa. 20. Houtzdale Municipal Authority (Beccaria Springs), Gulich Township, Clearfield County, Pa. 21. Hydro Recovery-Antrim LP, Antrim Treatment Plant, Duncan Township, Tioga County, Pa. (Exhibit B10) 22. Keystone Clearwater Solutions, LLC (Lycoming Creek), Lewis Township, Lycoming County, Pa. (Exhibit B11) 23. Keystone Clearwater Solutions, LLC (Moshannon Creek), Snow Shoe Township, Centre County, Pa. (Exhibit B12) 24. Keystone Clearwater Solutions, LLC (West Branch Susquehanna River), Goshen Township, Clearfield County, Pa. (Exhibit B13) 25-26. Roaring Spring Water – Division of Roaring Spring Blank Book, Roaring Spring Borough, Blair County, Pa. (Exhibit B14) 27. Southwestern Energy Production Company (Middle Lake), New Milford Township, Susquehanna County, Pa. 28. Talisman Energy USA Inc. (Susquehanna River), Sheshequin Township, Bradford County, Pa. (Exhibit B15) |
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Highlight = Staff recommending tabling.

Commissioner Jordan moved that the Commission adopt the recommendations of staff for the 28 project applications as presented by Mr. Dehoff, and also adopt Mr. Dehoff's recommendations with respect to: 1) the conditional transfer extension request for Talon Holdings, LLC; and 2) issuance of a corrective docket to Nature's Way Purewater Systems, Inc. He further moved that the Commission adopt Ms. Ryneanson's recommendation with respect to partial waiver of application fees for withdrawn projects. This motion was seconded by Commissioner Heffner and unanimously adopted by the Commission.

5. Public Comments

Chairman Summers opened the meeting to public comments. The Commission received one question about the outcome of tabled project applications. Tabled applications are acted on at a later meeting of the Commission.

6. Adjournment

There being no further business before the Commission, and on a motion by Commissioner Heffner, seconded by Commissioner Jordan, Chairman Summers adjourned the meeting at 8:54 a.m. The next regular meeting of the Commission is tentatively scheduled for December 14, 2012, in Annapolis, Maryland.

Date Adopted

Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

1721 North Front Street • Harrisburg, Pennsylvania 17102-2391
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Docket No. 20110618
Approval Date: June 23, 2011

NATURE’S WAY PUREWATER SYSTEMS, INC.

**Groundwater Withdrawal (30-Day Average) of 0.057 mgd
from Covington Springs Borehole 1 (BH-1) and
Consumptive Water Use of up to 0.257 mgd**

Section 1. Approval

After review of the record, including the technical findings of Susquehanna River Basin Commission (Commission) staff, the Commission determines that no adverse impacts to area surface water or groundwater withdrawals are anticipated by the operation of this project, and that the project is physically feasible, does not conflict with or adversely affect the Commission’s Comprehensive Plan, and does not adversely influence the present or future use and development of the water resources of the basin. Accordingly, the application of the project sponsor requesting a withdrawal and the consumptive use of water in support of the project identified in Section 2, from the sources identified in Sections 3 and 6, is hereby approved by the Commission in accordance with the conditions set forth below.

Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP) and the Delaware River Basin Commission (DRBC) during review of this project.

Section 2. Project Information

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

Project Information	
Project Sponsor:	Nature’s Way Purewater Systems, Inc.
Approval Types:	Groundwater Withdrawal and Consumptive Water Use
Water Use Type:	Bottled Water
Municipality:	Dupont Borough
County:	Luzerne County
State:	Pennsylvania

Section 3. Source Information

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

Source Information	
Withdrawal Type:	Groundwater
Withdrawal Source:	Covington Springs Borehole 1 (BH-1)
Subbasin:	Middle Susquehanna
Watershed Boundary Dataset (WBD):	0205010701 (Lackawanna River)
Withdrawal Location (degrees):	Lat: 41.271825 N Long: -75.538150 W
Special Flow Protection Required:	No

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 BH-1 was conducted on June 1 through 4, 2010, pumping at an average rate of 81.5 gallons per minute (gpm).

Commission staff determined that the withdrawal from Well BH-1 at the tested and the requested withdrawal rate has the potential for causing adverse impacts to competing supplies along with potential to cause adverse impacts to the water resources of the basin. Commission staff calculated, using the supplied testing results, a reduced withdrawal quantity that should not result in adverse impacts to either competing water supplies or 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):	0.057
Maximum Instantaneous Withdrawal Rate (gpm):	40 (Not to Exceed)
Total System Withdrawal Limit (30-Day Average) (mgd):	0.057
mgd – million gallons per day	

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

Section 6. Approved Consumptive Water Use Quantities and Limitations

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

Approved Consumptive Water Use Quantities and Limitations	
Sources for Project Consumptive Water Use:	1. Covington Springs BH-1 2. Public Water Supply – Pennsylvania American Water
Peak Day Consumptive Water Use Amount (mgd):	0.257 (Not to Exceed)
Project Consumptive Water Uses:	Bottled Water
Consumptive Use Mitigation Type:	Payment of consumptive use mitigation fee

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

Section 7. Standard Conditions

1. The project sponsor shall comply with all Commission regulations, including metering and reporting requirements contained in Commission Regulation 18 CFR §806.30.

2. 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 digital photographs of the meter when it has been installed and certify the accuracy of the measuring device to within five (5) percent of actual flow.

3. Within sixty (60) days from the date of this approval, the project sponsor shall submit a metering plan to the Commission for review and approval by Commission staff that accounts for all consumptive water use. Following approval, the project sponsor shall execute the plan and complete any installation of meters in accordance with the approved schedule. The project sponsor shall notify the Commission, in writing, and submit digital photographs of the meter when it has been installed and certify the accuracy of the measuring device to within five (5) percent of actual flow. The project sponsor shall notify the Commission when the monitoring plan has been fully implemented.

4. Within ninety (90) days from the date of this approval, the project sponsor shall submit a plan to Commission staff for review and approval for the implementation of a groundwater elevation monitoring program. The plan shall include proposed methods for the daily measurement and recording of groundwater elevations in the source listed in Section 3, along with monitoring well BH-4 and wetlands piezometers WP-1, WP-2 and WP-3 (new wetlands piezometer). Following approval, the project sponsor shall execute the plan and complete installation of water level monitoring equipment in accordance with the approved schedule. The project sponsor shall notify the Commission, in writing, and submit digital

photographs of the water level monitoring equipment when it has been installed and certify the accuracy of the measuring devices. The project sponsor shall notify the Commission when the monitoring plan has been fully implemented. Thereafter, the groundwater elevations data shall be reported to the Commission quarterly, and as otherwise required. Quarterly monitoring reports shall be submitted on-line and are due within thirty (30) days after the close of the preceding quarter.

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

6. The project sponsor shall keep daily records of the project's withdrawal and shall report the data to the Commission quarterly, and as otherwise required. Quarterly monitoring reports shall be submitted on-line 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, approved by Commission staff prior to implementing or modifying existing equipment or procedures.

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

8. The project sponsor shall keep daily records of the project's consumptive water use and shall report the data to the Commission quarterly, and as otherwise required. The daily quantity of water consumptively used shall be the combined quantity of water received from Covington Springs BH-1 and Pennsylvania American Water. Quarterly monitoring reports shall be submitted on-line 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, approved by Commission staff.

9. The project's consumptive water use is subject to water mitigation requirements, as per Commission Regulation 18 CFR §806.22(b). To satisfy the Commission's current compensation requirements for consumptive water use, the project sponsor shall make quarterly payments to the Commission at the rate specified in the effective Regulatory Program Fee Schedule, as modified from time to time by the Commission. Payments shall be made quarterly and shall be calculated by applying this rate to the daily amount of water consumptively used by the project during the preceding calendar quarter. Quarterly payments are due and payable within thirty (30) days after the close of the preceding quarter. The rate of payment, after appropriate notice to consumptive users of water using this method of compliance, is subject to change at the Commission's discretion. Water approved for consumptive use under this approval but originating from sources outside the Susquehanna River Basin are not subject to the water mitigation requirement; therefore, the consumptive use mitigation fee required for this project

shall be calculated from the total combined water received from the Covington Springs BH-1 and the Pennsylvania American Water interconnect sources, both of which are located within the Susquehanna River Basin.

10. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation 18 CFR §806.25(b).

11. To satisfy the Commission's registration requirement, the project sponsor shall register with the PADEP all surface water and groundwater sources described in this docket in accordance with 25 PA Code §110.201, Pennsylvania Water Resources Planning Act, Act 220 of 2002.

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 is subject to enforcement actions pursuant to Commission Regulation 18 CFR §808.

13. Commission approval shall not be construed to exempt the project sponsor from obtaining 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 reserves the right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.

14. The Commission reserves the right to reopen any project docket 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 has a period of three (3) years from the date of this approval to initiate the project or this approval will automatically expire, unless an extension is requested by the project sponsor and approved by the Commission. Likewise, 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 unless a renewal is requested by the project sponsor and approved by the Commission.

18. Should the project's approved withdrawals or consumptive uses be expected to exceed the amounts listed herein, the project sponsor is required to make application for modification to this approval at that time.

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

20. This approval is effective until June 22, 2026. As specified in Commission Regulation 18 CFR §806.31(e), the project sponsor shall submit an application by December 22, 2025, and obtain Commission approval prior to continuing operation beyond June 22, 2026.

Section 8. Special Conditions

21. Should the project's anticipated total system demand be expected to exceed the approved total system withdrawal limit herein, the project sponsor is required to make application for modification to this approval at that time.

22. The project sponsor shall maintain legal access to the withdrawal location for the duration of the approval.

23. For evaluation of potential ongoing impacts to the site wetlands, an additional wetlands piezometer to be identified as WP-3 should be installed 50 to 80 feet to the west and downslope of the Weir 1 location. WP-3 should be installed with similar depth and construction as WP-2. Following the installation of WP-3, the project sponsor shall provide the Commission an updated site map illustrating the location of WP-3, and a construction and lithologic log for WP-3. Additionally, during the period of three (3) years following the initiation of operation of the approved withdrawal from BH-1, the project sponsor shall prepare and submit a report annually providing the results and evaluations of groundwater elevation and wetlands piezometer monitoring required herein. The report must be submitted within sixty (60) days after the close of the preceding year of operation. The report shall be submitted in both hard copy and by electronic file. Upon receiving the monitoring and reporting for the third year of operation, Commission staff will make a determination regarding impacts of the operation and the need for continued monitoring. Commission staff will notify the project sponsor in writing if it determines that the monitoring and reporting requirement may be terminated.

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 June 23, 2011.

Dated: June 24, 2011


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

1721 North Front Street • Harrisburg, Pennsylvania 17102-2391

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Docket No. 20120901

Approval Date: September 20, 2012

BOROUGH OF ADAMSTOWN

**Groundwater Withdrawal (30-Day Average) of 0.069 mgd from Well 4, and
Total System Withdrawal Limit (30-Day Average) of 0.163 mgd
from Wells 2, 3, and 4**

Section 1. Approval

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

The project was originally approved by the Commission on November 13, 1980, with Commission Docket No. 19801104 for groundwater withdrawal from Well 4. Upon application for renewal, the project sponsor requested a lesser withdrawal quantity than had been previously approved; Commission staff recommended the approved rate be reduced to 0.069 million gallons per day (mgd). The project maintains withdrawals from Wells 2 and 3 that predate the applicable groundwater withdrawal regulations as set forth below in Section 6 (Grandfathering Determination – Withdrawals).

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

Section 2. Project Information

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

Project Information	
Project Sponsor:	Borough of Adamstown
Approval Type:	Groundwater Withdrawal
Authorized Water Use Purpose:	Public Water Supply
Original Docket No.:	19801104
Municipality:	Adamstown Borough
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
Withdrawal Source:	Well 4
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

Commission staff determined that the withdrawal from Well 4 at the revised withdrawal rate of 0.069 mgd should not cause permanent loss of aquifer storage, render competing supplies unreliable, or cause adverse impacts to the water resources of the basin. Therefore, the aquifer testing requirements for Well 4, pursuant to Commission Regulation 18 CFR §806.12, are hereby waived.

Section 5. Approved Withdrawal Quantities and Limitations

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

Approved Withdrawal Quantities and Limitations – Well 4	
30-Day Average Withdrawal (mgd):	0.069
Maximum Instantaneous Withdrawal Rate (gpm):	250 (Not to Exceed)
Total System Withdrawal Limit – Wells 2, 3 and 4 (30-Day Average) (mgd):	0.163
gpm – gallons per minute	

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

Section 6. Grandfathering Determination – Withdrawals

Quantities applicable to the project’s grandfathering determination for existing withdrawals are listed in the table below.

Grandfathered Groundwater Withdrawals	
Source	30-Day Average Withdrawal (mgd)
Well 2	0.141
Well 3	0.150

Section 7. Standard Conditions

1. The project sponsor shall comply with all Commission regulations, including metering and reporting requirements contained in Commission Regulation 18 CFR §806.30. 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 from time to time.

2. Within sixty (60) days from the date of this approval, the project sponsor shall submit a metering plan to the Commission for review and approval by Commission staff that accounts for all withdrawals from the sources listed in Sections 3 and 6. Following approval, the project sponsor shall execute the plan and complete any installation of meters in accordance with the approved schedule.

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 digital 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.

4. Within ninety (90) days from the date of this approval, the project sponsor shall submit a plan to Commission staff for review and approval for the implementation of a groundwater elevation monitoring program. The plan shall include proposed methods for the daily measurement and recording of groundwater elevations in the sources listed in Sections 3 and 6. Following approval, the project sponsor shall execute the plan and complete installation of water level monitoring equipment in accordance with the approved schedule. The project sponsor shall notify the Commission, in writing, and submit digital photographs of the water level monitoring equipment when it has been installed and certify the accuracy of the measuring devices. The project sponsor shall notify the Commission when the monitoring plan has been fully implemented. Thereafter, the groundwater elevation data shall be reported to the Commission quarterly, and as otherwise required. Quarterly monitoring reports shall be submitted on-line and are due within thirty (30) days after the close of the preceding quarter.

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

6. The project sponsor shall 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, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted on-line 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, approved by Commission staff prior to implementing or modifying existing equipment or procedures.

7. The project sponsor shall maintain totalizing meters and other 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.

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

9. To satisfy the Commission's registration requirement, the project sponsor shall register with the PADEP all groundwater sources described in this docket in accordance with 25 PA Code §110.201, Pennsylvania Water Resources Planning Act, Subchapter B, "Registration."

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

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

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

13. Commission approval confers no property rights upon the project sponsor. The securing of all rights necessary and incident to the project sponsor's development and operation

of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.

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

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

16. Should the project's anticipated withdrawals be expected to exceed the amounts listed herein, the project sponsor is required to make application for modification to this approval at that time.

17. If the Commission determines that the operation of the project's groundwater withdrawals 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.

18. This approval is effective until September 19, 2027. As specified in Commission Regulation 18 CFR §806.31(e), the project sponsor shall submit an application by March 19, 2027. Provided such application is timely filed, 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.

Section 8. Special Conditions

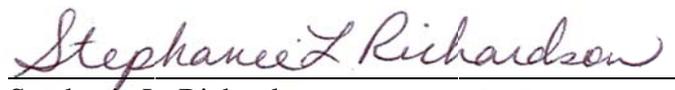
19. Should the project's grandfathered withdrawals be expected to exceed the amounts listed herein, or if a new source is added to the system, the project sponsor is required to make application at that time.

20. Should the project's anticipated total system demand be expected to exceed the approved total system withdrawal limit herein, the project sponsor is required to make application for modification to this approval at that time.

21. The project sponsor shall maintain legal access to the withdrawal location for the duration of the approval.

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 20, 2012.

Dated: September 21, 2012


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

1721 North Front Street • Harrisburg, Pennsylvania 17102-2391

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Docket No. 20120902

Approval Date: September 20, 2012

ANADARKO E&P COMPANY LP

**Surface Water Withdrawal (Peak Day) of up to 0.200 mgd
from Second Fork Larrys Creek**

Section 1. Approval

After review of the record, including the technical findings of Susquehanna River Basin Commission (Commission) staff, the Commission determines that no adverse impacts are anticipated by the operation of this project, and that the project is physically feasible, does not conflict with or adversely affect the Commission's Comprehensive Plan, and does not adversely influence the present or future use and development of the water resources of the basin. 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), Department of Conservation and Natural Resources (DCNR), and the Pennsylvania Fish and Boat Commission (PFBC) during review of this project.

Section 2. Project Information

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

Project Information	
Project Sponsor:	Anadarko E&P Company LP
Approval Type:	Surface Water Withdrawal
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses
Municipality:	Mifflin Township
County:	Lycoming County
State:	Pennsylvania

Section 3. Source Information

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

Source Information	
Approved Source:	Second Fork Larrys Creek
Subbasin:	West Branch Susquehanna
Watershed Boundary Dataset (WBD):	0205020601 (Larrys Creek)
Water Use Designation:	Exceptional Value (EV)
Withdrawal Location (degrees):	Lat: 41.336447 N Long: 77.243448 W
Flow Statistics (cfs):	Q7-10 = 0.4; Average Daily Flow = 25.4
Wild Trout Classification:	Naturally Reproducing Wild Trout Stream
Drainage Area (square miles):	16.3
Special Flow Protection Required:	Yes
cfs – cubic feet per second	

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):	0.200 (Not to Exceed, When Available)
Maximum Instantaneous Withdrawal Rate (gpm):	138 (Not to Exceed)
Flow Protection Type:	Passby; 25% Average Daily Flow
Flow Protection Rate (cfs):	6.4
Flow Protection Rate (gpm):	2,850
Method for Flow Protection:	Monitor USGS Real-Time Gage 01549500; Blockhouse Creek near English Center, Pennsylvania
Flow Protection Threshold (cfs):	16
mgd – million gallons per day gpm – gallons per minute	USGS – U.S. Geological Survey

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, including metering and reporting requirements contained in Commission Regulation 18 CFR §806.30.

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 from time to time.

2. Within sixty (60) days from the date of this approval, the project sponsor shall submit a metering plan to the Commission for review and approval by Commission staff that accounts for all withdrawals. Following approval and prior to withdrawal, the project sponsor shall execute the plan and complete any installation of meters in accordance with the approved schedule.

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 digital 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. Within sixty (60) days from the date of this approval, the project sponsor shall submit an intake design for review and approval 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 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.

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

6. The project sponsor shall 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 on-line 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, approved by Commission staff prior to implementing or modifying existing equipment or procedures.

7. The project sponsor shall maintain the totalizing meter and other measuring devices, accurate to within five (5) percent, so as to provide an accurate record of withdrawals and certify to the Commission once every two (2) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.

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

9. To satisfy the Commission's registration requirement, the project sponsor shall register with the PADEP all surface water sources described in this docket in accordance with 25 PA Code §110.201, Pennsylvania Water Resources Planning Act, Subchapter B, "Registration."

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

11. Commission approval shall not be construed to exempt the project sponsor from obtaining 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 reserves the right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.

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

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

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

15. The project sponsor 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 by the project sponsor and approved by the Commission as provided in Commission Regulation 18 CFR §806.31(b). Likewise, 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 unless a renewal is requested by the project sponsor and approved by the Commission.

16. Should the project's anticipated withdrawals be expected to exceed the amounts listed herein, the project sponsor is required to make application for modification to this approval at that time.

17. This approval is effective until September 19, 2016. As specified in Commission Regulation 18 CFR §806.31(e), the project sponsor shall submit an application by March 19, 2016. Provided such application is timely filed, 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.

Section 6. Special Conditions

18. Effective the date of this approval, 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 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. The project sponsor shall keep daily records of the U.S. Geological Survey stream gage and shall report the data to the Commission, as required. The project sponsor may propose alternative flow monitoring to the Commission for staff review and, if acceptable, approval.

19. Per Commission coordination with jurisdictional agency(ies), the project sponsor shall adhere to recommendations for avoiding adverse impact to documented occurrences of rare, threatened, or endangered species at or in proximity to the project location. To avoid adverse impact to the stream's naturally reproducing wild trout population, instream construction shall not be permitted from October 1 through December 31.

20. Prior to the withdrawal of water, the project sponsor shall post a sign that meets Commission specifications and displays required project description information. 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 description shall identify the project sponsor, project name, docket approval number, and conditions of the surface water withdrawal approval including quantity, rate and passby flow requirement, docket expiration date, and contact information for the project sponsor and the Commission. The sign shall be installed prior to any withdrawal of water and be maintained for the duration of the approval. The project sponsor shall submit digital photographs as proof of sign installation prior to the initiation of the withdrawal.

21. The project sponsor shall maintain legal access to the withdrawal location for the duration of the approval.

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 determination of authorized 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 all water withdrawn from surface water sources, while under control of or on a facility owned or operated by the project sponsor, is transported, stored, injected into a well, or discharged with appropriate controls and treatment to prevent the spread of aquatic nuisance species.

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 20, 2012.

Dated: September 21, 2012


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20120903

Approval Date: September 20, 2012

CABOT OIL & GAS CORPORATION

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

Section 1. Approval

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

This approval is a renewal of Commission Docket No. 20080908 that was approved September 11, 2008, and modified March 15, 2012. The project sponsor has not requested and Commission staff did not recommend any changes of the modification docket identified as 20080908-1.

Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP), 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
Original Docket No.:	20080908
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses
Municipality:	Susquehanna Depot Borough
County:	Susquehanna County

State:	Pennsylvania
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Section 3. Source Information

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

Source Information	
Approved Source:	Susquehanna River
Subbasin:	Upper Susquehanna
Watershed Boundary Dataset (WBD):	0205010113 (Lower Susquehanna River)
Water Use Designation:	Warm Water Fishery (WWF)
Withdrawal Location (degrees):	Lat: 41.947805 N Long: 75.606861 W
Flow Statistics (cfs):	Q7-10 = 169; Average Daily Flow = 3,260
Drainage Area (square miles):	2,005
Special Flow Protection Required:	Yes
cfs – cubic feet per second	

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:	Passby: 20% Average Daily Flow November 1 through June 30; 10% Average Daily Flow July 1 through October 31
Flow Protection Rate (cfs):	652 – November 1 through June 30; 326 – July 1 through October 31
Flow Protection Rate (gpm):	293,000 – November 1 through June 30; 146,000 – July 1 through October 31
Method for Flow Protection:	Monitor USGS Real-Time Gage 01503000; Susquehanna River at Conklin, New York
Flow Protection Threshold (cfs):	726 – November 1 through June 30; 363 – July 1 through October 31
mgd – million gallons per day	USGS – U.S. Geological Survey
gpm – gallons per minute	

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

Section 5. Standard Conditions

1. The project sponsor shall comply with all Commission regulations, including metering and reporting requirements contained in Commission Regulation 18 CFR §806.30. 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 from time to time.

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 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 install and/or 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 digital photographs of the proposed 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.

4. The project sponsor shall adhere to the intake designs reviewed and approved by Commission staff, and shall maintain/obtain necessary general or individual permits for the intake from the jurisdictional permitting agency. The project sponsor shall provide the Commission with a copy of the permit prior to use of the intake. 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.

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

6. The project sponsor shall 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 on-line 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, approved by Commission staff prior to implementing or modifying existing equipment or procedures.

7. The project sponsor shall maintain the totalizing meter and other measuring devices, accurate to within five (5) percent, so as to provide an accurate record of withdrawals, and certify

to the Commission once every two (2) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.

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

9. To satisfy the Commission's registration requirement, the project sponsor shall register with the PADEP all surface water sources described in this docket in accordance with 25 PA Code §110.201, Pennsylvania Water Resources Planning Act, Subchapter B, "Registration."

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

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

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

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

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

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

16. Should the project's anticipated withdrawals be expected to exceed the amounts listed herein, the project sponsor is required to make application for modification to this approval at that time.

17. This approval is effective until September 19, 2016. As specified in Commission Regulation 18 CFR §806.31(e), the project sponsor shall submit an application by March 19,

2016. Provided such application is timely filed, 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.

Section 6. Special Conditions

18. Effective the date of this approval, 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 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. The project sponsor shall keep daily records of the U.S. Geological Survey stream gage and shall report the data to the Commission, as required. The project sponsor may propose alternative flow monitoring to the Commission for staff review and, if acceptable, approval.

19. Within sixty (60) days from the date of this approval, the project sponsor shall post a sign that meets Commission specifications and displays required project description information. 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 description shall identify the project sponsor, project name, docket approval number, and conditions of the surface water withdrawal approval including quantity, rate and passby flow requirement, docket expiration date, and contact information for the project sponsor and the Commission. The sign shall be installed prior to any withdrawal of water and be maintained for the duration of the approval. The project sponsor shall submit digital photographs as proof of sign installation.

20. The project sponsor shall maintain legal access to the withdrawal location for the duration of the approval.

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

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

23. Prior to supplying water for any use not authorized pursuant to Section 2 of this approval, the project sponsor shall first submit a request for determination of authorized use to the Executive Director. The project sponsor shall not supply water for such use unless and until

such authorization is granted, and pursuant to any supplemental terms and conditions contained in such approval.

24. The project sponsor shall demonstrate to the satisfaction of the Commission that all water withdrawn from surface water sources, while under control of or on a facility owned or operated by the project sponsor, is transported, stored, injected into a well, or discharged with appropriate controls and treatment to prevent the spread of aquatic nuisance species.

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 20, 2012.

Dated: September 21, 2012


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20120904

Approval Date: September 20, 2012

CABOT OIL & GAS CORPORATION

**Surface Water Withdrawal (Peak Day) of up to 2.000 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 determines that no adverse impacts are anticipated by the operation of this project, and that the project is physically feasible, does not conflict with or adversely affect the Commission's Comprehensive Plan, and does not adversely influence the present or future use and development of the water resources of the basin. Accordingly, the Commission hereby approves the renewal of the project described herein in accordance with the conditions set forth below.

This approval is a renewal of Commission Docket No. 20080905 that was approved September 11, 2008, and modified March 15, 2012. The project sponsor has not requested and Commission staff did not recommend any changes of the modification docket identified as 20080905-1.

Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP), 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
Original Docket No.:	20080905
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses
Municipality:	Great Bend Township
County:	Susquehanna County
State:	Pennsylvania

Section 3. Source Information

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

Source Information	
Approved Source:	Susquehanna River
Subbasin:	Upper Susquehanna
Watershed Boundary Dataset (WBD):	0205010113 (Lower Susquehanna River)
Water Use Designation:	Warm Water Fishery (WWF)
Withdrawal Location (degrees):	Lat: 41.964596 N Long: 75.737193 W
Flow Statistics (cfs):	Q7-10 = 172; Average Daily Flow = 3,320
Drainage Area (square miles):	2,044
Special Flow Protection Required:	Yes
cfs – cubic feet per second	

Section 4. Approved Withdrawal Quantities and Limitations

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

Approved Withdrawal Quantities and Limitations	
Peak Day Withdrawal Amount (mgd):	2.000 (Not to Exceed, When Available)
Maximum Instantaneous Withdrawal Rate (gpm):	1,389 (Not to Exceed)
Flow Protection Type:	Passby: 20% Average Daily Flow November 1 through June 30; 10% Average Daily Flow July 1 through October 31
Flow Protection Rate (cfs):	665 – November 1 through June 30; 332 – July 1 through October 31
Flow Protection Rate (gpm):	298,000 – November 1 through June 30; 149,000 – July 1 through October 31
Method for Flow Protection:	Monitor USGS Real-Time Gage 01503000; Susquehanna River at Conklin, New York
Flow Protection Threshold (cfs):	726 – November 1 through June 30; 363 – July 1 through October 31
mgd – million gallons per day gpm – gallons per minute	USGS – U.S. Geological Survey

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, including metering and reporting requirements contained in Commission Regulation 18 CFR §806.30. 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 from time to time.

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 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 install and/or 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 digital photographs of the proposed 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.

4. The project sponsor shall adhere to the intake designs reviewed and approved by Commission staff, and shall maintain/obtain necessary general or individual permits for the intake from the jurisdictional permitting agency. The project sponsor shall provide the Commission with a copy of the permit prior to use of the intake. 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.

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

6. The project sponsor shall 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 on-line 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, approved by Commission staff prior to implementing or modifying existing equipment or procedures.

7. The project sponsor shall maintain the totalizing meter and other measuring devices, accurate to within five (5) percent, so as to provide an accurate record of withdrawals, and certify

to the Commission once every two (2) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.

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

9. To satisfy the Commission's registration requirement, the project sponsor shall register with the PADEP all surface water sources described in this docket in accordance with 25 PA Code §110.201, Pennsylvania Water Resources Planning Act, Subchapter B, "Registration."

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

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

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

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

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

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

16. Should the project's anticipated withdrawals be expected to exceed the amounts listed herein, the project sponsor is required to make application for modification to this approval at that time.

17. This approval is effective until September 19, 2016. As specified in Commission Regulation 18 CFR §806.31(e), the project sponsor shall submit an application by March 19,

2016. Provided such application is timely filed, 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.

Section 6. Special Conditions

18. Effective the date of this approval, 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 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. The project sponsor shall keep daily records of the U.S. Geological Survey stream gage and shall report the data to the Commission, as required. The project sponsor may propose alternative flow monitoring to the Commission for staff review and, if acceptable, approval.

19. Within sixty (60) days from the date of this approval, the project sponsor shall post a sign that meets Commission specifications and displays required project description information. 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 description shall identify the project sponsor, project name, docket approval number, and conditions of the surface water withdrawal approval including quantity, rate and passby flow requirement, docket expiration date, and contact information for the project sponsor and the Commission. The sign shall be installed prior to any withdrawal of water and be maintained for the duration of the approval. The project sponsor shall submit digital photographs as proof of sign installation.

20. The project sponsor shall maintain legal access to the withdrawal location for the duration of the approval.

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

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

23. Prior to supplying water for any use not authorized pursuant to Section 2 of this approval, the project sponsor shall first submit a request for determination of authorized use to the Executive Director. The project sponsor shall not supply water for such use unless and until

such authorization is granted, and pursuant to any supplemental terms and conditions contained in such approval.

24. The project sponsor shall demonstrate to the satisfaction of the Commission that all water withdrawn from surface water sources, while under control of or on a facility owned or operated by the project sponsor, is transported, stored, injected into a well, or discharged with appropriate controls and treatment to prevent the spread of aquatic nuisance species.

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 20, 2012.

Dated: September 21, 2012


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

1721 North Front Street • Harrisburg, Pennsylvania 17102-2391

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Docket No. 20120905

Approval Date: September 20, 2012

CARRIZO (MARCELLUS), LLC

**Surface Water Withdrawal (Peak Day) of up to 0.720 mgd
from Muddy Run**

Section 1. Approval

After review of the record, including the technical findings of Susquehanna River Basin Commission (Commission) staff, the Commission determines that no adverse impacts are anticipated by the operation of this project, and that the project is physically feasible, does not conflict with or adversely affect the Commission's Comprehensive Plan, and does not adversely influence the present or future use and development of the water resources of the basin. 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), 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:	Gulich 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:	Muddy Run
Subbasin:	West Branch Susquehanna
Watershed Boundary Dataset (WBD):	0205020103 (Clearfield Creek)
Water Use Designation:	Cold Water Fishery (CWF)
Withdrawal Location (degrees):	Lat: 40.754530 N Long: 78.446246 W
Flow Statistics (cfs):	Q7-10 = 0.8; Average Daily Flow = 18.6
Impairment:	Mine Drainage
Drainage Area (square miles):	10.8
Special Flow Protection Required:	Yes
cfs – cubic feet per second	

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:	Passby; 15% Average Daily Flow
Flow Protection Rate (cfs):	2.8
Flow Protection Rate (gpm):	1,250
Method for Flow Protection:	Monitor USGS Real-Time Gage 01557500; Bald Eagle Creek at Tyrone, Pennsylvania
Flow Protection Threshold (cfs):	16
mgd – million gallons per day	USGS – U.S. Geological Survey
gpm – gallons per minute	

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

Section 5. Standard Conditions

1. The project sponsor shall comply with all Commission regulations, including metering and reporting requirements contained in Commission Regulation 18 CFR §806.30. 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 from time to time.

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 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 digital 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 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 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.

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

6. The project sponsor shall 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 on-line 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, approved by Commission staff prior to implementing or modifying existing equipment or procedures.

7. The project sponsor shall maintain the totalizing meter and other measuring devices, accurate to within five (5) percent, so as to provide an accurate record of withdrawals, and certify to the Commission once every two (2) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.

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

9. To satisfy the Commission's registration requirement, the project sponsor shall register with the PADEP all surface water sources described in this docket in accordance with 25 PA Code §110.201, Pennsylvania Water Resources Planning Act, Subchapter B, "Registration."

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

11. Commission approval shall not be construed to exempt the project sponsor from obtaining 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 reserves the right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.

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

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

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

15. The project sponsor 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 by the project sponsor and approved by the Commission as provided in Commission Regulation 18 CFR §806.31(b). Likewise, 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 unless a renewal is requested by the project sponsor and approved by the Commission.

16. Should the project's anticipated withdrawals be expected to exceed the amounts listed herein, the project sponsor is required to make application for modification to this approval at that time.

17. This approval is effective until September 19, 2016. As specified in Commission Regulation 18 CFR §806.31(e), the project sponsor shall submit an application by March 19, 2016. Provided such application is timely filed, 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.

Section 6. Special Conditions

18. Effective the date of this approval, 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 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. The project sponsor shall keep daily records of the U.S. Geological Survey stream gage and shall report the data to the Commission, as required. The project sponsor may propose alternative flow monitoring to the Commission for staff review and, if acceptable, approval.

19. Prior to the withdrawal of water, the project sponsor shall post a sign that meets Commission specifications and displays required project description information. 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 description shall identify the project sponsor, project name, docket approval number, and conditions of the surface water withdrawal approval including quantity, rate and passby flow requirement, docket expiration date, and contact information for the project sponsor and the Commission. The sign shall be installed prior to any withdrawal of water and be maintained for the duration of the approval. The project sponsor shall submit digital photographs as proof of sign installation prior to the initiation of the withdrawal.

20. The project sponsor shall maintain legal access to the withdrawal location for the duration of the approval.

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

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

23. Prior to supplying water for any use not authorized pursuant to Section 2 of this approval, the project sponsor shall first submit a request for determination of authorized use to the Executive Director. The project sponsor shall not supply water for such use unless and until

such authorization is granted, and pursuant to any supplemental terms and conditions contained in such approval.

24. The project sponsor shall demonstrate to the satisfaction of the Commission that all water withdrawn from surface water sources, while under control of or on a facility owned or operated by the project sponsor, is transported, stored, injected into a well, or discharged with appropriate controls and treatment to prevent the spread of aquatic nuisance species.

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 20, 2012.

Dated: September 21, 2012


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20120906

Approval Date: September 20, 2012

EAST HEMPFIELD TOWNSHIP MUNICIPAL AUTHORITY

**Groundwater Withdrawal (30-Day Averages) of 0.268 mgd from Well W-1,
0.673 mgd from Well W-2, 0.264 mgd from Well W-3,
0.321 mgd from Well W-4, and 0.632 mgd from Well W-5;
Surface Water Withdrawal (Peak Day) of up to 0.070 mgd from Spring S-1;
Total System Withdrawal Limit (30-Day Average) of 1.937 mgd;
and a Combined Withdrawal Limit for
Wells W-1, W-2, and W-3 (30-Day Average) of 0.673 mgd**

Section 1. Approval

After review of the record, including the technical findings of Susquehanna River Basin Commission (Commission) staff, the Commission determines that no adverse impacts are anticipated by the operation of this project, and that the project is physically feasible, does not conflict with or adversely affect the Commission's Comprehensive Plan, and does not adversely influence the present or future use and development of the water resources of the basin. Accordingly, the Commission hereby approves the project described herein, comprised of the renewal of the Commission approval for Well W-5 and the approval of Spring S-1 and Wells W-1, W-2, W-3, and W-4, in accordance with the conditions set forth below.

Groundwater withdrawal from Well 5 was originally approved by the Commission with Commission Docket No. 19810203 on February 10, 1981. At that time, the project sponsor operated withdrawals initiated prior to applicable groundwater and surface water regulations from five sources (Wells W-1, W-2, W-3, and W-4 and Spring S-1). Because the project sponsor now operates one or more of the previously grandfathered sources above historic quantities, causing forfeiture of grandfathering, the five previously unapproved pre-regulation sources are subject to review and approval by the Commission.

The project sponsor also utilizes, as sources, four additional groundwater wells and an interconnection with the City of Lancaster public water supply. As identified in Section 6 below, Wells W-6, W-7, W-8, and W-11 are currently approved by the Commission under separate dockets. These four additional groundwater sources plus Spring S-1, and the groundwater sources referenced above, are hereafter referred to as the "total system."

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

Section 2. Project Information

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

Project Information	
Project Sponsor:	East Hempfield Township Municipal Authority
Approval Types:	Groundwater and Surface Water Withdrawals
Authorized Water Use Purpose:	Public Water Supply
Original Docket No.:	19810203 (Well W-5)
Municipality:	East Hempfield 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 tables below.

Groundwater Source Information	
Withdrawal Type:	Groundwater
Approved Sources:	Wells W-1, W-2, W-3, W-4, and W-5
Subbasin:	Lower Susquehanna River
Watershed Boundary Dataset (WBD):	0205030610 (Little Conestoga 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.	

Surface Water Source Information	
Withdrawal Type:	Surface Water
Approved Source:	Spring S-1
Subbasin:	Lower Susquehanna River
Watershed Boundary Dataset (WBD):	0205030610 (Little Conestoga Creek)
Water Use Designation*:	Cold Water Fishery (CWF)
Withdrawal Location (degrees)**:	Lat: -- Long: --
Flow Statistics (cfs)*:	Q7-10 = 0.3; Average Daily Flow = 3.5
Impairment*:	Unnamed tributary to Swarr Run is impaired by crop-related agriculture – nutrients; crop-related agriculture – siltation; grazing-related agriculture – siltation; urban runoff/storm sewers – cause unknown

Surface Water Source Information (continued)	
Drainage Area (square miles)*:	2.8
Special Flow Protection Required:	No
cfs – cubic feet per second	
* Information is based on the point where the discharge from Spring S-1 enters the unnamed tributary to Swarr Run.	
** Specific location information concerning discrete water-related project features has been withheld for security reasons.	

Section 4. Aquifer Testing

The project sponsor requested that the constant-rate aquifer testing required by Commission Regulation 18 CFR §806.12 for groundwater withdrawals be waived. In support of its request for waivers, the project sponsor has submitted data from historical aquifer testing completed on Wells W-2, W-3, W-4, and W-5 and operational withdrawal data for Wells W-1, W-2, W-3, W-4, and W-5. Commission staff determined that the individual withdrawals from Wells W-4 and W-5 and the Well Field consisting of Wells W-1, W-2, and W-3 (hereafter referred to as “the Well Field”) at the withdrawal rates approved herein 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 of this approval. Therefore, completion of aquifer testing requirements for Wells W-4 and W-5 and the Well Field, pursuant to Commission Regulation 18 CFR §806.12, are hereby waived.

However, because Wells W-4 and W-5 and the Well Field are all located within the same general groundwater recharge area and have overlapping or coincident recharge areas with other East Hempfield Township Municipal Authority production wells, this approval incorporates a total system withdrawal limit to ensure that the cumulative effects of groundwater withdrawal from all sources do not cause permanent loss of aquifer storage, render competing supplies unreliable, or cause adverse impacts to the water resources of the basin. The total system withdrawal limit is based on limited data supplied by the project sponsor indicating historic, maximum, short-term operation of the system that was accomplished with no known impacts to water resources or competing supplies. Because the data are not conclusive with respect to possible impacts of long-term sustained operation of the system at the maximum or greater rate, the total system withdrawal limit is imposed in the interim until such time as a comprehensive system evaluation can be completed.

To further evaluate cumulative effects during operation, potential well interference, future sustainability, and appropriate total system withdrawal limits, operational testing and monitoring is required hereunder (refer to Special Condition 21).

Section 5. Approved Withdrawal Quantities and Limitations

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

Approved Withdrawal Quantities and Limitations – Well W-1	
30-Day Average Withdrawal (mgd):	0.268
Maximum Instantaneous Withdrawal Rate (gpm):	200 (Not to Exceed)
Well Field Combined Withdrawal Limit – Wells W-1, W-2, and W-3 (30-Day Average) (mgd):	0.673
Total System Withdrawal Limit – Wells W-1, W-2, W-3, W-4, W-5, W-6, W-7, W-8, and W-11 and Spring S-1 (30-Day Average) (mgd):	1.937
mgd – million gallons per day gpm – gallons per minute	

Approved Withdrawal Quantities and Limitations – Well W-2	
30-Day Average Withdrawal (mgd):	0.673
Maximum Instantaneous Withdrawal Rate (gpm):	550 (Not to Exceed)
Well Field Combined Withdrawal Limit – Wells W-1, W-2, and W-3 (30-Day Average) (mgd):	0.673
Total System Withdrawal Limit – Wells W-1, W-2, W-3, W-4, W-5, W-6, W-7, W-8, and W-11 and Spring S-1 (30-Day Average) (mgd):	1.937

Approved Withdrawal Quantities and Limitations – Well W-3	
30-Day Average Withdrawal (mgd):	0.264
Maximum Instantaneous Withdrawal Rate (gpm):	200 (Not to Exceed)
Well Field Combined Withdrawal Limit – Wells W-1, W-2, and W-3 (30-Day Average) (mgd):	0.673
Total System Withdrawal Limit – Wells W-1, W-2, W-3, W-4, W-5, W-6, W-7, W-8 and, W-11 and Spring S-1 (30-Day Average) (mgd):	1.937

Approved Withdrawal Quantities and Limitations – Well W-4	
30-Day Average Withdrawal (mgd):	0.321
Maximum Instantaneous Withdrawal Rate (gpm):	230 (Not to Exceed)
Total System Withdrawal Limit – Wells W-1, W-2, W-3, W-4, W-5, W-6, W-7, W-8, and W-11 and Spring S-1 (30-Day Average) (mgd):	1.937

Approved Withdrawal Quantities and Limitations – Well W-5	
30-Day Average Withdrawal (mgd):	0.632
Maximum Instantaneous Withdrawal Rate (gpm):	500 (Not to Exceed)
Total System Withdrawal Limit – Wells W-1, W-2, W-3, W-4, W-5, W-6, W-7, W-8, and W-11 and Spring S-1 (30-Day Average) (mgd):	1.937

Approved Withdrawal Quantities and Limitations – Spring S-1	
Peak Day Withdrawal Amount (mgd):	0.070 (Not to Exceed)
Maximum Instantaneous Withdrawal Rate (gpm):	70 (Not to Exceed)
Total System Withdrawal Limit – Wells W-1, W-2, W-3, W-4, W-5, W-6, W-7, W-8, and W-11 and Spring S-1 (30-Day Average) (mgd):	1.937

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 Sources			
Source	30-Day Average Withdrawal (mgd)	Commission Docket No.	Docket Expiration Date
Wells W-6 and W-7	0.403	19870306	March 12, 2017
Well W-8	1.440	19890503	May 11, 2019
Well W-11	1.656	19930101	January 14, 2023
City of Lancaster Interconnection (PADEP WA487B)	2.000	Not Applicable	Not Applicable

Section 7. Standard Conditions

1. The project sponsor shall comply with all Commission regulations, including metering and reporting requirements contained in Commission Regulation 18 CFR §806.30. 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 from time to time.

2. The project sponsor has installed metering that accounts for all withdrawals and shall maintain such metering in accordance with Commission Regulation 18 CFR §806.30. The project sponsor shall submit digital photographs of the meters, provide the serial number of the meters, and certify the accuracy of the meters to within five (5) percent of actual flow.

3. The project sponsor shall maintain the totalizing meter and other 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.

4. 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.

5. 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 on-line 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, approved by Commission staff prior to implementing or modifying existing equipment or procedures.

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

7. To satisfy the Commission's registration requirement, the project sponsor shall register with the PADEP all surface water and groundwater sources described in this docket in accordance with 25 PA Code §110.201, Pennsylvania Water Resources Planning Act, Subchapter B, "Registration."

8. 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 is subject to enforcement actions pursuant to Commission Regulation 18 CFR §808.

9. Commission approval shall not be construed to exempt the project sponsor from obtaining 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 reserves the right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.

10. The Commission reserves the right to reopen any project docket 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.

11. 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.

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

13. 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 unless a renewal is requested by the project sponsor and approved by the Commission.

14. Should the project's anticipated withdrawals be expected to exceed the individual, combined, or total system limit amounts listed herein, the project sponsor is required to make application for modification to this approval at that time.

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

16. The project sponsor shall maintain legal access to the withdrawal locations for the duration of the approval.

17. This approval is effective until September 19, 2027. As specified in Commission Regulation 18 CFR §806.31(e), the project sponsor shall submit an application on or before March 19, 2027. Provided such application is timely filed, 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.

Section 8. Special Conditions

18. Within ninety (90) days from the date of this approval, the project sponsor shall submit a plan to Commission staff for review and approval for the implementation of a groundwater elevation monitoring program. The plan shall include proposed methods for the daily measurement and recording of groundwater elevations in the sources listed in Sections 3 and 6, excluding Spring S-1. Following approval, the project sponsor shall execute the plan and complete installation of water level monitoring equipment in accordance with the approved schedule. The project sponsor shall notify the Commission, in writing, and submit digital photographs of the water level monitoring equipment when it has been installed and certify the accuracy of the measuring devices. The project sponsor shall notify the Commission when the monitoring plan has been fully implemented. Thereafter, the groundwater elevation data shall be reported to the Commission quarterly, and as otherwise required. Quarterly monitoring reports shall be submitted on-line and are due within thirty (30) days after the close of the preceding quarter.

19. To provide outflow data from Spring S-1 to be used in monitoring the hydrologic system and effects resulting from operation of nearby groundwater withdrawals and to monitor effects on flow during withdrawal from the spring, the project sponsor shall install and implement flow monitoring equipment. Within ninety (90) days from the date of this approval, the project sponsor shall submit for review and approval by Commission staff a proposed plan to install a transducer and data logger, or alternate equivalent measuring equipment, at the discharge point of Spring S-1 (existing concrete outlet structure) and to utilize it in conjunction with the existing or newly constructed weir to provide accurate outflow measurements collected at a minimum frequency of daily. The spring flow measurement system shall be kept fully functional and free of debris. The Commission reserves the right to inspect the flow measurement device at any time. The project sponsor may propose an alternative spring flow measurement device to the Commission for staff review and approval.

Following approval, the project sponsor shall execute the plan and complete installation of the monitoring equipment in accordance with the approved schedule. The project sponsor shall notify the Commission, in writing, and submit digital photographs of the monitoring equipment when it has been installed and certify the accuracy of the measuring devices. The project sponsor shall notify the Commission when the monitoring plan has been fully implemented. Thereafter, the spring outflow data shall be reported to the Commission quarterly, and as otherwise required. Quarterly monitoring reports shall be submitted on-line and are due within thirty (30) days after the close of the preceding quarter.

20. Initial testing data provided for Well W-3 in Appendix F of the application submittal support a pump setting design that will maintain a water level above the 168-foot pumping level. Some historical water level data reported for Well W-3 indicate a pumping level that is deeper than 168 feet. Because dewatering of the zone at 168 feet below ground surface (bgs) could have potentially adverse impacts on the quality and quantity of groundwater, the groundwater level in Well W-3 shall be maintained above 168 feet bgs. Accordingly, the following modifications shall be completed within ninety (90) days from the date of this approval:

- a. The project sponsor shall install a shut-off switch or similar limiting equipment so that operation of Well W-3 automatically ceases if the water level reaches 168 feet bgs.
- b. The project sponsor shall notify the Commission, in writing, and submit digital photographs of the automatic shut-off equipment. The project sponsor shall notify the Commission when such equipment is fully functional.

21. Within one hundred and eighty (180) days from the date of this approval, the project sponsor shall submit an operational testing and monitoring plan to evaluate well interference, zones of influence, sustainability of the withdrawals, and the appropriateness of the total system limit established herein during concurrent operation at the individual approved withdrawal rates. Planning of operational testing should consider general performance standards in the current Commission aquifer testing guidance and, at a minimum, be generally completed in accordance with such standards. The plan shall include details of the monitoring and testing during operation of Wells W-1, W-2, W-3, W-4, W-5, W-8, and W-11 to accomplish data collection sufficient to complete the following:

- a. Evaluation and confirmation for each well individually that the maximum approved withdrawal is sustainable, and further evaluation of the individual zones of influence and resulting individual groundwater recharge areas. The evaluations shall include the use of 90-day projections of expected drawdown.
- b. Evaluation of well interference expected between individual wells and subsets of wells during concurrent operation at the maximum individual approved withdrawal rates and sub-system withdrawal limits. The evaluations shall include the use of 90-day projections of expected drawdown.
- c. Evaluation to confirm or determine appropriate total system and sub-system withdrawal limits or if additional sub-system limits are necessary.

- d. Preparation and submission of an interpretive report providing all the data, evaluations, and conclusions from the evaluations for review by Commission staff.

The plan shall include a schedule detailing the implementation and completion of the required operational testing, monitoring, and reporting. Commission staff will complete review of the submitted plan within approximately ninety (90) days of receipt. The proposed schedule shall provide for submission of the final interpretative report to the Commission on or before thirty (30) months from receipt of approval of the plan from Commission staff. Commission staff will complete review of the final submitted interpretative report within approximately one hundred eighty (180) days of receipt and will present findings and recommendations to the Commission at the following quarterly Commission meeting for consideration of modifications to the conditions herein and corresponding subsystem and total system limits.

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

The water resource development plan shall identify additional water sources to meet the project's reasonably foreseeable water needs using 15- and 25-year water use projections, in addition to the potential long-term development need of up to an additional 6.100 mgd. The plan shall describe a practical, phased approach for the development of storage and additional sources to meet the projected water demands. The plan may include the collection and analysis of site-specific hydrogeologic data (similar to or in conjunction with that requested in Special Condition 21 above) that demonstrates the existing groundwater withdrawal wells can sustain higher cumulative withdrawal rates than historically demonstrated. To the extent that the project sponsor plans to implement any portion of the plan that would result in changes in withdrawals or project features, all appropriate applications and fees for withdrawal and/or applications and fees for modification shall be required, and shall only be implemented to the extent approved by the Commission in advance thereof.

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 20, 2012.

Dated: September 21, 2012


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20120907

Approval Date: September 20, 2012

ENERPLUS RESOURCES (USA) CORPORATION

**Surface Water Withdrawal (Peak Day) of up to 2.000 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 determines that no adverse impacts are anticipated by the operation of this project, and that the project is physically feasible, does not conflict with or adversely affect the Commission's Comprehensive Plan, and does not adversely influence the present or future use and development of the water resources of the basin. 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), Department of Conservation and Natural Resources (DCNR), Pennsylvania Fish and Boat Commission (PFBC), and the Pennsylvania Game Commission (PGC) 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:	Enerplus Resources (USA) Corporation
Approval Type:	Surface Water Withdrawal
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses
Municipality:	East Keating Township
County:	Clinton 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):	0205020107 (Lower West Branch Susquehanna River)
Water Use Designation:	Warm Water Fishery (WWF)
Withdrawal Location (degrees):	Lat: 41.236400 N Long: 77.917114 W
Flow Statistics (cfs):	Q7-10 = 256; Average Daily Flow = 2,780
Drainage Area (square miles):	1,590
Special Flow Protection Required:	Yes
cfs – cubic feet per second	

Section 4. Approved Withdrawal Quantities and Limitations

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

Approved Withdrawal Quantities and Limitations	
Peak Day Withdrawal Amount (mgd):	2.000 (Not to Exceed, When Available)
Maximum Instantaneous Withdrawal Rate (gpm):	1,389 (Not to Exceed)
Flow Protection Type:	Passby; 20% Average Daily Flow
Flow Protection Rate (cfs):	557
Flow Protection Rate (gpm):	250,000
Method for Flow Protection:	Monitor USGS Real-Time Gage 01542500; West Branch Susquehanna River at Karthaus, Pennsylvania
Flow Protection Threshold (cfs):	515
mgd – million gallons per day gpm – gallons per minute	USGS – U.S. Geological Survey

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, including metering and reporting requirements contained in Commission Regulation 18 CFR §806.30.

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 from time to time.

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 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 digital 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 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 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.

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

6. The project sponsor shall 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 on-line 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, approved by Commission staff prior to implementing or modifying existing equipment or procedures.

7. The project sponsor shall maintain the totalizing meter and other measuring devices, accurate to within five (5) percent, so as to provide an accurate record of withdrawals, and certify to the Commission once every two (2) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.

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

9. To satisfy the Commission's registration requirement, the project sponsor shall register with the PADEP all surface water sources described in this docket in accordance with 25 PA Code §110.201, Pennsylvania Water Resources Planning Act, Subchapter B, "Registration."

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

11. Commission approval shall not be construed to exempt the project sponsor from obtaining 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 reserves the right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.

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

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

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

15. The project sponsor 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 by the project sponsor and approved by the Commission as provided in Commission Regulation 18 CFR §806.31(b). Likewise, 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 unless a renewal is requested by the project sponsor and approved by the Commission.

16. Should the project's anticipated withdrawals be expected to exceed the amounts listed herein, the project sponsor is required to make application for modification to this approval at that time.

17. This approval is effective until September 19, 2016. As specified in Commission Regulation 18 CFR §806.31(e), the project sponsor shall submit an application by March 19, 2016. Provided such application is timely filed, 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.

Section 6. Special Conditions

18. Effective the date of this approval, 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 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. The project sponsor shall keep daily records of the U.S. Geological Survey stream gage and shall report the data to the Commission, as required. The project sponsor may propose alternative flow monitoring to the Commission for staff review and, if acceptable, approval.

19. Prior to the withdrawal of water, the project sponsor shall post a sign that meets Commission specifications and displays required project description information. 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 description shall identify the project sponsor, project name, docket approval number, and conditions of the surface water withdrawal approval including quantity, rate and passby flow requirement, docket expiration date, and contact information for the project sponsor and the Commission. The sign shall be installed prior to any withdrawal of water and be maintained for the duration of the approval. The project sponsor shall submit digital photographs as proof of sign installation prior to the initiation of the withdrawal.

20. The project sponsor shall maintain legal access to the withdrawal location for the duration of the approval.

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

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

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

24. The project sponsor shall demonstrate to the satisfaction of the Commission that all water withdrawn from surface water sources, while under control of or on a facility owned or operated by the project sponsor, is transported, stored, injected into a well, or discharged with appropriate controls and treatment to prevent the spread of aquatic nuisance species.

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 20, 2012.

Dated: September 21, 2012


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20120908

Approval Date: September 20, 2012

EXCO RESOURCES (PA), LLC

**Surface Water Withdrawal (Peak Day) of up to 0.200 mgd
from Larrys Creek**

Section 1. Approval

After review of the record, including the technical findings of Susquehanna River Basin Commission (Commission) staff, the Commission determines that no adverse impacts are anticipated by the operation of this project, and that the project is physically feasible, does not conflict with or adversely affect the Commission's Comprehensive Plan, and does not adversely influence the present or future use and development of the water resources of the basin. Accordingly, the Commission hereby approves the modification and 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. 20080936 that was approved September 11, 2008, with a peak day withdrawal rate of 0.086 million gallons per day (mgd) and no special flow protection requirements. The project sponsor has requested to increase the peak day withdrawal rate to 0.499 mgd and modify the intake location approximately 100 feet downstream. Commission staff recommended that the intake location be modified as requested, a flow protection provision be added, and the approved rate of withdrawal be reduced to 0.200 mgd, herein referred to as the modified rate.

Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP), 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:	EXCO Resources (PA), LLC
Approval Type:	Surface Water Withdrawal
Original Docket No.:	20080936
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses

Municipality:	Mifflin Township
County:	Lycoming County
State:	Pennsylvania

Section 3. Source Information

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

Source Information	
Approved Source:	Larrys Creek
Subbasin:	West Branch Susquehanna
Watershed Boundary Dataset (WBD):	0205020601 (Larrys Creek)
Water Use Designation:	Exceptional Value (EV)
Withdrawal Location (degrees):	Lat: 41.297461 N Long: 77.197694 W
Flow Statistics (cfs):	Q7-10 = 0.7; Average Daily Flow = 51.3
Wild Trout Classification:	Naturally Reproducing Wild Trout Stream
Drainage Area (square miles):	32.9
Special Flow Protection Required:	Yes
cfs – cubic feet per second	

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):	0.200 (Not to Exceed, When Available)
Maximum Instantaneous Withdrawal Rate (gpm):	138 (Not to Exceed)
Flow Protection Type:	Passby; 25% Average Daily Flow
Flow Protection Rate (cfs):	12.8
Flow Protection Rate (gpm):	5,760
Method for Flow Protection:	Monitor USGS Real-Time Gage 01549500; Blockhouse Creek near English Center, Pennsylvania
Flow Protection Threshold (cfs):	16
gpm – gallons per minute USGS – U.S. Geological Survey	

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, including metering and reporting requirements contained in Commission Regulation 18 CFR §806.30. 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 from time to time.

2. Within sixty (60) days from the date of this approval, the project sponsor shall submit a metering plan to the Commission for review and approval by Commission staff that accounts for all withdrawals. Following approval and prior to withdrawal, the project sponsor shall execute the plan and complete any installation of meters in accordance with the approved schedule.

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 digital 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. Within sixty (60) days from the date of this approval, the project sponsor shall submit an intake design to the Commission for review and approval 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 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.

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

6. The project sponsor shall 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 on-line 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, approved by Commission staff prior to implementing or modifying existing equipment or procedures.

7. The project sponsor shall maintain the totalizing meter and other measuring devices, accurate to within five (5) percent, so as to provide an accurate record of withdrawals, and certify

to the Commission once every two (2) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.

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

9. To satisfy the Commission's registration requirement, the project sponsor shall register with the PADEP all surface water sources described in this docket in accordance with 25 PA Code §110.201, Pennsylvania Water Resources Planning Act, Subchapter B, "Registration."

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

11. Commission approval shall not be construed to exempt the project sponsor from obtaining 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 reserves the right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.

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

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

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

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

16. Should the project's anticipated withdrawals be expected to exceed the amounts listed herein, the project sponsor is required to make application for modification to this approval at that time.

17. This approval is effective until September 19, 2016. As specified in Commission Regulation 18 CFR §806.31(e), the project sponsor shall submit an application by March 19, 2016. Provided such application is timely filed, 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.

Section 6. Special Conditions

18. Effective the date of this approval, 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 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. The project sponsor shall keep daily records of the U.S. Geological Survey stream gage and shall report the data to the Commission, as required. The project sponsor may propose alternative flow monitoring to the Commission for staff review and, if acceptable, approval.

19. Per Commission coordination with jurisdictional agency(ies), the project sponsor shall adhere to recommendations for avoiding adverse impact to documented occurrences of rare, threatened, or endangered species at or in proximity to the project location. To avoid adverse impact to the stream's naturally reproducing wild trout population, instream construction shall not be permitted from October 1 through December 31.

20. Within sixty (60) days from the date of this approval, the project sponsor shall post a sign that meets Commission specifications and displays required project description information. 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 description shall identify the project sponsor, project name, docket approval number, and conditions of the surface water withdrawal approval including quantity, rate and passby flow requirement, docket expiration date, and contact information for the project sponsor and the Commission. The sign shall be installed prior to any withdrawal of water and be maintained for the duration of the approval. The project sponsor shall submit digital photographs as proof of sign installation.

21. The project sponsor shall maintain legal access to the withdrawal location for the duration of the approval.

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 determination of authorized 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 all water withdrawn from surface water sources, while under control of or on a facility owned or operated by the project sponsor, is transported, stored, injected into a well, or discharged with appropriate controls and treatment to prevent the spread of aquatic nuisance species.

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 20, 2012.

Dated: September 21, 2012


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20120909

Approval Date: September 20, 2012

JACKSON AND ETHYL PERRY – FOREST SPRINGS WATER COMPANY

**Groundwater Withdrawal (30-Day Average) of 0.075 mgd from Borehole BH-1,
and Consumptive Water Use of up to 0.075 mgd**

Section 1. Approval

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

The project was originally approved by the Commission on February 8, 2001, and subsequently modified on June 14, 2001 and March 29, 2005, for consumptive use of water from two springs designated as Spring 1 and Spring 2 (Commission Docket Nos. 20010206, 20010206-1, and 20010206-2, respectively). Withdrawals from the springs were not subject to review and approval at the time of the original approval and subsequent modifications. Following successful installation and testing of Borehole BH-1, the project sponsor submitted an application for withdrawal of water to be consumptively used, with the intent of replacing the previous sources (Springs 1 and 2). Upon approval and initiation of withdrawal from Borehole BH-1, the project sponsor will cease all withdrawals from Springs 1 and 2, and prior approvals will be rescinded.

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

Section 2. Project Information

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

Project Information	
Project Sponsor:	Jackson and Ethyl Perry – Forest Springs Water Company
Approval Types:	Groundwater Withdrawal and Consumptive Water Use
Authorized Water Use Purpose:	Bulk Water Supply in Support of Drinking Water Bottling Operations
Municipality:	Wayne Township
County:	Schuylkill County
State:	Pennsylvania

Section 3. Source Information

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

Source Information	
Withdrawal Type:	Groundwater
Withdrawal Source:	Borehole BH-1
Subbasin:	Lower Susquehanna
Watershed Boundary Dataset (WBD):	0205030506 (Upper Swatara Creek)
Withdrawal Location (degrees)*:	Lat: -- Long: --
Special Flow Protection Required:	Yes
* 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 75-hour, constant-rate aquifer test of Borehole BH-1 was conducted between October 22, 2011 and October 25, 2011, pumping at an average rate of 62 gallons per minute (gpm).

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

Section 5. Approved Withdrawal Quantities and Limitations

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

Approved Withdrawal Quantities and Limitations	
30-Day Average Withdrawal (mgd):	0.075
Maximum Instantaneous Withdrawal Rate (gpm):	62 (Not to Exceed)
Flow Protection Type:	Passby; 20% Average Daily Flow
Flow Protection Rate (gpm):	36
Method for Flow Protection:	On-site Flow Monitoring
mgd – million gallons per day gpm – gallons per minute	

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

Section 6. Approved Consumptive Water Use Quantities and Limitations

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

Approved Consumptive Water Use Quantities and Limitations	
Source for Project Consumptive Water Use:	Borehole BH-1
Peak Day Consumptive Water Use Amount (mgd):	0.075 (Not to Exceed)
Project Consumptive Water Use:	Bulk water hauling in support of a drinking water bottling operation
Consumptive Water Use Mitigation Type:	Payment of consumptive use mitigation fee

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

Section 7. Standard Conditions

1. The project sponsor shall comply with all Commission regulations, including metering and reporting requirements contained in Commission Regulation 18 CFR §806.30. 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 from time to time.

2. Within sixty (60) days from the date of this approval, the project sponsor shall submit a metering plan to the Commission for review and approval by Commission staff that accounts for withdrawals from Borehole BH-1 and consumptive use. Following approval and prior to withdrawal from Borehole BH-1, the project sponsor shall execute the plan and complete any installation of meters in accordance with the approved schedule.

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 digital 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 or consumptive use shall not commence until Commission staff has approved the implementation of the approved metering plan and notified the project sponsor of such approval.

4. Within ninety (90) days from the date of this approval, the project sponsor shall submit a plan to Commission staff for review and approval for the implementation of a groundwater elevation monitoring program. The plan shall include proposed methods for the daily measurement and recording of groundwater elevations in the source listed in Section 3. Following approval, the project sponsor shall execute the plan and complete installation of water level monitoring equipment in accordance with the approved schedule. The project sponsor shall notify the Commission, in writing, and submit digital photographs of the water level monitoring equipment when it has been installed and certify the accuracy of the measuring devices. The project sponsor shall notify the Commission when the monitoring plan has been fully implemented. Withdrawals from Borehole BH-1 shall not commence until Commission staff has approved the implementation of the approved metering plan and notified the project sponsor of such approval. Thereafter, the groundwater elevation data shall be reported to the Commission quarterly, and as otherwise required. Quarterly monitoring reports shall be submitted on-line and are due within thirty (30) days after the close of the preceding quarter.

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

6. The project sponsor shall keep daily records of the project's withdrawals and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted on-line 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, approved by Commission staff prior to implementing or modifying existing equipment or procedures.

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

8. The project sponsor shall keep daily records of the project's consumptive water use and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted on-line 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, approved by Commission staff.

9. The project's consumptive water use shall be equal to the quantity of the withdrawal from Borehole BH-1 and is subject to water mitigation requirements, as per Commission Regulation 18 CFR §806.22(b). To satisfy the Commission's current compensation requirements for consumptive water use, the project sponsor shall make quarterly payments to the Commission at the rate specified in the effective Regulatory Program Fee Schedule, as modified from time to time by the Commission. Payments shall be made quarterly and shall be calculated by applying this rate to the total amount of water consumptively used by the project during the preceding calendar quarter. Quarterly payments are due and payable within thirty (30) days after the close of the preceding quarter. The rate of payment, after appropriate notice to consumptive users of water using this method of compliance, is subject to change at the Commission's discretion.

10. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation 18 CFR §806.25(b).

11. To satisfy the Commission's registration requirement, the project sponsor shall register with the PADEP all groundwater sources described in this docket in accordance with 25 PA Code §110.201, Pennsylvania Water Resources Planning Act, Subchapter B, "Registration."

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 is subject to enforcement actions pursuant to Commission Regulation 18 CFR §808.

13. Commission approval shall not be construed to exempt the project sponsor from obtaining 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 reserves the right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.

14. The Commission reserves the right to reopen any project docket 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 has a period of three (3) years from the date of this approval to commence the withdrawal from the source listed in Section 3 or this approval will automatically expire, unless an extension is requested by the project sponsor and approved by the Commission as provided in Commission Regulation 18 CFR §806.31(b). Likewise, 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 unless a renewal is requested by the project sponsor and approved by the Commission.

18. Should the project's anticipated withdrawals or consumptive uses be expected to exceed the amounts listed herein, the project sponsor is required to make application for modification to this approval at that time.

19. If the Commission determines that the operation of the project's 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.

20. This approval is effective until September 19, 2027. As specified in Commission Regulation 18 CFR §806.31(e), the project sponsor shall submit an application on or before March 19, 2027. Provided such application is timely filed, 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.

Section 8. Special Conditions

21. The project sponsor shall notify and submit a copy of the PADEP operation permit for Borehole BH-1 to the Commission within thirty (30) days of issuance by the PADEP.

22. Upon initiation of withdrawal from Borehole BH-1, Commission Docket Nos. 20010206, 20010206-1, and 20010206-2 shall be rescinded. The project sponsor shall cease all withdrawal activities associated with Commission Docket Nos. 20010206, 20010206-1, and 20010206-2; prevent withdrawals by physically isolating Spring 1 and Spring 2 through removal of piping connecting the encapsulated springs to the water-related storage and loading facilities; and submit to the Commission photo documentation of the modifications isolating the springs.

23. Within ninety (90) days from the date of this approval, the project sponsor shall submit for review and approval by Commission staff a proposed plan to replace the existing Weir 1 with a properly constructed weir, flume, or other flow measurement device to monitor the required passby flow. The plan shall incorporate installation of a transducer and data logger, or alternate equivalent monitoring equipment, and utilize it in conjunction with the flow measurement device to provide accurate flow measurements collected at a minimum frequency of daily. The project sponsor should submit its designs and a proposed construction schedule for review and approval by Commission staff prior to any construction. Commission staff also should review and approve the location of the monitoring devices.

24. Following approval, the project sponsor shall complete construction of the flow measurement and monitoring equipment in accordance with the approved schedule, and shall certify to the Commission that construction has been completed in accordance with the approved design. The project sponsor shall notify the Commission, in writing, and submit digital photographs of the flow measurement and monitoring equipment when it has been installed and certify the accuracy of the monitoring devices. Withdrawals from Borehole BH-1 shall not commence until Commission staff has approved the implementation of the flow measurement and monitoring equipment and notified the project sponsor of such approval. The project sponsor must maintain the approved flow measuring and monitoring equipment, keeping it fully functional and free of debris. The Commission reserves the right to inspect the flow measurement and monitoring equipment at any time. Thereafter, flow monitoring data shall be reported to the Commission quarterly, and as otherwise required. Quarterly monitoring reports shall be submitted on-line and are due within thirty (30) days after the close of the preceding quarter.

25. The project sponsor shall cease all withdrawals from Borehole BH-1 when streamflow, as measured in the approved flow measuring device specified in Section 5 and Special Condition 23, is less than the flow protection rate specified in Section 5, and shall not reinstate withdrawals until the streamflow has remained above such flow protection rate for 48 hours.

26. Should the project's anticipated total system demand be expected to exceed the approved total system withdrawal limit herein, the project sponsor is required to make application for modification to this approval at that time.

27. The project sponsor shall maintain legal access to the withdrawal location for the duration of the approval.

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 20, 2012.

Dated: September 21, 2012


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20090902-1

Approval Date: September 10, 2009

Modification Date: September 20, 2012

HYDRO RECOVERY–ANTRIM, LP

**Surface Water Withdrawal (Peak Day) of up to 1.872 mgd
from Antrim No. 1 Mine Discharge and Backswitch Mine Discharge**

Section 1. Approval

After review of the record, including the technical findings of Susquehanna River Basin Commission (Commission) staff, the Commission determines that no adverse impacts are anticipated by the operation of this project, and that the project is physically feasible, does not conflict with or adversely affect the Commission's Comprehensive Plan, and does not adversely influence the present or future use and development of the water resources of the basin. Accordingly, the Commission hereby approves the modification to the existing approval described herein in accordance with the conditions set forth below.

This approval is a modification of Commission Docket No. 20090902 that was approved September 10, 2009, with a peak day withdrawal rate of 0.720 million gallons per day (mgd) and a special flow protection requirement. The project sponsor has requested to increase the peak day withdrawal rate to 1.872 mgd and modify the source withdrawal location. Commission staff recommended the approval of the project sponsor's requests, including the withdrawal rate of 1.872 mgd, herein referred to as the modified rate, along with a modification to the monitoring requirements for the special flow protection requirement and an extension of the approval term.

Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP), 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:	Hydro Recovery–Antrim, LP
Approval Type:	Surface Water Withdrawal
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses
Municipality:	Duncan Township
County:	Tioga County
State:	Pennsylvania

Section 3. Source Information

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

Source Information		
Approved Sources:	Antrim No. 1 Mine Discharge and Backswitch Mine Discharge	
Subbasin:	West Branch Susquehanna	
Watershed Boundary Dataset (WBD):	0205020504 (Babb Creek)	
Withdrawal Location (degrees):		
Antrim No. 1 Mine Discharge	Lat: 41.628611 N	Long: 77.284167 W
Backswitch Mine Discharge	Lat: 41.634167 N	Long: 77.294167 W
Impairment:	Mine Discharge	
Special Flow Protection Required:	Yes	

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):	1.872 (Not to Exceed, When Available)
Maximum Combined Instantaneous Withdrawal Rate (gpm):	1,300 (Not to Exceed)
Flow Protection Type:	Passby*
Flow Protection Rate (cfs):	1.0
Flow Protection Rate (gpm):	460
Method for Flow Protection:	Monitor effluent weirs at the Antrim Treatment Plant discharge points with on-site real-time data logging equipment
Flow Protection Threshold (gpm):	460
gpm – gallons per minute cfs – cubic feet per second	
*Passby based on Antrim Treatment Plant operational needs	

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, including metering and reporting requirements contained in Commission Regulation 18 CFR §806.30.

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 from time to time.

2. Within sixty (60) days from the date of this approval, the project sponsor shall submit a metering and on-site monitoring plan to the Commission for review and approval by Commission staff that accounts for all withdrawals. Following approval and prior to withdrawal at the modified rate, the project sponsor shall execute the plan and complete any installation of meters and monitoring equipment in accordance with the approved schedule.

3. Prior to any withdrawal at the modified rate from the sources listed in Section 3, the project sponsor shall install and maintain metering on the withdrawal and on-site monitoring in accordance with Commission Regulation 18 CFR §806.30. The project sponsor shall notify the Commission, in writing, and submit digital 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 at the modified rate shall not commence until Commission staff has approved the implementation of the approved metering and on-site monitoring plan and notified the project sponsor of such approval.

4. Within sixty (60) days from the date of this approval, the project sponsor shall submit an intake design to the Commission for review and approval 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 rate. 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.

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

6. The project sponsor shall 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 on-line 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, approved by Commission staff prior to implementing or modifying existing equipment or procedures.

7. The project sponsor shall maintain the totalizing meter and other 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.

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

9. To satisfy the Commission's registration requirement, the project sponsor shall register with the PADEP all surface water sources described in this docket in accordance with 25 PA Code §110.201, Pennsylvania Water Resources Planning Act, Subchapter B, "Registration."

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

11. Commission approval shall not be construed to exempt the project sponsor from obtaining 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 at the modified rate. The Commission reserves the right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.

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

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

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

15. 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 unless a renewal is requested by the project sponsor and approved by the Commission.

16. Should the project's anticipated withdrawals be expected to exceed the amounts listed herein, the project sponsor is required to make application for modification to this approval at that time.

17. This approval is effective until October 31, 2021. As specified in Commission Regulation 18 CFR §806.31(e), the project sponsor shall submit an application by April 30, 2021. Provided such application is timely filed, 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.

Section 6. Special Conditions

18. The Commission grants a one (1)-year extension to Decision Item 24 in Commission Docket No. 20090902, whereby the project sponsor has a period of one (1) year from the modification date to commence the withdrawal, or this approval will automatically expire unless an extension is requested by the project sponsor and approved by the Commission as provided in Commission Regulation 18 CFR §806.31(b).

19. The project sponsor shall cease all withdrawals from the approved sources when discharges at the Antrim Treatment Plant, as measured by real-time data logging equipment at the on-site weirs specified in Section 4, are less than the flow protection threshold specified in Section 4, and shall not reinstate withdrawals until the discharges exceed the flow protection threshold specified in Section 4. The project sponsor shall keep daily records of the discharge data and shall report the data to the Commission, as required. The project sponsor may propose alternative flow monitoring to the Commission for staff review and, if acceptable, approval.

20. Prior to the withdrawal of water at the modified rate, the project sponsor shall post a sign that meets Commission specifications and displays required project description information. 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 description shall identify the project sponsor, project name, docket approval number, and conditions of the surface water withdrawal approval including modified quantity, rate and passby flow requirement, docket expiration date, and contact information for the project sponsor and the Commission. The sign shall be installed prior to any withdrawal of water at the modified rate and be maintained for the duration of the approval. The project sponsor shall submit digital photographs as proof of sign installation prior to the initiation of the withdrawal at the modified rate.

21. The project sponsor shall maintain legal access to the withdrawal location for the duration of the approval.

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 determination of authorized 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 all water withdrawn from surface water sources, while under control of or on a facility owned or operated by the project sponsor, is transported, stored, injected into a well, or discharged with appropriate controls and treatment to prevent the spread of aquatic nuisance species.

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 20, 2012.

Dated: September 21, 2012


Stephanie L. Richardson



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Docket No. 20110616-1**Approval Date: June 23, 2011****Modification Date: September 20, 2012**

KEYSTONE CLEARWATER SOLUTIONS, LLC

**Surface Water Withdrawal (Peak Day) of up to 2.125 mgd
from Lycoming Creek**

Section 1. Approval

After review of the record, including the technical findings of Susquehanna River Basin Commission (Commission) staff, the Commission determines that no adverse impacts are anticipated by the operation of this project, and that the project is physically feasible, does not conflict with or adversely affect the Commission's Comprehensive Plan, and does not adversely influence the present or future use and development of the water resources of the basin. Accordingly, the Commission hereby approves the modification to the existing approval described herein in accordance with the conditions set forth below.

This approval is a modification of Commission Docket No. 20110616 that was approved June 23, 2011, with a peak day withdrawal rate of 1.292 million gallons per day (mgd) and a special flow protection requirement consisting of a 25 percent average daily flow passby. The project sponsor has requested to increase the peak day withdrawal rate to 2.600 mgd. Commission staff recommended that the approved rate of withdrawal be reduced to 2.125 mgd, herein referred to as the modified rate.

Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP), 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
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses
Municipality:	Lewis Township
County:	Lycoming County
State:	Pennsylvania

Section 3. Source Information

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

Source Information	
Approved Source:	Lycoming Creek
Subbasin:	West Branch Susquehanna
Watershed Boundary Dataset (WBD):	0205020602 (Lycoming Creek)
Water Use Designation:	Exceptional Value (EV)
Withdrawal Location (degrees):	Lat: 41.437298 N Long: 76.994626 W
Flow Statistics (cfs):	Q7-10 = 6.5; Average Daily Flow = 250
Wild Trout Classification:	Naturally Reproducing Wild Trout Stream
Drainage Area (square miles):	149
Special Flow Protection Required:	Yes
cfs – cubic feet per second	

Section 4. Approved Withdrawal Quantities and Limitations

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

Approved Withdrawal Quantities and Limitations	
Peak Day Withdrawal Amount (mgd):	2.125 (Not to Exceed, When Available)
Maximum Instantaneous Withdrawal Rate (gpm):	1,476 (Not to Exceed)
Flow Protection Type:	Passby; 25% Average Daily Flow
Flow Protection Rate (cfs):	62
Flow Protection Rate (gpm):	28,000
Method for Flow Protection:	Monitor USGS Real-Time Gage 01550000; Lycoming Creek near Trout Run, Pennsylvania
Flow Protection Threshold (cfs):	72
gpm – gallons per minute USGS – U.S. Geological Survey	

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, including metering and reporting requirements contained in Commission Regulation 18 CFR §806.30. 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 from time to time.

2. Within sixty (60) days from the date of this approval, the project sponsor shall submit a metering plan to the Commission for review and approval by Commission staff that accounts for all withdrawals. Following approval and prior to withdrawal at the modified rate, the project sponsor shall execute the plan and complete any installation of meters in accordance with the approved schedule.

3. Prior to any withdrawal at the modified rate 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 digital 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 at the modified rate 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 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 rate. 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.

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

6. The project sponsor shall 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 on-line 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, approved by Commission staff prior to implementing or modifying existing equipment or procedures.

7. The project sponsor shall maintain the totalizing meter and other measuring devices, accurate to within five (5) percent, so as to provide an accurate record of withdrawals, and certify to the Commission once every two (2) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.

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

9. To satisfy the Commission's registration requirement, the project sponsor shall register with the PADEP all surface water sources described in this docket in accordance with 25 PA Code §110.201, Pennsylvania Water Resources Planning Act, Subchapter B, "Registration."

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

11. Commission approval shall not be construed to exempt the project sponsor from obtaining 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 at the modified rate. The Commission reserves the right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.

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

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

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

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

16. Should the project's anticipated withdrawals be expected to exceed the amounts listed herein, the project sponsor is required to make application for modification to this approval at that time.

17. This modified approval is effective until June 22, 2015, the term of the prior docket approval. As specified in Commission Regulation 18 CFR §806.31(e), the project sponsor shall submit an application by December 22, 2014. Provided such application is timely filed, 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.

Section 6. Special Conditions

18. Effective the date of this approval, 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 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. The project sponsor shall keep daily records of the U.S. Geological Survey stream gage and shall report the data to the Commission, as required. The project sponsor may propose alternative flow monitoring to the Commission for staff review and, if acceptable, approval.

19. Per Commission coordination with jurisdictional agencies, the project sponsor shall adhere to recommendations for avoiding adverse impact to documented occurrences of rare, threatened, or endangered species at or in proximity to the project location. To avoid adverse impact to the stream's naturally reproducing wild trout population, instream construction shall not be permitted from October 1 through December 31.

20. Prior to the withdrawal of water at the modified rate, the project sponsor shall post a sign that meets Commission specifications and displays required project description information. 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 description shall identify the project sponsor, project name, docket approval number, and conditions of the surface water withdrawal approval including modified quantity, rate and passby flow requirement, docket expiration date, and contact information for the project sponsor and the Commission. The sign shall be installed prior to any withdrawal of water at the modified rate and be maintained for the duration of the approval. The project sponsor shall submit digital photographs as proof of sign installation prior to the initiation of the withdrawal at the modified rate.

21. The project sponsor shall maintain legal access to the withdrawal location for the duration of the approval.

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

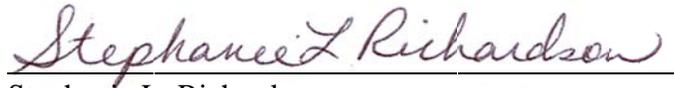
from the project for uses other than hydrocarbon development authorized pursuant to Special Condition 24, including daily quantities supplied.

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 determination of authorized 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 all water withdrawn from surface water sources, while under control of or on a facility owned or operated by the project sponsor, is transported, stored, injected into a well, or discharged with appropriate controls and treatment to prevent the spread of aquatic nuisance species.

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 20, 2012.

Dated: September 21, 2012


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20120910**Approval Date: September 20, 2012**

KEYSTONE CLEARWATER SOLUTIONS, LLC

**Surface Water Withdrawal (Peak Day) of up to 1.000 mgd
from Moshannon Creek**

Section 1. Approval

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

This approval is a renewal of Commission Docket No. 20080946 that was approved September 11, 2008, with a peak day withdrawal rate of 2.000 million gallons per day (mgd) and no special flow protection requirements. The project sponsor has not requested any changes to the conditions of the approval. Commission staff recommended that the approved rate of withdrawal be reduced to 1.000 mgd, herein referred to as the modified rate.

Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP), 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.:	20080946
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses
Municipality:	Snow Shoe Township
County:	Centre County
State:	Pennsylvania

Section 3. Source Information

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

Source Information	
Approved Source:	Moshannon Creek
Subbasin:	West Branch Susquehanna
Watershed Boundary Dataset (WBD):	0205020105 (Moshannon Creek)
Water Use Designation:	Trout Stocked Fishery (TSF)
Withdrawal Location (degrees):	Lat: 41.036917 N Long: 78.057611 W
Flow Statistics (cfs):	Q7-10 = 34.8; Average Daily Flow = 424
Impairment:	Mine Drainage
Drainage Area (square miles):	263
Special Flow Protection Required:	No
cfs – cubic feet per second	

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):	1.000 (Not to Exceed)
Maximum Instantaneous Withdrawal Rate (gpm):	1,440 (Not to Exceed)
gpm – gallons per minute	

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

Section 5. Standard Conditions

1. The project sponsor shall comply with all Commission regulations, including metering and reporting requirements contained in Commission Regulation 18 CFR §806.30. 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 from time to time.

2. Within sixty (60) days from the date of this approval, the project sponsor shall submit a metering plan to the Commission for review and approval by Commission staff that accounts for the approved withdrawal quantity and limitations presented in Section 4. Any future modifications proposed for the metering plan shall be submitted for review and approval by Commission staff in accordance with Commission Regulation 18 CFR §806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan.

3. 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 approval by Commission staff in accordance with Commission Regulations 18 CFR §806.21 and §806.23.

4. 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.

5. 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 on-line 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, approved by Commission staff prior to implementing or modifying existing equipment or procedures.

6. The project sponsor shall maintain the totalizing meter and other measuring devices, accurate to within five (5) percent, so as to provide an accurate record of withdrawals, and certify to the Commission once every two (2) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.

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

8. To satisfy the Commission's registration requirement, the project sponsor shall register with the PADEP all surface water sources described in this docket in accordance with 25 PA Code §110.201, Pennsylvania Water Resources Planning Act, Subchapter B, "Registration."

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

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

11. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to

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

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

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

14. 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 unless a renewal is requested by the project sponsor and approved by the Commission.

15. Should the project's anticipated withdrawals be expected to exceed the amounts listed herein, the project sponsor is required to make application for modification to this approval at that time.

16. This approval is effective until September 19, 2016. As specified in Commission Regulation 18 CFR §806.31(e), the project sponsor shall submit an application by March 19, 2016. Provided such application is timely filed, 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.

Section 6. Special Conditions

17. Within sixty (60) days from the date of this approval, the project sponsor shall post a sign that meets Commission specifications and displays required project description information. 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 description shall identify the project sponsor, project name, docket approval number, and conditions of the surface water withdrawal approval including quantity, rate and passby flow requirement, docket expiration date, and contact information for the project sponsor and the Commission. The sign shall be installed prior to any withdrawal of water and be maintained for the duration of the approval. The project sponsor shall submit digital photographs as proof of sign installation.

18. The project sponsor shall maintain legal access to the withdrawal location for the duration of the approval.

19. Except as authorized pursuant to Special Condition 21, the project sponsor shall only supply water for use in hydrocarbon development to persons who have properly registered this approval pursuant to Commission Regulation 18 CFR §806.22(f)(12).

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

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

22. The project sponsor shall demonstrate to the satisfaction of the Commission that all water withdrawn from surface water sources, while under control of or on a facility owned or operated by the project sponsor, is transported, stored, injected into a well, or discharged with appropriate controls and treatment to prevent the spread of aquatic nuisance species.

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 20, 2012.

Dated: September 21, 2012


Stephanie L. Richardson



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Docket No. 20120911

Approval Date: September 20, 2012

KEYSTONE CLEARWATER SOLUTIONS, LLC

**Surface Water Withdrawal (Peak Day) of up to 1.000 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 determines that no adverse impacts are anticipated by the operation of this project, and that the project is physically feasible, does not conflict with or adversely affect the Commission's Comprehensive Plan, and does not adversely influence the present or future use and development of the water resources of the basin. Accordingly, the Commission hereby approves the renewal of the project described herein in accordance with the conditions set forth below.

This approval is a renewal of Commission Docket No. 20080944 that was approved September 11, 2008, with a peak day withdrawal rate of 2.160 million gallons per day (mgd) and no special flow protection requirements. The project sponsor has not requested any changes to the conditions of the approval. Commission staff recommended that the approved rate of withdrawal be reduced to 1.000 mgd, herein referred to as the modified rate.

Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP), 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.:	20080944
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses
Municipality:	Goshen 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):	0205020107 (Lower West Branch Susquehanna River)
Water Use Designation:	Warm Water Fishery (WWF)
Withdrawal Location (degrees):	Lat: 41.073646 N Long: 78.327957 W
Flow Statistics (cfs):	Q7-10 = 158; Average Daily Flow = 1,720
Drainage Area (square miles):	983
Special Flow Protection Required:	No
cfs – cubic feet per second	

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):	1,000 (Not to Exceed)
Maximum Instantaneous Withdrawal Rate (gpm):	1,500 (Not to Exceed)
gpm – gallons per minute	

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

Section 5. Standard Conditions

1. The project sponsor shall comply with all Commission regulations, including metering and reporting requirements contained in Commission Regulation 18 CFR §806.30. 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 from time to time.

2. Within sixty (60) days from the date of this approval, the project sponsor shall submit a metering plan to the Commission for review and approval by Commission staff that accounts for the approved withdrawal quantity and limitations presented in Section 4. Any future modifications proposed for the metering plan shall be submitted for review and approval by Commission staff in accordance with Commission Regulation 18 CFR §806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan.

3. 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 approval by Commission staff in accordance with Commission Regulations 18 CFR §806.21 and §806.23.

4. 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.

5. 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 on-line 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, approved by Commission staff prior to implementing or modifying existing equipment or procedures.

6. The project sponsor shall maintain the totalizing meter and other measuring devices, accurate to within five (5) percent, so as to provide an accurate record of withdrawals, and certify to the Commission once every two (2) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.

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

8. To satisfy the Commission's registration requirement, the project sponsor shall register with the PADEP all surface water sources described in this docket in accordance with 25 PA Code §110.201, Pennsylvania Water Resources Planning Act, Subchapter B, "Registration."

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

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

11. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to

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

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

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

14. 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 unless a renewal is requested by the project sponsor and approved by the Commission.

15. Should the project's anticipated withdrawals be expected to exceed the amounts listed herein, the project sponsor is required to make application for modification to this approval at that time.

16. This approval is effective until September 19, 2016. As specified in Commission Regulation 18 CFR §806.31(e), the project sponsor shall submit an application by March 19, 2016. Provided such application is timely filed, 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.

Section 6. Special Conditions

17. Within sixty (60) days from the date of this approval, the project sponsor shall post a sign that meets Commission specifications and displays required project description information. 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 description shall identify the project sponsor, project name, docket approval number, and conditions of the surface water withdrawal approval including quantity, rate and passby flow requirement, docket expiration date, and contact information for the project sponsor and the Commission. The sign shall be installed prior to any withdrawal of water and be maintained for the duration of the approval. The project sponsor shall submit digital photographs as proof of sign installation.

18. The project sponsor shall maintain legal access to the withdrawal location for the duration of the approval.

19. Except as authorized pursuant to Special Condition 21, the project sponsor shall only supply water for use in hydrocarbon development to persons who have properly registered this approval pursuant to Commission Regulation 18 CFR §806.22(f)(12).

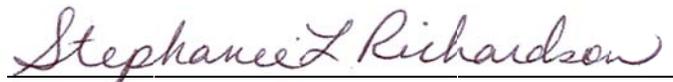
20. The project sponsor shall keep daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project for use in hydrocarbon development, including daily quantities supplied. The project sponsor also shall keep daily records, and shall report the same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

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

22. The project sponsor shall demonstrate to the satisfaction of the Commission that all water withdrawn from surface water sources, while under control of or on a facility owned or operated by the project sponsor, is transported, stored, injected into a well, or discharged with appropriate controls and treatment to prevent the spread of aquatic nuisance species.

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 20, 2012.

Dated: September 21, 2012


Stephanie L. Richardson



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Docket No. 20120913

Approval Date: September 20, 2012

ROARING SPRING WATER – DIVISION OF ROARING SPRING BLANK BOOK

**Surface Water Withdrawal (Peak Day) of up to 0.302 mgd
from Roaring Spring, and
Consumptive Water Use (Peak Day) of up to 0.255 mgd**

Section 1. Approval

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

Roaring Spring Water – Division of Roaring Spring Blank Book (Roaring Spring Water) began withdrawing and bottling water from Roaring Spring in 1980. In 2001, under the Commission's Compliance Incentive Program, Roaring Spring Water applied for a withdrawal of 302,000 gallons per day (gpd) and a consumptive use of 255,000 gpd to be used for water bottling.

The Commission-sponsored "Morrison Cove Water Resources Availability Study," which was completed in December 2011, identified water availability concerns for Roaring Spring and for Halter Creek, into which the spring discharges. In March 2012, the Commission approved the withdrawal and consumptive use of quantities historically used at the Roaring Spring Water facility pursuant to Commission Docket No. 20120309.

This approval addresses the full request made in the 2001 application. Commission staff recommended that those requested withdrawal and consumptive use quantities be approved, with special flow protection for withdrawals above the historic quantity approved in Commission Docket No. 20120309, which is hereby rescinded.

Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP), 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:	Roaring Spring Water – Division of Roaring Spring Blank Book
Approval Type:	Surface Water Withdrawal and Consumptive Use
Authorized Water Use Purpose:	Water Bottling and Associated Processes and Bulk Supply for Water Bottling
Municipality:	Roaring Spring Borough
County:	Blair County
State:	Pennsylvania

Section 3. Source and Receiving Stream 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:	Roaring Spring
Subbasin:	Juniata River
Watershed Boundary Dataset (WBD):	0205030201 (Upper Frankstown Branch Juniata River)
Withdrawal Location (degrees)*:	Lat: -- Long: --
Source (Spring) Flow Statistics (cfs):	Q7-10 = 8.0; Average Daily Flow = 10.3
Spring Pool Discharge Flow Statistics (cfs):	Q7-10 = 0.2; Average Daily Flow = 2.4
Drainage Area (square miles):	5.5
Special Flow Protection Required:	Yes
cfs – cubic feet per second	
* Specific location information concerning discrete water-related project features has been withheld for security reasons.	

Information concerning the stream which will be affected by the withdrawal is set forth in the table below.

Receiving Stream Information	
Receiving Stream:	Halter Creek
Subbasin:	Juniata River
Watershed Boundary Dataset (WBD):	0205030201 (Upper Frankstown Branch Juniata River)
Water Use Designation:	High Quality Cold Water Fishery (HQ-CWF)
Confluence Location (degrees):	Lat: 40.3375 N Long: 78.4053 W
Flow Statistics (cfs):	Q7-10 = 3.0; Average Daily Flow = 25.1 at outfall of Roaring Spring into Halter Creek
Wild Trout Classification:	Naturally Reproducing Wild Trout
Impairment:	Impaired for aquatic life use by suspended solids
Drainage Area (square miles):	13.5 (at Roaring Spring confluence)
Special Flow Protection Required:	Yes

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):	0.302 (Not to Exceed, Available When Spring Pool Discharge is greater than the Flow Protection Rate)
Flow Protection Type*:	Passby; Equivalent to 71% Average Daily Flow of Spring Pool Discharge
Flow Protection Rate (cfs):	1.7
Flow Protection Rate (gpm):	763
Method for Flow Protection:	Monitor Spring Pool Discharge
Flow Protection Threshold:	When discharge from the Spring Pool falls below the flow protection rate, withdrawals shall not exceed the approved historic withdrawal quantities presented below in Section 5
mgd – million gallons per day gpm – gallons per minute	
* In accordance with Section III.B of Commission Policy No. 2003-01 and Commission Regulation 18 CFR §806.23, the Commission reserves the right to increase the passby flow requirement above the passby flow determined using the guidelines contained in Commission Policy No. 2003-01.	

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

Section 5. Approved Historic Withdrawal Quantities and Limitations

The withdrawal approved hereunder is subject to the quantitative limits and restrictions set forth in the table below when discharge from the Spring Pool falls below the flow protection rate presented in Section 4 above.

Approved Historic Withdrawal Quantities and Limitations	
Peak Day Withdrawal Amount (mgd):	0.171 (Not to Exceed)
30-day Average Withdrawal (mgd):	0.140

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

Section 6. Approved Consumptive Water Use Quantities and Limitations

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

Approved Consumptive Water Use Quantities and Limitations	
Source for Project Consumptive Water Use:	Roaring Spring
Peak Day Consumptive Water Use Amount (mgd):	0.255 (Not to Exceed, Available When Spring Pool Discharge is greater than the Flow Protection Rate)
Flow Protection Threshold:	When discharge from the Spring Pool falls below the flow protection rate, consumptive water use shall not exceed the approved historic consumptive water use quantities presented below in Section 7
Project Consumptive Water Use:	Water bottling and bulk supply for water bottling
Consumptive Water Use Mitigation Type:	Payment of consumptive use mitigation fee

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

Section 7. Approved Historic Consumptive Water Use Quantities and Limitations

The consumptive water use approved hereunder is subject to the quantitative limits and restrictions set forth in the table below when discharge from the Spring Pool falls below the flow protection rate presented in Section 4 above.

Approved Historic Consumptive Water Use Quantities and Limitations	
Source for Project Consumptive Water Use:	Roaring Spring
Peak Day Consumptive Water Use Amount (mgd):	0.130 (Not to Exceed)
30-Day Average Consumptive Water Use Amount (mgd):	0.110

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

Section 8. Standard Conditions

1. The project sponsor shall comply with all Commission regulations, including metering and reporting requirements contained in Commission Regulation 18 CFR §806.30. 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 from time to time.

2. Within ninety (90) days from the date of this approval, the project sponsor shall submit a metering and monitoring plan to the Commission for review and approval by Commission staff that accounts for the quantities and limitations presented in Sections 4, 5, 6, and 7. Following approval and prior to any withdrawal in excess of the approved historic quantities from the source listed in Section 3, the project sponsor shall execute the plan and complete any installation of meters and monitoring equipment in accordance with the approved schedule.

3. The project sponsor shall notify the Commission, in writing, and submit digital photographs of the meters and monitoring equipment when they have been installed, provide the serial numbers of the equipment, and certify the accuracy of the measuring devices to within five (5) percent of actual flow. Withdrawals shall not commence at rates in excess of the approved historic quantities until Commission staff has approved the implementation of the approved metering and monitoring plan and notified the project sponsor of such approval.

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

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

6. The project sponsor shall 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 on-line 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, approved by Commission staff prior to implementing or modifying existing equipment or procedures.

7. The project sponsor shall keep daily records of the project's consumptive water use and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted on-line 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, approved by Commission staff.

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

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

10. To satisfy the Commission's registration requirement, the project sponsor shall register with the PADEP all surface water sources described in this docket in accordance with 25 PA Code §110.201, Pennsylvania Water Resources Planning Act, Subchapter B, "Registration."

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 is subject to enforcement actions pursuant to Commission Regulation 18 CFR §808.

12. Commission approval shall not be construed to exempt the project sponsor from obtaining 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 reserves the right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.

13. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to

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

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

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

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

17. Should the project's anticipated withdrawals or consumptive uses be expected to exceed the amounts listed herein, the project sponsor is required to make application for modification to this approval at that time.

18. This approval is effective until September 19, 2027. As specified in Commission Regulation 18 CFR §806.31(e), the project sponsor shall submit an application by March 19, 2027. Provided such application is timely filed, 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.

Section 9. Special Conditions

19. Effective the date of this approval, the project sponsor's withdrawal and consumptive use from the approved source shall not exceed the historic rates presented in Sections 5 and 7, respectively, when discharge from the Spring Pool falls below 1.7 cfs. Withdrawals at the rates approved herein shall not resume until discharge from the Spring Pool exceeds 1.7 cfs.

20. The project sponsor shall maintain legal access to the withdrawal location for the duration of the approval.

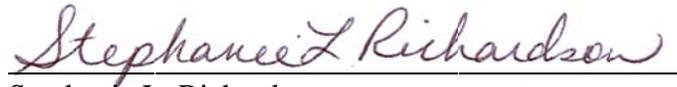
21. Prior to supplying water for any use not authorized pursuant to Section 2 of this approval, the project sponsor shall first submit a request for determination of authorized use to the Executive Director. The project sponsor shall not supply water for such use unless and until such authorization is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

22. The project sponsor shall demonstrate to the satisfaction of the Commission that all water withdrawn from surface water sources, while under control of or on a facility owned or operated by the project sponsor, is transported, stored, injected into a well, or discharged with appropriate controls and treatment to prevent the spread of aquatic nuisance species.

23. Effective the date of this approval, Commission Docket No. 20120309 is hereby rescinded.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on September 20, 2012.

Dated: September 21, 2012


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

1721 North Front Street • Harrisburg, Pennsylvania 17102-2391

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

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Docket No. 20120912

Approval Date: September 20, 2012

TALISMAN ENERGY USA INC.

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

Section 1. Approval

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

This approval is a renewal of Commission Docket No. 20080909 that was approved September 11, 2008, and modified December 17, 2009, with a peak day withdrawal rate of 2.000 million gallons per day (mgd) and no special flow protection requirements. The project sponsor has not requested any changes to the conditions of the approval. Commission staff recommended that a flow protection provision be added and the approved rate of withdrawal be reduced to 1.500 mgd, herein referred to as the modified rate.

Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP), 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:	Talisman Energy USA Inc.
Approval Type:	Surface Water Withdrawal
Original Docket No.:	20080909
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses
Municipality:	Sheshequin Township
County:	Bradford 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):	0205010605 (Upper Susquehanna River)
Water Use Designation:	Warm Water Fishery (WWF)
Withdrawal Location (degrees):	Lat: 41.848500 N Long: 76.494361 W
Flow Statistics (cfs):	Q7-10 = 576; Average Daily Flow = 10,800
Drainage Area (square miles):	7,582
Special Flow Protection Required:	Yes
cfs – cubic feet per second	

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):	1,400 (Not to Exceed)
Flow Protection Type:	Passby: 20% Average Daily Flow November 1 through June 30; 10% Average Daily Flow July 1 through October 31
Flow Protection Rate (cfs):	2,160 – November 1 through June 30; 1,080 – July 1 through October 31
Flow Protection Rate (gpm):	969,000 – November 1 through June 30; 484,000 – July 1 through October 31
Method for Flow Protection:	Monitor USGS Real-Time Gage 01531500; Susquehanna River at Towanda, Pennsylvania
Flow Protection Threshold (cfs):	2,220 – November 1 through June 30; 1,110 – July 1 through October 31
gpm – gallons per minute USGS – U.S. Geological Survey	

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, including metering and reporting requirements contained in Commission Regulation 18 CFR §806.30.

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 from time to time.

2. Within sixty (60) days from the date of this approval, the project sponsor shall submit a metering plan to the Commission for review and approval by Commission staff that accounts for the approved withdrawal quantity and limitations presented in Section 4. Any future modifications proposed for the metering plan shall be submitted for review and approval by Commission staff in accordance with Commission Regulation 18 CFR §806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan.

3. 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 approval by Commission staff in accordance with Commission Regulations 18 CFR §806.21 and §806.23.

4. 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.

5. 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 on-line 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, approved by Commission staff prior to implementing or modifying existing equipment or procedures.

6. The project sponsor shall maintain the totalizing meter and other measuring devices, accurate to within five (5) percent, so as to provide an accurate record of withdrawals and certify to the Commission once every two (2) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.

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

8. To satisfy the Commission's registration requirement, the project sponsor shall register with the PADEP all surface water sources described in this docket in accordance with 25 PA Code §110.201, Pennsylvania Water Resources Planning Act, Subchapter B, "Registration."

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

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

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

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

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

14. 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 unless a renewal is requested by the project sponsor and approved by the Commission.

15. Should the project's anticipated withdrawals be expected to exceed the amounts listed herein, the project sponsor is required to make application for modification to this approval at that time.

16. This approval is effective until September 19, 2016. As specified in Commission Regulation 18 CFR §806.31(e), the project sponsor shall submit an application by March 19, 2016. Provided such application is timely filed, 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.

Section 6. Special Conditions

17. Effective the date of this approval, 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 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. The project sponsor shall keep daily records of the U.S. Geological Survey stream gage and shall report the data to the Commission, as required. The project sponsor may propose alternative flow monitoring to the Commission for staff review and, if acceptable, approval.

18. Within sixty (60) days from the date of this approval, the project sponsor shall post a sign that meets Commission specifications and displays required project description information. 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 description shall identify the project sponsor, project name, docket approval number, and conditions of the surface water withdrawal approval including quantity, rate and passby flow requirement, docket expiration date, and contact information for the project sponsor and the Commission. The sign shall be installed prior to any withdrawal of water and be maintained for the duration of the approval. The project sponsor shall submit digital photographs as proof of sign installation.

19. The project sponsor shall maintain legal access to the withdrawal location for the duration of the 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 determination of authorized 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 all water withdrawn from surface water sources, while under control of or on a facility owned or operated by the project sponsor, is transported, stored, injected into a well, or discharged with appropriate controls and treatment to prevent the spread of aquatic nuisance species.

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 20, 2012.

Dated: September 21, 2012