



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20150608

Approval Date: June 4, 2015

HYDRO RECOVERY, LP

**Groundwater Withdrawal (30-Day Average) of 0.216 mgd from Well HR-1,
and Consumptive Water Use (Peak Day) of up to 0.316 mgd from Well HR-1,
Public Water Supply, and Storm Water**

Section 1. Approval

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

Hydro Recovery, LP treats flowback, production, and formation fluids collected during the development and production from hydrocarbon wells. The treatment process includes the consumptive use of water supplied from the Blossburg Municipal Authority public water supply system, Well HR-1, and storm water. Hydro Recovery, LP also supplies bulk freshwater for use in hydrocarbon development from the Blossburg Municipal Authority public water supply system, Well HR-1 and storm water. Because of on-site storage, the project has the capacity to supply bulk freshwater during a single day in excess of its combined approved withdrawals, provided that no more than 0.100 million gallons per day (mgd) is withdrawn in a single day from the public water supply system (for any purpose) and the 30-day average and maximum instantaneous withdrawal rate for Well HR-1 is not exceeded.

Commission staff recommends that the requested withdrawal from Well HR-1, the requested consumptive use, the addition of storm water as a source of water for consumptive use, and that total withdrawals from the Blossburg Municipal Authority public water supply system limited to 0.100 mgd (peak day) all be approved.

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:	Hydro Recovery, LP
Approval Types:	Groundwater Withdrawal and Consumptive Water Use
Original Docket No.:	20110612
Authorized Water Use Purpose:	Treatment of Flowback, Production, and Formation Fluids, and Bulk Supply to Natural Gas Exploration and Production Companies
Municipality:	Blossburg Borough
County:	Tioga County
State:	Pennsylvania

Section 3. Source Information

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

Source Information	
Withdrawal Type:	Groundwater
Approved Source:	Well HR-1
Subbasin:	Chemung
Watershed Boundary Dataset (WBD):	0205010409 (Tioga River)
Withdrawal Location (degrees):	Lat: 41.671617 N Long: 77.072300 W
Special Flow Protection Required:	No

Section 4. Aquifer Testing

The project sponsor requested that the constant-rate aquifer testing required by Commission Regulation 18 CFR §806.12 for groundwater withdrawals be waived. In support of the aquifer testing waiver request, the project sponsor provided the required groundwater availability analysis and operational monitoring data collected during the first approval term. Staff compared and evaluated the operational monitoring data to the results of the Commission-approved aquifer test that was completed in September 2010, in support of the original application. Data from aquifer testing previously conducted indicate that withdrawals from Well HR-1 have the potential to cause unacceptable interference with a competing supply. As a result of the potential interference, the original approval included a requirement to monitor the water level and daily withdrawals from the competing well. Staff's evaluation of the operational monitoring data indicates that operation of Well HR-1 has not caused unacceptable interference during the first approval term, but has not demonstrated that unacceptable interference will not occur at the approved rate. Influence to competing wells can vary depending on variables such as hydrologic conditions, rate of withdrawal, and duration or continuity of withdrawal. Staff recommends the operation of Well HR-1 be conditioned as set forth in Special Condition 27 and that the monitoring of the competing supply be continued for the duration of this approval in accordance with Special Condition 28.

Commission staff finds that the withdrawal from Well HR-1 at the requested withdrawal rate and operated consistent with the conditions of this approval 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 HR-1, 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 HR-1	
30-Day Average Withdrawal (mgd):	0.216
Maximum Instantaneous Withdrawal Rate (gpm):	150 (Not to Exceed)
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	
Sources for Project Consumptive Water Use:	<ol style="list-style-type: none"> Well HR-1 Public Water Supply – Blossburg Municipal Authority, not to exceed 0.100 mgd (peak day) Storm Water
Peak Day Consumptive Water Use Amount (mgd):	0.316 mgd (not to exceed from all sources excluding storm water)
Project Consumptive Water Uses:	On-site treatment of flowback, production, and formation fluids
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. Existing Approved Withdrawals

The project does not have existing approved withdrawals for other sources.

Section 8. Grandfathering Determination – Withdrawals and Consumptive Water Use

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

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

Section 9. Standard Conditions

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

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

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

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

5. The project sponsor shall adhere to the groundwater elevation monitoring plan reviewed and approved by Commission staff for the source listed in Section 3. The groundwater elevation data shall be reported to the Commission quarterly, and as otherwise required. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any modifications proposed for the groundwater elevation monitoring plan shall be submitted for review and approval by Commission staff in accordance with Commission Regulation 18 CFR §806.30(a)(4). Modifications shall not be made until the project sponsor receives written approval of the amended plan.

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

this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

7. The project sponsor 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. The daily quantity of water consumptively used shall be the total quantity of accumulated storm water and freshwater added or used during the treatment of production, formation, or flowback fluids. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any alternative measuring, monitoring, or accounting procedure requested by the project sponsor shall be submitted for review and, if appropriate, approval by Commission staff. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

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

10. 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.

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

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

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

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

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

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

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

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

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

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

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

Section 10. Special Conditions

22. Within thirty (30) days, the project sponsor shall submit a plan for review by Commission staff that includes the procedure for calculating the daily quantity of storm water that is added or used during the treatment of production, formation, or flowback fluids.

23. The date of the last meter certification was June 5, 2013; therefore, the next meter certification is due no later than June 5, 2018. Certification of meter accuracy shall be provided to the Commission no less frequent than once every five (5) years from the date of the last certification.

24. Except as authorized pursuant to Special Condition 26, 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).

25. 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 26, including daily quantities supplied.

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

27. Due to the determined potential for an unacceptable interference with an existing competing supply (Ward Plant 1 Well), the groundwater level in Well HR-1 must be maintained above 126 feet below ground surface (bgs) (1,256.5 feet above mean sea level). The following modifications must be maintained during the operation of Well HR-1:

- a. The project sponsor shall maintain an automatic shut-off switch so that if the water level of 126 feet bgs is reached, operation of Well HR-1 is automatically ceased.

28. The project sponsor shall conduct additional monitoring during well operation to confirm long-term water availability and boundary conditions present in the aquifer, and to ensure that the operation of Well HR-1 does not adversely impact the local groundwater users (i.e., Ward Manufacturing) and the aquifer, or affect the low flow of local streams. The monitoring requirements set forth below shall be maintained and shall continue for the term of this approval:

- a. With the concurrence of Ward Manufacturing, an electronic recording transducer shall be maintained by the project sponsor in the Ward Plant 1 Well. The purpose

of this device is to monitor pumping groundwater levels in this well to document long-term effects on the local area aquifer. The metering device must be maintained on the Ward Plant 1 Well water conveyance line. Daily groundwater withdrawal data must be documented from the Ward Plant 1 Well as part of the monitoring program.

- b. If Ward Manufacturing rescinds access to Ward Plant 1 Well, the project sponsor shall propose alternative local area aquifer monitoring to the Commission for staff review and approval. This could include the installation of one or more groundwater monitoring wells within the zone of influence of Well HR-1, positioned and constructed for evaluating ongoing impacts to the Ward Plant 1 Well.

All data collected as part of Special Condition 28 shall be submitted electronically to the Commission on a quarterly basis. If an evaluation of these data indicates unacceptable hydraulic conditions (i.e., recurring excessive drawdown, lowering of the water table, etc.) or excessive unacceptable interference between Well HR-1 and Ward Plant 1 Well during operation of the Ward Plant 1 Well, the Commission reserves the right to rescind or impose additional restrictions on the use of Well HR-1.

29. The project sponsor shall maintain metering on the withdrawal from the public water supply system in accordance with Commission Regulation 18 CFR §806.30.

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

31. Total withdrawals from the public water supply system shall not exceed 0.100 mgd (peak day).


Section 11. Term

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

33. Commission Docket No. 20110612 shall remain effective through June 30, 2015, whereupon it shall expire.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on June 4, 2015.

Dated: June 5, 2015


Stephanie L. Richardson