



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20190607

Approval Date: June 14, 2019

HYDRO RECOVERY, LP

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

Section 1. Approval

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

The project sponsor operates one well (Well HR-1) at the facility. The project sponsor also purchases water from the local public water supply system, and utilizes stormwater collected at the facility. According to information provided by the project sponsor, no other sources are used by the project.

This approval is a renewal of Commission Docket No. 20150608 that was approved on June 4, 2015. The project sponsor did not request any changes to the project; however, Commission staff recommended additional monitoring and reporting requirements based on evaluation of the project's monitoring data. This approval authorizes the continued withdrawal from Well HR-1 at the requested rate, in accordance with the conditions herein.

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 Use
Past Docket No.:	20150608
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 constant-rate aquifer testing required by 18 CFR § 806.12 for groundwater withdrawals was completed with prior Commission approval. A 72-hour, constant-rate aquifer test of Well HR-1 was conducted in September 2010, pumping at an average rate of 150 gallons per minute (gpm). The project sponsor provided an evaluation of historical withdrawal and water level data, along with the required groundwater availability analysis.

Data from the 2010 aquifer test indicate that withdrawals from Well HR-1 have the potential to cause unacceptable interference with a competing supply (Ward Plant 1 Well). As a result of the potential interference, prior approvals included a requirement to monitor the water level and daily withdrawals from the Ward Plant 1 Well. Staff's evaluation of the Ward Plant 1 Well water level data indicates that the transducer has not been installed deep enough to measure the full range of water levels during operation, and definitive evaluation of the potential for significant adverse impacts to occur to other users as a result of operating Well HR-1 is not able to be completed with the available data. To protect other users and collect the necessary data to confirm that significant adverse impacts to other users will not occur as a result of this approval, Commission staff recommends that the approval of Well HR-1 be conditioned to require water level equipment to be set at a depth sufficient to measure and record the full range of water levels

in the Ward Plant 1 Well, continued monitoring of the Ward Plant 1 Well, and periodic submittal of interpretive reports to the Commission providing an evaluation of interference effects from pumping Well HR-1, as provided in Special Conditions 26 and 27.

Commission staff determined that the withdrawal from Well HR-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):	0.216
Maximum Instantaneous Withdrawal Rate (gpm):	150 (Not to Exceed)
Peak Day Withdrawal (mgd):	0.216
mgd – million gallons per day	

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

Section 6. Approved Consumptive Use Quantities and Limitations

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

Approved Consumptive Use Quantities and Limitations	
Sources for Project Consumptive Use:	<ol style="list-style-type: none"> 1. Well HR-1 2. Public Water Supply – Blossburg Municipal Authority, not to exceed 0.100 mgd (peak day) 3. Stormwater
Peak Day Consumptive Use Amount (mgd):	0.316 (Not to Exceed – from all sources excluding stormwater)
Authorized Project Consumptive Uses:	On-site treatment of flowback, production, and formation fluids
Consumptive Use Mitigation Type:	Payment of consumptive use mitigation fee

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

Section 7. Existing Approved Withdrawals and Consumptive Uses

The project does not have existing approved withdrawals or consumptive uses.

Section 8. Grandfathering Determination – Withdrawals and Consumptive 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 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 the totalizing meter and other flow and volume measuring devices, accurate to within five (5) percent, so as to provide an accurate record of withdrawals and consumptive 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.

4. 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 project sponsor shall maintain and monitor the accuracy of the measuring devices in accordance with the manufacturer's specifications.

5. The project sponsor shall keep daily records of the project's withdrawal, consumptive use, and groundwater elevations for the sources listed in Sections 3 and 6, and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any alternative measuring, monitoring, or accounting procedure, and any modifications proposed for the groundwater elevation monitoring plan, shall be submitted for review and approval by Commission staff in accordance with 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

6. The project's consumptive use is subject to mitigation requirements, as per 18 CFR § 806.22(b). To satisfy the Commission's current mitigation requirements for consumptive 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.

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

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

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

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

11. The project sponsor shall comply with the water conservation requirements specified in 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 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 18 CFR § 806.32.

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

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

19. The project sponsor is required to apply for and obtain approval prior to any increase in withdrawal 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.

20. 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

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

22. The date of the last meter certifications was June 4, 2018; therefore, the next meter certifications are due no later than June 4, 2023. Certification of meter accuracy shall be provided to the Commission no less frequent than once every five (5) years from the date of the last certification.

23. Except as authorized pursuant to Special Condition 25, the project sponsor shall only supply water for use in hydrocarbon development to persons who have properly registered or received approval pursuant to 18 CFR § 806.22(f), as applicable.

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

25. Prior to supplying water for any use not authorized pursuant to Sections 2 or 6 of this approval, the project sponsor shall first submit a request for minor modification under 18 CFR § 806.18(c)(4) for such new use to the Executive Director. The project sponsor shall not supply water for such use unless and until such authorization is granted, and pursuant to any supplemental terms and conditions contained in such approval.

26. Due to the potential for unacceptable interference with an existing competing supply (Ward Plant 1 Well), the groundwater level in Well HR-1 must be maintained above an elevation of 1,256.5 feet above mean sea level (AMSL), which corresponds to 126 feet below top of casing (btoc). During the operation of Well HR-1, the project sponsor shall maintain an automatic shut-off switch so that if the groundwater elevation of 1,256.5 feet AMSL is reached, operation of Well HR-1 is automatically ceased.

27. The project sponsor shall continue 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 shall be continued with noted modifications implemented as set forth below for the term of this approval (unless otherwise notified by Commission staff):

- a. Within ninety (90) days from the date of this approval, changes to the monitoring equipment in the Ward Plant 1 Well shall be completed to accurately measure and record the full range of water levels occurring in the Ward Plant 1 Well. Monitoring equipment must be set to an elevation of 1,227 feet AMSL (138 feet below ground surface [bgs]) or lower, which is the location of the first identified water-bearing zone in the Ward Plant 1 Well. Should the water level in the well decline below 1,227 feet AMSL, the project sponsor shall lower the water level monitoring equipment and notify Commission staff of the change within seven (7) days of discovery of the need to make the change.
- b. Commission staff's evaluation of the monitoring data indicates that water levels in the Ward Plant 1 Well may be lower than expected during prior approvals. To confirm that significant adverse impacts as a result of operating Well HR-1 are not occurring, the project sponsor shall prepare and submit an interpretive report semiannually that evaluates and documents interference effects and water levels in Ward Plant 1 Well. The semiannual interpretive report must include an evaluation of not only the previous six (6) months but also an evaluation of water level data since monitoring began in 2011.

- 1) The monitoring and reporting requirement shall continue for the term of this approval, unless data and hydrologic conditions are sufficient for staff to determine that significant adverse impacts to the Ward Plant 1 Well are not expected. Commission staff will notify the project sponsor, in writing, if the monitoring and reporting required herein will no longer be required.
 - 2) The semiannual reporting periods will be January 1 to June 30, and July 1 to December 31 of each year. The semiannual reports will be due January 31 and July 31 of each year, with the first report being due January 31, 2020.
- c. The metering device must be maintained on the Ward Plant 1 Well water conveyance line. Daily groundwater withdrawal data must be recorded from the Ward Plant 1 Well as part of the monitoring program and reported to the Commission quarterly.
 - d. 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.
 - e. If the monitoring data indicates that a significant adverse impact to the Ward Plant 1 Well has occurred or will occur, or if Ward Manufacturing provides notice to the project sponsor that Ward Plant 1 Well is not operational or limited due to suspected or confirmed dewatering of the well, the project sponsor shall contact Commission staff immediately.

All data collected as part of Special Condition 27 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.

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

29. 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.

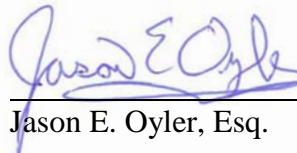
Section 11. Term

30. This approval shall be effective July 1, 2019, and shall remain effective until June 30, 2034. As specified in 18 CFR § 806.31(e), if the project sponsor submits an application on or before December 31, 2033, 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.

31. Commission Docket No. 20150608 shall remain effective through June 30, 2019, whereupon it shall expire.

CERTIFICATION: I, Jason E. Oyler, 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 14, 2019.

Dated: June 17, 2019



Jason E. Oyler, Esq.