

DOCKET NO. D-1993-040-4

DELAWARE RIVER BASIN COMMISSION

**United Corrstack, LLC - DBA DS Smith Reading Mill
Groundwater Withdrawal
City of Reading, Berks County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) on May 11, 2022 for a renewal of a groundwater withdrawal project with an increase in allocation and addition of one new groundwater source and review of a groundwater water withdrawal project (Application). The groundwater withdrawal project was previously approved by the Commission on May 8, 2013 in Docket No. D-1993-040-3.

The Application was reviewed for approval under Section 3.8 of the *Delaware River Basin Compact*. The Berks County Planning Commission has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on November 9, 2022.

A. DESCRIPTION

- 1. Purpose.** The purpose of this project is to approve the renewal of an existing withdrawal project and approve an increase in allocation from 17.856 million gallons per month to 29.02 mgm of groundwater from previously approved Well PW-1 and new well PW-2R. Water is used for industrial processes at the applicant's existing paper products manufacturing facility.
- 2. Location.** The project wells and the facility are located in the Schuylkill River Watershed in the City of Reading, Berks County, Pennsylvania. Schuylkill River near the project site is designated by the Pennsylvania Department of Environmental Protection (PADEP) as supporting Warm Water Fishes (WWF). The project wells are completed in Middle-Cambrian carbonate rocks of the Lebanon Valley Sequence.

Specific location information has been withheld for security reasons.

- 3. Area Served.** Groundwater withdrawals from the project wells serve only the docket holder's manufacturing facility. For the purpose of defining Area Served, the Application is incorporated herein by reference consistent with conditions contained in Section C. DECISION of this docket.

4. **Design Criteria.** The docket holder uses groundwater for industrial processes in the recycling and manufacturing of corrugated cardboard and paper products. The existing average and maximum daily water demands are 0.655 million gallons per day (mgd) and 0.705 mgd, respectively. Up to 0.244 mgd is also purchased from the City of Reading to supplement the water needed for industrial process and operation of the docket holder's boiler. The docket holder's 10-year average and maximum daily water demands are projected to increase to 0.936 mgd and 0.986 mgd, respectively. The docket holder requested an allocation of 29.02 mgm to meet the future demands of the facility.

5. **Facilities.** The existing project wells have the following characteristics:

WELL NO.	DEPTH (FEET)	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY (GPM)	YEAR DRILLED
PW-1	268'	179' / 8"	450 gpm	1993
PW-2R	280'	125' / 10"	450 gpm	2017

All wells are metered.

The water is not treated prior to use.

The project wells are not located in the flood hazard area.

6. **Other.** Wastewater is conveyed to the City of Reading sewage treatment facility most recently approved by DRBC Docket No. D-1986-028 CP-4 on December 11, 2019. The discharge is approved by PADEP in its NPDES Permit No. PA0026549. The treatment facility has adequate capacity to continue to receive wastewater from the project.

B. FINDINGS

1. Background and Related Dockets

The Paper Mill currently utilizes Well PW-1 as the primary water source for industrial operations. DRBC Docket No. D-1993-040-3 approved an allocation of 17.856 mgm at a maximum pumping rate of 400 gpm. However, due to increasing facility demands, the usage from Well PW-1 periodically exceeded the approved allocation. The docket holder initiated a long-term pumping test to support its request for an increase in allocation to meet demands.

The docket holder also requested to utilize an existing inactive water supply well known as Well PW-2R located on an adjoining property (now owned by the docket holder). The adjoining property was the site of the Evergreen Community Power facility that previously provided power to the Reading Paper Mill. DRBC Docket No. D-2008-011-2 issued to Evergreen Community Power approved a total allocation of 53.57 mgm (20.09 mgm from Well PW-2 and 33.48 mgm from Well PW-3) of groundwater to be withdrawn from the wells on the property for cooling and industrial processes. The power facility ceased its operations in May 2018 and the docket has since been terminated. Well PW-2R was previously drilled and tested as a replacement well for PW-2 but was never placed into operation.

2. Pumping Tests

Well PW-2R was drilled in September 2017 to a total depth of 280 feet below ground surface (bgs) and is cased to 125 bgs. The well is located 8 feet from Well PW2 and was completed as a 10-inch diameter borehole to increase well efficiency. Water bearing zones were encountered at 130 feet, 235 feet and 263 feet bgs. At the time of drilling, the blown yield of Well PW-2R was estimated to be 1,000 gpm.

On October 30 through November 1, 2017 a constant rate pumping test was conducted on Well PW-2R to assess withdrawal capabilities, aquifer characteristics and potential impacts to the local hydrologic system. The well was pumped at a rate of 579 gpm for a total of 2,910 minutes. This discharge rate did not vary by more than 5 percent. Discharge from the pumping well was conveyed to a stormwater inlet. Prior to the start of the pumping test, the static water level was 66.80 feet below top of casing (btoc). Total drawdown at the end of the pumping test was 41.96 feet (water level of 108.76 feet btoc) resulting in a specific capacity of 13.8 gpm/foot of drawdown. The 180-day extrapolated drawdown in Well PW-2R at a continuous pumping rate of 579 gpm and no recharge was projected to be 151 feet (water level of 217 feet btoc).

During the pumping test, water levels were measured in three observation wells including PW-1 (210 feet from the pumping well), PW-2 (8 feet from the pumping well) and PW-3 (300 feet from the pumping well). At the completion of the pumping test, drawdown in PW-2 and PW-1 was measured at 34.9 feet and 20.0 feet, respectively. Well PW-3 was in operation during the pumping test and drawdown from the pumping of PW-2R was not observed in the well. The estimated transmissivity from the analysis of the pumping test drawdown data was 8,376 gpd/ft to 11,758 gpd/ft and a storativity of 0.0017.

The pumping test data showed that well PW-2R and PW-1 were hydraulically connected. An extrapolation of water level data indicates that after 180-days of pumping well PW-2R at a continuous rate of 579 gpm, the water level in PW-1 would decline to depth of 110 feet btoc. Since the PW-1 well casing extends to a depth of 179 feet bgs, dewatering of water bearing zones is not anticipated.

The docket holder also reevaluated the capabilities of well PW-1 to support an increase in withdrawals from the previously approved rate of 400 gpm to 450 gpm. Over the course of a 6-month period from May 6, 2021 to November 6, 2021, PW-1 was pumped at current facility demand. Pumping rates were continuously monitored. Water levels in PW-1, PW-2, and PW-3 were monitored and recorded during this period using pressure transducers.

Over the 6-month period, the total average daily pumping rate from PW-1 was 450 gpm. Water levels measured in the observation wells fluctuated by no more than 17 feet over the period due to variations in pumping rates and responses to precipitation events. Data from a 31-day dry period in September through October 2021 was used to predict 180-day drawdown estimates in the wells. During this period, the withdrawal from well PW-1 was maintained at an average rate of 460 gpm and less than 0.75 inches of rain was recorded in Reading, Pennsylvania. Extrapolations indicate that after 180 days of continuous pumping under dry conditions at an average rate of 460 gpm, the estimated water levels in wells PW-1, PW-2 and PW-3 would be 92 feet btoc, 105 feet btoc and 56 feet btoc, respectively. Since the casing in PW-1 extends to 179 feet bgs and all the primary water producing zones exist below 188 feet, the projected drawdown in PW-1 is not expected to dewater any water producing zones. Based on the 6-month investigation well PW-1 can be pumped at the requested increased rate of 450 gpm.

3. Other Findings

The docket holder estimates that the project withdrawals, used for the purpose of industrial processes, result in a consumptive use of 56 percent of the total water use. The DRBC definition of consumptive use is defined in Article 5.5.1.D of the *Administrative Manual – Part III – Basin Regulations – Water Supply Charges*.

The project is designed to conform to the requirements of the *Water Code (WC)* and *Water Quality Regulations (WQR)* of the DRBC.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

C. DECISION

Effective on the approval date for Docket No. D-1993-040-4 below, Docket No. D-1993-040-3 is terminated and replaced by Docket No. D-1993-040-4. The project and appurtenant facilities as described in in Section A.4. (Design Criteria) and A.5. (Facilities) are approved subject to the following conditions, pursuant to Section 3.8 of the *Compact*:

Monitoring and Reporting

1. Within 60 days (February 5, 2023), the docket holder shall provide written confirmation to the Commission that it has registered and reported with PADEP all surface and groundwater sources described in this docket in accordance with the Pennsylvania Regulations (Title 25 - Environmental Protection, [25 PA. CODE CH. 110], Water Resources Planning).

2. The project withdrawals shall be metered by means of an automatic continuous recording device, flow meter, or other method, and shall be measured to within 5 percent of actual flow. Meters or other methods of measurement shall be subject to approval and inspection by the PADEP as to the type, method, installation, maintenance, calibration, reading and accuracy. A record of daily biweekly withdrawals shall be maintained, and monthly totals shall be reported to the PADEP annually and shall be available at any time to the Commission if requested by the Executive Director.

3. Within 30 days of completion of construction of the approved project, the docket holder is to submit to the attention of the Project Review Section of DRBC a Construction Completion Statement (“Statement”) signed by the docket holder responsible agent for the project.

4. The docket holder shall implement to the satisfaction of the PADEP, a continuous program to encourage water conservation in all types of use within the facilities served by this docket approval. The docket holder will report to the PADEP, on the actions taken pursuant to this program and the impact of those actions as requested by the PADEP.

Other Conditions

5. During any month, the combined withdrawal from all well sources shall not exceed 29.02 million gallons. No well shall be pumped above the maximum rate and monthly allocation as indicated below:

WELL NO.	MAXIMUM RATE (GPM)*	MONTHLY ALLOCATION (MGM)
PW-1	450	20.09
PW-2R	450	20.09

* Based on a 24-Hour Average

Additionally, the combined maximum pumping rate of Well PW-1 and PW-2R shall not exceed 650 gpm.

6. Section 2.3.10 of the Commission's Rules of Practice and Procedure (18 C.F.R. 401.41), limiting the Commission's approval to three years in the absence of an expenditure of substantial funds by the project sponsor in reliance on the approval, is hereby waived for good cause shown in accordance with Section 2.9.3 (18 C.F.R. 401.123) of the same regulations. This approval shall expire on the expiration date set forth below unless prior thereto the docket holder has applied to the Commission to renew or extend this approval.

7. The docket holder is responsible for timely submittal to the DRBC of a docket renewal application on the appropriate application form including the appropriate docket application filing fee (see 18 C.F.R. 401.43) at least 6 months in advance of the docket expiration date set forth below. The docket holder will be subject to late filed renewal surcharges in the event of untimely submittal of its renewal application, whether or not DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. In the event that a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below, the terms and conditions of the current docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

8. The wells and operational records shall be available at all times for inspection by the DRBC.

9. The wells shall be operated at all times to comply with the requirements of the *WC* and *WQR* of the DRBC.

10. The wells shall be equipped with readily accessible capped ports and minimum ½ inch inner diameter (ID) drop pipes so that water levels may be measured under all conditions. Existing wells are to be similarly equipped, where possible, with readily accessible ports and ½ inch ID drop pipes as repairs or modifications are made at each existing well.

11. No water service connections shall be made to newly constructed premises with plumbing fixtures and fittings that do not comply with water conservation performance standards contained in Resolution No. 88-2 (Revision 2).

12. The docket holder shall implement to the satisfaction of the PADEP, a drought or other water supply emergency plan.

13. No new water service connections shall be made to premises connected to sewerage systems which are not in compliance with all applicable effluent limits contained in State permits and the *Water Quality Regulations* of the Commission.

14. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

15. The docket holder is permitted to provide the water approved in this docket to the areas included in Section A.3. Area Served of this docket. Any expansion beyond those included in Section A.3. Area Served is subject to DRBC review and approval in accordance with Section 3.8 of the *Compact*.

16. The docket holder shall be subject to applicable DRBC regulatory program fees, in accordance with duly adopted DRBC resolutions and/or regulations. (see 18 C.F.R. 401.43).

17. This approval is transferable by request to the DRBC Executive Director provided that the project purpose and area served approved by the Commission in this docket will not be materially altered because of the change in project ownership. The request shall be submitted on the appropriate form and be accompanied by the appropriate fee (see 18 C.F.R. 401.43).

18. The docket holder shall request a name change of the entity to which this approval is issued if the name of the entity to which this approval is issued changes its name. The request for name change shall be submitted on the appropriate form and be accompanied by the appropriate fee (see 18 C.F.R. 401.43).

19. The issuance of this docket approval shall not create any private or proprietary rights in the water of the Basin, and the Commission reserves the rights to amend, alter or rescind any actions taken hereunder to ensure the proper control, use and management of the water resources of the Basin.

20. If the monitoring required herein or any other relevant data or information demonstrates that the operation of this project is interfering with or otherwise impairing existing uses of ground or surface water, or if the docket holder receives a complaint from an existing ground or surface water user within the zone of influence of the withdrawal alleging such interference or impairment, the permit holder shall immediately notify the Executive Director, and unless excused by the Executive Director, shall investigate the demonstrated or alleged impacts. For purposes of this condition, notification shall mean either (a) electronic transmittal of written notice to the Executive Director via email (using addresses posted on the DRBC website); or (b) written notice to the Executive Director and a telephone call to the Project Review Section at 609-883-9500, ext. 216. (Oral notification must always be accompanied by immediate written notification directed to the Executive Director.) In addition, the docket holder shall provide written notice to all potentially affected water users of the docket holder's responsibilities under this condition. **Any well or surface water supply that is impaired as a result of the docket holder's project withdrawal shall be repaired, replaced or mitigated at the docket holder's expense.** The scope of the options to consider for repair, replacement and/or mitigation shall not be limited solely to those that are owned, operated, or controlled by the project sponsor. An investigation report and/or mitigation plan prepared and certified by a licensed professional engineer and/or a licensed professional geologist shall be submitted to the Executive Director as soon as practicable following notice of the demonstrated or alleged impairment consistent with this paragraph. The Executive Director shall make the final determination regarding the scope and sufficiency of the investigation and the extent of any mitigation measures that may be required. Where ground and surface waters are rendered unavailable, unusable, or unsuitable for the pre-existing use, the Executive Director may direct the docket holder to take interim actions to mitigate such impacts, pending completion of the investigative report and any long-term repair, replacement or mitigation.

21. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

22. For the duration of any drought emergency declared by either Pennsylvania or the Commission, water service or use by the docket holder pursuant to this approval shall be subject to the prohibition of those nonessential uses specified by the Governor of Pennsylvania, the Pennsylvania Emergency Management Council, PADEP, or the Commonwealth Drought Coordinator to the extent that they may be applicable, and to any other emergency resolutions or orders adopted hereafter by the Commission.

23. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the *Rules of Practice and Procedure*. In accordance with Section 15.1(p) of the *Delaware River Basin Compact*, cases and controversies arising under the *Compact* are reviewable in the United States district courts.

BY THE COMMISSION

APPROVAL DATE: December 7, 2022

EXPIRATION DATE: December 7, 2032