DOCKET NO. D-2010-043-2

DELAWARE RIVER BASIN COMMISSION

Bethany Children's Home/DS Services of America, Inc.
Groundwater Withdrawal and Exportation Project
Heidelberg Township, Berks County, Pennsylvania.

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) on July 8, 2020 (Application) for renewal of an allocation of groundwater and a groundwater exportation project and review of a groundwater withdrawal and exportation project. The project groundwater withdrawal was approved by the Pennsylvania Department of Environmental Protection (PADEP) on May 23, 2012 (Operation Permit No. 0611504) and revised on March 27, 2018 (Operation Permit No. 7366003).

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 May 12, 2021.

A. DESCRIPTION

1. Purpose. The purpose of this project is to renew the approval of an existing groundwater withdrawal and exportation project to supply up to 6.0 million gallons per month (mgm) of groundwater for bottled water operations from Wells PW-A and PW-B.

2. Location. The project wells are completed in the Epler Formation and are located in the Tulpehocken Creek Watershed in Heidelberg Township, Berks County, Pennsylvania. Tulpehocken Creek near the project site is designated by the PADEP as supporting Trout Stocking Fishes (TSF) and Migratory Fishes (MF).

Specific location information has been withheld for security reasons.

3. Area Served. The groundwater withdrawn from Wells PW-A and PW-B is exported from the Delaware River Basin (DRB) to the Susquehanna River Basin (SRB). The project withdrawal will serve as a source of bulk spring water for DS Services of America, Inc. (DS Services). Bethany Children's Home (BCH), the property owner, sells the spring water to DS Services for bottling at the DS Services' Ephrata, Pennsylvania, bottled water plant. The Ephrata Bottling Facility is located in the Susquehanna River Basin (SRB) in Lancaster County, Pennsylvania. Additionally, from time to time, BCH will sell finished water per DEP's permit to other potable water users in the area. For the purpose of defining Area Served, the Application is incorporated herein by reference consistent with conditions contained in the DECISION section of this docket.

4. Design criteria. Wells PW-A and PW-B were developed to be spring water sources for DS Services' Ephrata Bottling Plant. DS Services has an agreement with BCH to operate the sources in close proximity to the "Farm Spring", an existing spring located on the western side of the BCH property. Wells PW-A and PW-B tap a fractured rock aquifer that is hydraulically connected to the spring. This spring formerly provided water to the BCH dairy farm, but it is no longer used for this purpose.

The existing bulk water loadout station is southwest of BCH along East Bethany Road, between the production wells and BCH campus. Groundwater withdrawn from Wells PW-A and PW-B is conveyed to the bulk water loadout station via food-grade high-density polyethylene (HDPE) with heat welded seams. Once the groundwater is conveyed to the bulk water loadout station, water passes through cartridge filters and is disinfected by ultraviolent (UV) light. The treated water is stored in an above ground 30,000-gallon stainless steel silo. BCH / DS Services may add additional silage in the future to replace the existing silo and/or provide for more storage. Water from the silo is metered and pumped into bulk water tankers for transportation to the Ephrata Bottling Facility.

The pipeline from each well is equipped with a shutoff valve, pressure gauge, flow meter and sanitary sampling port. All valves, inlets, piping, vents and other related equipment connected to the storage tanks are accessible from inside the bulk loading facility. All wetted surfaces of ancillary items including piping, gauges, valves, couplings and fittings installed in the loadout building are constructed of stainless steel. Floor drains are installed to convey overflow from the spring water filter housing and production lines when sample ports are opened or when filters are changed. The floor drains direct water outside of the building.

The loadout facility contains a secured interior room containing the above listed water treatment equipment and a smaller adjacent room for the tanker drivers to complete their necessary paperwork and facilitate the loading process. There is also an interior restroom for use by the delivery drivers and maintenance personnel. That contains toilet facilities, a sink, an eye wash station and first aid station. The building interior and exterior are lighted and the building is secured with locking doors. Truck ingress and egress to the loadout facility is secured by electronically operated gates.

Bethany Children's Home operates an on-site public water supply known as the Manderbach Spring, located to the east-northeast of Wells PW-A and PW-B which is used to supply potable water to the orphanage. The spring source was most recently approved by the PADEP as a public water supply source on March 16, 1990 (Permit No. 0689508). The spring serves a population of approximately 135 individuals with an average and peak water demand of 0.025 mgd and 0.056 mgd, respectively. Water diverted from the spring for public water supply is disinfected through chlorination.

The average and maximum groundwater demand for this project are 0.2 million gallons per day (mgd) and 0.2 mgd, respectively. The docket holder does not project an increase in demand over the next ten (10) years. The allocation of 6.0 mgm is sufficient to meet the future demands of the docket holder.

5. Facilities. The docket holder's existing wells have the following characteristics:

WELL NO.	DEPTH (FEET)	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY (GPM)	YEAR DRILLED
PW-A	243	152' / 8"	350	2009
PW-B	404	204' / 8"	250	2009

All wells are metered.

Prior to storage and hauling, the water will be treated with nominal filtration (cartridge filters) and UV light disinfection. No wastewater is generated by the treatment process. The cartridge filters will be replaced by bottling plant personnel on an as-needed basis. No backwashing is performed with the cartridge filters.

The project wellheads are above the 100-year flood elevation.

The water system is not presently interconnected with any other distribution system.

6. Other. The only wastewater produced at the site will be that generated by the restroom in the load out building. Wastewater will be contained in a holding tank that will be periodically emptied by a septic hauler for off-site disposal.

B. FINDINGS

1. Groundwater Exportation

Groundwater withdrawn from the project wells is exported from the DRB to the DS Services Bottling Facility in Ephrata, Pennsylvania in the SRB. The Susquehanna River Basin Commission Docket associated with this project is Docket No. 20140911 which was approved on September 4, 2014. Commission staff have reviewed the project pursuant to the requirements A through H contained in Section 2.30 (Importation and Exportation of Water) of the Delaware River Basin *Water Code (WC).* The review results in the following:

A. **Consideration of Resources Outside of the DRB:** DS Services' Ephrata Bottling Facility currently uses two other spring water sources located outside of the DRB; however, after additional assessments of these sources it was determined that they have insufficient additional yield to fully supply the Ephrata plant's entire demand for water.

B. **Water Resource Impacts:** Potential impacts of the 0.2 mgd withdrawal on groundwater and surface water resources have been evaluated by conducting multiple aquifer tests. The results of these tests are documented in the October 29, 2010 hydrogeologic report submitted to the Commission with the previous Application. The results indicate that the yields of production wells PW-A and PW-B are capable of sustaining the 0.2 mgd withdrawal and that the withdrawal does not detrimentally impact groundwater or surface water resources. Although, a long-term groundwater monitoring program is required as described in Condition C.3. to detect potential long-term water level declines caused by groundwater withdrawals that may adversely affect the local hydrologic system.

C. **Economic and Social Impacts:** The project produces several local, social and economic benefits. The project is located on land owned by BCH and DS Services purchases bulk spring water from BCH. BCH provides residential services for children who are unable to live with their own or substitute families. The residential nature of the facility requires staff every day of the year, including weekends and holidays. Annually, BCH serves more than 300 youth and also provides counseling services to 600 families throughout the region. In addition to providing residential services, BCH also owns and operates a fishing pond and a public water supply system. BCH is organized as a 501(c)(3) (not-for-profit) organization, operating primarily from money generated via county contracts with support from contributions and endowments. The project generates a direct and sustainable revenue source for BCH through the sale of bulk water for bottling. As a not-for-profit organization, BCH relies on county contracts with additional support from donations and/or limited funds generated through on-site activities. In order to continue as a viable resource for Pennsylvania children, it is important that the BCH develop additional sources of income to maintain and improve existing programs and facilities. In addition, the bulk spring water that DS Services purchases from BCH enables the Ephrata Bottling Facility to continue operation and meet the demands of its customers for bottled spring water. Continued operation of the Ephrata Bottling Facility provides employment opportunities and local, state and federal tax revenues.

D. **Amount, timing and duration of the proposed transfer and its relationship to passing flow requirements and other hydrologic conditions in the Basin, and impact on instream uses and downstream waste assimilation capacity.** The amount (maximum 0.2 mgd), timing and duration of the current withdrawal were evaluated through multiple aquifer tests as part of the hydrogeologic investigation for the project. This included a 116-hour, constant rate pumping test at the current production level of 0.2 mgd, during dry season conditions (September 2010). The results of this and other testing are fully described in the October 29, 2010 Hydrogeologic report. These tests indicated that withdrawal of the existing 0.2 mgd will have no detrimental impacts to groundwater or surface water including wetlands. Although, a

long-term groundwater monitoring program is required as described in Condition C.3. to detect potential long-term water level declines caused by groundwater withdrawals that may adversely affect the local hydrologic system.

E. **Benefits to the DRB:** As Item C. above.

F. **Volume of Transfer and its Relationship to Previous Commission Actions:** The 0.2 mgd groundwater withdrawal is a renewal of an existing docket, supported by substantial testing and environmental monitoring and it is consistent with other bottled water withdrawals approved by the Commission. Specifically, the Arrowhead Springs source currently used by another Docket holder was approved by the Commission for a 0.3 mgd withdrawal.

G. **Volume of Transfer and its Relationship to Other Diversions:** The 0.2 mgd diversion while typical for bottled water operations, is a small quantity compared to other diversions within the basin. The Schuylkill County Municipal Authority is approved to divert up to 1.0 mgd from the DRB. The Wildwood Water Utility is approved to divert up to 10.1 mgd from the DRB.

H. **Other Impacts:** There are no other foreseeable impacts associated with this out of basin transfer of groundwater.

2. <u>Long-term Groundwater Level Monitoring</u>

The data collected during the aquifer testing at the site indicated that there would be no adverse impacts to the adjacent wetlands or the local hydrologic system at the maximum rates of 50 gpm in Well PW-A and 90 gpm in Well PW-B; however, a long-term groundwater monitoring program is required as described in Condition C.3. to detect potential long-term water level declines caused by groundwater withdrawals that may adversely affect the local hydrologic system.

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

The DRBC estimates that the project withdrawals, used for the purpose of bottled water, result in a consumptive use of 100 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 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-2010-043-2 below, Docket No. D-2010-043-1 is terminated and replaced by Docket No. D-2010-043-2. 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. The permit holder shall continue to report to the PADEP all groundwater sources described in this permit 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 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. A long-term monitoring program is required to obtain data on groundwater and surface water hydrologic conditions in the project area. The docket holder shall continue to implement the long-term monitoring program as described herein. This program will include the following:

A. **Groundwater Level Monitoring** - The docket holder shall monitor Wells PW-A, PW-B, OW-3, OW-4, and the pool levels in Manderbach Spring (Piezometer A) and the Farm Spring (Piezometer B) to estimate annual groundwater fluctuations caused by seasonal changes and/or production well pumping and detect water level declines that may affect the performance of public and private wells in the area of the docket holder's production wells.

B. **Reports** - All monitoring data, including records required in Conditions "2." and "3." herein shall be submitted to the Commission annually, due by April 1. The docket holder is encouraged to submit the annual report electronically. The report shall be prepared by a hydrogeologist and shall assess the effects of well withdrawals on hydrologic conditions in the area. This report shall include an evaluation of the monitoring data required by this docket approval and such information as deemed appropriate by the hydrogeologist or required by the Executive Director.

C. The Executive Director may modify the monitoring program or temporarily suspend or modify this docket at any time if review of the hydrologic data and/or any other information indicates such action is necessary or appropriate.

Other Conditions

4. During any month, the combined withdrawal from all well sources shall not exceed 6.0 million gallons (0.2 mgd). No well shall be pumped above the maximum rate and monthly allocation as indicated below:

WELL NO.	MAXIMUM RATE (GPM)*	MONTHLY ALLOCATION (MGM)
PW-A	80	3.571
PW-B	90	4.02

*Based on a 24-Hour Average

5. 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 CFR 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.

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

6. The wells shall be operated at all times to comply with the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.

7. 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.

8. Each new water service connection shall include a water meter in accordance with the DRBC's Resolution No. 87-7 (Revised).

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

10. 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.

11. 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.

12. 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*.

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

14. 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 CFR 401.35).

15. 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 CFR 401.35).

16. 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 in order to insure the proper control, use and management of the water resources of the Basin.

17. 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.

18. 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.

19. For the duration of a critical hydrologic condition as announced by the Commission, on a daily basis the docket holder shall cause to be released from a replacement water source approved by the Commission an amount of water equal to the amount consumptively used by the docketed facility, multiplied by the applicable relative effect factor, if assigned. For the duration of such critical hydrologic condition, the docket holder shall operate its facility only at a level commensurate with the amount of replacement water it is capable of causing to be released

20. 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: **June 9, 2021**

EXPIRATION DATE: **June 9, 2031**