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DOCKET NO. D-1998-055-7

DELAWARE RIVER BASIN COMMISSION

Located in Drainage Area to Special Protection Waters

**BlueTriton Brands, Inc. / Green Waltz Water Company
Groundwater Withdrawal
Washington Township, Northampton County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) on July 25, 2023 for renewal of an allocation of groundwater and review of a groundwater water withdrawal project including an additional borehole source (Application). The construction permit for Borehole B-3 was approved by the Pennsylvania Department of Environmental Protection (PADEP) on February 7, 2024 (Public Water Supply Permit No. 3392308) contingent upon DRBC approval.

The Application was reviewed for approval under Section 3.8 of the *Delaware River Basin Compact*. The Lehigh Valley Planning Commission has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on May 8, 2024.

A. DESCRIPTION

1. **Purpose.** The purpose of this docket is to renew the approval of an existing groundwater withdrawal of up to 13.21 million gallons per month (mgm) from Borehole B-1, up to 3.84 mgm from Borehole B-2 and approve the withdrawal of up to 13.21 mgm from new Borehole B-3 for use at the docket holder's bottled water facility. The total combined groundwater allocation from all sources will remain at the previously approved rate of 17.05 mgm. Additionally, borehole B-3 is to be used in conjunction with boreholes B-1 and B-2 and the previously approved maximum combined pumping rate of 439 gpm will not increase because of this project.

2. **Location.** The project is located in the Waltz Creek Watershed in Washington Township, Northampton County, Pennsylvania. Boreholes B-1 and B-3 are completed in unconsolidated glacial outwash valley fill and Borehole B-2 is completed in the weathered slate of the Martinsburg Formation that underlies the unconsolidated material. Waltz Creek is classified by the PADEP as supporting Cold Water Fishes (CWF). The site is located within the drainage area to the section

of the non-tidal Delaware River known as the Lower Delaware, which the Commission has designated as Special Protection Waters.

Specific location information has been withheld for security reasons.

3. **Area Served.** The docket holder trucks all water withdrawn from Boreholes B-1, B-2 and B-3 (upon completion) to its Breinigsville bottling facilities located in Upper Macungie Township, Lehigh County, Pennsylvania. 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.** Currently, spring water is pumped from Boreholes B-1 and B-2 through an Intermediate Pump Station (IPS) where it is treated by ultraviolet light and stored in two 30,000-gallon stainless steel storage silos. The water from these silos is pumped to the existing tanker loadout facility on Route 512 from where it is transported to the BlueTriton Brands bottling facility. Water from new borehole B-3 will be conveyed to the existing IPS with new underground 6-inch diameter pipe. The new B-3 borehole building will be constructed similar to the existing borehole B-1 and B-2 buildings and will be of masonry construction with concrete floor and stainless-steel piping and valves. A gravel driveway is proposed to provide access to the new borehole building for construction and routine maintenance activities. In addition to the new water line, underground conduits for electrical and fiber optic services to the borehole B-3 will be installed beneath the new driveway.

The docket holder records an existing average and maximum daily water demand of 0.455 million gallons per day (mgd) and 0.537 mgd, respectively. The docket holder projects the 10-year average and maximum water demand to increase to 0.500 mgd and 0.550 mgd, respectively.

5. **Facilities.** The existing and proposed project boreholes have the following characteristics:

BOREHOLE NO.	DEPTH (FEET)	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY (GPM)	YEAR DRILLED	FORMATION
B-1	75	65’/8”	360	2003	Unconsolidated glacial outwash overlying the Martinsburg Formation
B-2	62	51’/8”	180	2004	Martinsburg Formation

BOREHOLE NO.	DEPTH (FEET)	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY (GPM)	YEAR DRILLED	FORMATION
B-3	73	61'8"	325	2020	Unconsolidated glacial outwash overlying the Martinsburg Formation

All existing and proposed borehole sources are or will be metered.

The project facilities are not located in a FEMA-mapped flood hazard area.

Withdrawn water is treated by ultra-violet irradiation for disinfection.

6. **Other.** Wastewater from the Breinigsville bottling facility is conveyed to the Lehigh County Authority's City of Allentown sewage treatment facility most recently approved by DRBC Docket No. D-97-14 CP on August 6, 1997. The treatment facility is regulated by PADEP National Pollutant Discharge Elimination System (NPDES) Permit No. PA002600. The treatment facility has adequate capacity to continue to receive wastewater from the existing project.

B. FINDINGS

1. Special Protection Waters

In 1992, the DRBC amended its Water Quality Regulations (WQR) by the addition of regulations for the protection of Special Protection Waters (SPW), designed to maintain the quality of interstate waters where existing quality is better than the established stream quality objectives. As the result of its initial classifications and subsequent amendments, the Commission has designated the entire non-tidal main stem Delaware River from Hancock, New York to Trenton, New Jersey as SPW. DRBC's SPW regulations apply within the designated reaches and their drainage area.

Article 3.10.3A.2.e.1). and 2). of the *WQR, Administrative Manual - Part III*, states that projects subject to review under Section 3.8 of the *Compact* that are located in the drainage area of SPW must submit for approval a Non-Point Source Pollution Control Plan that controls the new or increased non-point source loads generated within the portion of the docket holder's service area which is also located within the drainage area of SPW. The boreholes providing water supply to the docket holder are located within the drainage area to the Special Protection Waters.

Since this project involves additional construction and/or expansion of facilities and creates new or increased non-point source loads, the NPSPCP requirement is applicable at this time. The docket holder prepared an Erosion and Sediment Control Plan (E&S Plan) for the proposed borehole B-3 project. An Erosion and Sediment Control Plan Adequacy Letter dated April 13, 2023 was obtained from the Northampton County Conservation District. Because of the limited area of disturbance, a post construction stormwater management plan was not required by the local municipality or the conservation district. The docket holder incorporated best management practices to minimize runoff and provided permanent stormwater volume controls. The proposed gravel drive was kept to a minimum width needed to accommodate service vehicles and will be constructed with the top surface matching existing grades. Additionally, the driveway base course will be 8-inches of No. 3 open graded aggregate which will function to displace the stormwater runoff from small storm events. The plan also includes a waterbar per the PADEP E&S manual as well as trench plugs at the culvert stream crossing. The project's E&S Plan meets the Commission's NPSPCP requirements.

2. Borehole B-3 Hydrogeologic Analysis

On August 15 through August 18, 2022, a 72-hour pumping test was conducted to assess the withdrawal capabilities of Borehole B-3 and the underlying aquifer characteristics and identify any potential impacts to the local hydrologic system. During the pumping test, borehole B-3 was pumped at a constant rate of 325 gpm and existing boreholes B-1 and B-2 were pumped at rates of 225 gpm and 50 gpm, respectively (combined total of 600 gpm). Water from boreholes B-1 and B-2 that was not transported to the bottling facility and water from B-3 was discharged to Greenwalk Creek downstream of the wetland piezometers.

During the aquifer test, water level monitoring was performed on the water supply boreholes and numerous wells installed in the confined and unconfined portions of the sand and gravel aquifer and the underlying bedrock. Additional monitoring was performed at several piezometers located adjacent to East Spring and in the wetland area as well as the flow in Greenwalk Creek. The monitoring points were monitored electronically and manually for backup purposes.

Prior to the start of the pumping test, the water level in borehole B-3 was 12.69 feet below top of casing (btoc). Maximum drawdown observed at the pumping borehole, after approximately 72 hours of pumping at a rate of 325 gpm, was 10.91 feet (water level of 23.60 feet btoc). Water levels measured in the monitoring points showed that the pumping influence was oriented in a north-south direction along the sand and gravel valley fill aquifer. Groundwater level drawdowns measured in the monitoring points located in the confined region of the sand and gravel aquifer between 5 feet and 650 feet of borehole B-3 ranged from 9.53 feet at well S-H to 2.05 feet at well S-E. Water levels in the more distant monitoring points screened in the unconfined portion of the aquifer and the two bedrock wells in this area located between approximately 1,065 feet and 1,425 feet from borehole B-3 showed only a minor deflection in the overall declining ambient trend with drawdowns estimated between 0.3 and 0.6 feet. The borehole B-3 pumping test did not appear to influence water levels in bedrock wells S-1 or S-3 located south (down gradient) of the project

site. Additionally, approximately 0.14 feet of drawdown was observed in the East Spring Piezometer due to pumping at borehole B-3. The two wetland piezometers monitored were essentially dry at the time of the aquifer test, which is reported to be consistent with typical conditions in August. Piezometer W-1 had less than 3 inches of water immediately before starting the test and W-2 had no measurable water. W-2 remained dry during the test. The water level rose somewhat in W-1 during test, which was eventually traced to a leak in the discharge hose that passed near to this piezometer. After the aquifer test, the water level in W-1 dropped to approximately its pre-pumping level. Flows in the east branch of Greenwalk Creek decreased by approximately 16 gpm during the borehole B-3 pumping test and rebounded once B-3 was shut down.

The observed drawdown data was used to calculate aquifer parameters to characterize the underlying aquifer. Plots were analyzed using the analytical method of Hantush and Jacob (1955) for leaky confined aquifers. Transmissivity values for the six monitoring wells located in the confined region of the aquifer yielded a geometric mean transmissivity and storativity of approximately 11,156 ft²/day and 4.4×10^{-5} , respectively, which is indicative of confined conditions. The 72-hour specific capacity of borehole B-3 was approximately 29.5 gpm/ft.

Commission staff have reviewed the Hydrogeologic Report for the borehole B-3 pumping test. No adverse impacts are expected to occur to the local hydrologic system due to the pumping from borehole B-3. No increases in the total permitted instantaneous maximum withdrawal rate of 439 gpm or monthly allocation of 17.05 will result from the use of B-3 in accordance with docket conditions.

3. Passby Flow

By letter dated August 29, 2006, the Pennsylvania Fish and Boat Commission (PFBC) indicated that a run of the Pennsylvania Maryland In-stream Flow Model (PMIFM) yielded a passby flow of 1.05 cubic feet per second (cfs) at the downstream monitoring location while limiting mean annual habitat loss to 10%, which is PFBC's threshold for Class B wild trout streams. In a PMIFM analysis, the natural and proposed alterations in the hydrology of a stream for which a withdrawal is proposed are compared to other streams in the same Physiographic Region that was studied in development of the PMIFM. Habitat versus flow analyses for these streams is used to predict habitat changes for the stream for which the permit is proposed. Passby flows are required to protect against the potential of such losses. The PFBC and the DRBC have assumed a one-to-one impact of the withdrawal to the stream in the immediate area of the withdrawal, although evaluations by the docket holder indicate that the withdrawal impact on stream flow is less than a one-to-one ratio.

The docket holder is required to ensure that the project does not cause the stream flow of Greenwalk Creek to be less than 1.05 cubic feet per second (cfs) (equivalent to 0.679 mgd) as measured at Greenwalk Creek monitoring point GC-4. Whenever the daily average stream flow as measured at this monitoring point is less than or equal to 1.05 cfs the docket holder must either cease withdrawals from Boreholes B-1, B-2 and B-3 or augment the stream flow to Greenwalk Creek by diverting water from Boreholes B-1, B-2 and B-3 to maintain the passby flow of 1.05

cfs. The amount of water used to augment the stream flow in Greenwalk Creek to maintain the passby flow is considered part of the maximum withdrawal limits established in Condition C.11. in the Decision section of this docket.

In addition to stream flow monitoring on Greenwalk Creek, the docket holder is required to conduct a groundwater and surface water monitoring program in accordance with the Operation & Monitoring Plan (O&M Plan) dated January 25, 2008, last revised December 15, 2023 which was submitted via email on December 18, 2023. No changes to this operation plan are proposed except that the same withdrawal monitoring, water level monitoring and reporting procedures currently used for existing boreholes B-1 and B-2 will also be used for new borehole B-3.

4. Other Findings

In 2001, Green-Waltz Water Company, Inc. sold its interests in waters from the spring sources located on the subject property and BlueTriton Brands has assumed responsibility for the operation and maintenance of the withdrawals from Boreholes B-1 and B-2.

An Erosion and Sediment Control adequacy letter was obtained from the Northampton County Conservation District. A PADEP/Army Corps Joint Permit will also be obtained for the project to enable construction of the new waterline and access drive from the existing facility to the new Borehole B-3.

The DRBC estimates that the project withdrawals, used for the purpose of bottled water supply, 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 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-1998-055-7 below, Docket No. D-1998-055-6 is terminated and replaced by Docket No. D-1998-055-7. 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 (by August 28, 2024), 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 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. The docket holder will comply with the Operation and Monitoring Plan (O&M) dated January 25, 2008, last revised December 15, 2023. The O&M Plan includes specific monitoring points, data collection and monitoring requirements. The O&M Plan requires the monitoring of stream flows in Greenwalk Creek below the point of taking.
4. The Executive Director may modify the O&M Plan if the results indicate that a change is required or appropriate. The Executive Director will notify the parties listed on the Interested Parties List for this docket of any approved changes to the O&M Plan.
5. All monitoring data, including records required in Conditions C.2 and C.3., herein shall be submitted to the Commission annually. Such data and records, covering operations in each calendar year, shall be submitted to the Commission by March 31 of the following year. The docket holder is encouraged to submit the annual report electronically to the Commission. 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.
6. Copies of the annual monitoring report, required by Condition C.5. will be provided to Washington Township at the same time it is provided to the Commission. Copies of the annual withdrawal data report, required by Condition C.2., will be provided to Washington Township at the same time it is provided to the PADEP. Monthly withdrawal data will be available and provided to Washington Township upon request by a member of the Board of Supervisors
7. 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’s professional engineer for the project. The Statement must (1) either confirm that construction has been completed in a manner consistent with any and all DRBC-approved plans or explain how the as-built project deviates from such plans; and (2) indicate the date on which the project was (or is to be) placed in operation.

8. The docket holder shall implement to the satisfaction of the Bureau of Watershed Management, 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 Bureau of Watershed Management, PADEP, on the actions taken pursuant to this program and the impact of those actions as requested by the PADEP.

9. The docket holder shall continue to implement its Water Conservation Plan as approved by PADEP and shall report to the PADEP on actions taken pursuant to this program and the impact of those actions as requested by the PADEP.

Other Conditions

10. During any month, the combined withdrawal from all borehole sources shall not exceed 17.05 million gallons. No borehole shall be pumped above the maximum rate and monthly allocation as indicated below:

BOREHOLE NO.	MAXIMUM RATE (GPM)*	MONTHLY ALLOCATION (MGM)	COMBINED MAXIMUM RATE*
B-1	325	13.21	439 gpm
B-2	114	3.84	
B-3	325	13.21	

* Based on a 24-Hour Average

11. 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.

12. 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 DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. If 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 pending the grant or denial of the application for docket approval.

13. The docket holder is required to ensure that the project does not cause the daily average stream flow of Greenwalk Creek to be less than 1.05 cubic feet per second (cfs) (equivalent to

0.695 mgd) as measured at Greenwalk Creek monitoring point GC-4. Whenever the daily average stream flow as measured at this monitoring point is less than or equal to 1.05 cfs the docket holder must either cease withdrawals from Boreholes B-1, B-2 and B-3 or augment the stream flow by diverting water from Boreholes B-1, B-2 and/or B-3 to maintain the passby flow of 1.05 cfs. The amount of water used to augment the stream flow in Greenwalk Creek to maintain the passby flow is considered part of the maximum withdrawal limit established in Condition C.11 in the Decision section of this docket.

14. To the greatest extent practicable, the docket holder shall schedule planned maintenance of the automated creek flow data collection instruments and weir when flow in Greenwalk Creek is greater than 1.25 cfs.

15. The boreholes, load-out facility and operational records shall be available at all times for inspection by the DRBC.

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

17. The boreholes 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.

18. 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).

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

20. Sound practices of excavation, backfill and reseedling shall be followed to minimize erosion and deposition of sediment in streams from any new facilities or repair related construction.

21. 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.

22. 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.

23. 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*.

24. 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).

25. 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 401.43).

26. 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).

27. 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.

28. 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.

29. 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.

30. 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.

31. Prior to allowing connections from any new service areas or any new developments, the docket holder shall either submit and have approved by the Executive Director of the DRBC a Non-Point Source Pollution Control Plan (NPSPCP) in accordance with Section 3.10.3.A.2.e or receive written confirmation from the Executive Director of the DRBC that the new service area complies with a DRBC approved NPSPCP.

32. 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:

EXPIRATION DATE: June 5, 2034