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**DOCKET NO. D-2013-020-2**

**DELAWARE RIVER BASIN COMMISSION**

**Drainage Area to Special Protection Waters**

**Nestle Waters North America Inc.  
Groundwater Withdrawal and Discharge  
Washington Township, Northampton County, Pennsylvania**

**PROCEEDINGS**

This docket is issued in response to an Application submitted by Nestle Water North America (Nwana or docket holder) to the Delaware River Basin Commission (DRBC or Commission) on June 6, 2018 to renew the approval of a groundwater withdrawal and discharge project (Application). National Pollutant Discharge Elimination System (NPDES) Permit No. PA0275794 for this facility was issued by the Pennsylvania Department of Environmental Protection (PADEP) on June 2, 2016, effective July 1, 2016.

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 November 14, 2018.

**A. DESCRIPTION**

1. **Purpose.** The purpose of this docket is to renew the approval of an existing groundwater withdrawal of up to 11.696 million gallons per month (mgm) from Well IW-1 and the discharge of the withdrawn groundwater to Greenwalk Creek. The project will continue to intercept groundwater containing elevated concentrations of total dissolved solids (TDS), sulfate and calcium, apparently emanating from upgradient former slate mining areas in order to manage Nwana's downgradient existing sources.

2. **Location.** The withdrawal and discharge project is located in the Waltz Creek Watershed in Washington Township, Northampton County, Pennsylvania. Well IW-1 is screened in the unconsolidated sand and gravel deposits overlying the Martinsburg Formation. The project withdrawals and discharges are located within the drainage area to the Lower Delaware Special Protection Waters (SPW).

Specific location information has been withheld for security reasons.

Groundwater withdrawn from Well IW-1 is discharged to the land surface through an energy dissipater and drains to Greenwalk Creek at River Mile 190.65 – 4.59 – 2.35 – 1.67 (Delaware River – Martins Creek – Waltz Creek – Greenwalk Creek) via Outfall 001 as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	40° 51' 52"	75° 13' 51"

3. **Area Served.** The project withdrawals and discharges are used only for the purpose of intercepting and removing groundwater containing elevated TDS concentrations at the project site as delineated on various maps included in the application. For the purpose of defining the Area Served, Section B (Type of Discharge) and D (Service Area) of the docket holder’s Application are incorporated herein by reference, to the extent consistent with all other conditions contained in the DECISION Section of this docket.

4. **Physical features.**

a. **Design criteria.** NWNA currently withdraws groundwater from two boreholes (Boreholes B-1 and B-2) that are associated with springs located on the Greenwalk Springs Facility property located in the Greenwalk Creek watershed in Washington Township, Northampton County, Pennsylvania. Docket No. D-1998-055-5, issued by the Commission on December 8, 2011 allows NWNA to withdraw up to 17.05 mgm of groundwater from the two spring water boreholes.

As part of its routine monitoring, NWNA detected increases in TDS, sulfate and calcium concentrations of groundwater flowing toward its spring water sources, with concentrations in certain monitoring wells approaching federal and state drinking water standards. Expanded sampling in 2013 found that groundwater with elevated TDS, sulfate and calcium was naturally discharging via springs that feed Greenwalk Creek.

In June 2013, NWNA informed PADEP of the changes in groundwater quality and in the water quality of Greenwalk Creek. Based on subsequent investigations conducted by PADEP, it appears that constituents in certain spoil material placed in an abandoned, water-filled slate quarry located upgradient of the Greenwalk Springs Facility is the cause of the elevated concentrations. Constituents in the spoil material used for quarry reclamation had oxidized to form gypsum; and upon placement of this material in the water-filled quarry, the material leached relatively high levels of sulfate, calcium and magnesium resulting in elevated sulfate, calcium and TDS concentrations in the quarry water. Back filling of the abandoned quarry commenced in April 2011 and continued until suspended at PADEP’s direction in late June 2013. Water containing elevated TDS, sulfate, and calcium from the quarry area continues to flow into and through a buried sand and gravel aquifer toward the Greenwalk Springs sources. Additionally, surface water from the former quarry at times flows from the toe of a waste slate pile into Greenwalk Creek.

In August 2013, NWNA drilled an interception well (IW-1) to mitigate impacts of elevated inorganic constituents on NWNA’s spring sources. Well IW-1 is screened in the sand and gravel aquifer, which is believed to convey the majority of the impacted groundwater from the upgradient quarry. The well intercepts a portion of the groundwater plume emanating from the quarry and discharges it directly to Greenwalk Creek. The continued withdrawals will allow NWNA to remove additional constituent mass from the aquifer to limit further migration toward NWNA’s sources.

Discharge from Well IW-1 is conveyed approximately 300 feet via overland pipe to a 15 square foot stone-lined discharge structure located approximately 50 feet from the bank of Greenwalk Creek. Water flows from the discharge structure through a permeable wattle filtration berm and disperses as overland flow to Greenwalk Creek. Water pumped from well IW-1 is not treated as it contains the same dissolved constituents as are present in the groundwater and currently discharging to Greenwalk Creek at some on-site springs. The piping and discharge structure is located outside any delineated wetlands and 100-year floodplain boundaries.

**b. Facilities.** The existing project well has the following characteristics:

WELL NO.	DEPTH / DIAMETER	SCREENED INTERVAL	PUMP CAPACITY	YEAR DRILLED
IW-1	50’ / 8”	40’ to 50’ bgs	262 gpm	2013

bgs- below ground surface

Well IW-1 is metered.

The project is not located within FEMA mapped flood hazard areas.

The facility is not staffed 24 hours per day nor is it equipped with a remote alarm or emergency generator. The pumping and subsequent discharge of groundwater stops in the event of a power failure. The facility discharges groundwater which includes no additives nor treatment of the groundwater. As such, a remote alarm, emergency power and an emergency management plan are not required.

**c. Effluent Requirements.** EFFLUENT TABLE A-1 below contains effluent requirements for DRBC parameters that must be met as a condition of this approval (See DECISION Condition C.II.g.). NPDES Permit No. PA0275794 was issued by the PADEP on June 2, 2016 (effective July 1, 2016) and includes final effluent limitations for the project discharge of 0.377 mgd to surface waters classified by the PADEP as supporting cold water fishes (CWF) and migratory fishes (MF). The following average monthly effluent limits are among those listed in the NPDES Permit and meet or are more stringent than the effluent requirements of the DRBC.

**EFFLUENT TABLE A-1: DRBC Parameters Included in NPDES Permit**

<b>OUTFALL 001 (Well IW-1 DISCHARGE)</b>		
<b>PARAMETER</b>	<b>LIMIT</b>	<b>MONITORING</b>
pH (Standard Units)	6 to 9 at all times	As required by NPDES Permit
Flow (MGD)	Report	As required by NPDES Permit
Total Dissolved Solids*	1,000 mg/l	As required by NPDES Permit

\* See DECISION Condition II.

In addition, NPDES Permit No. PA0275794 requires that the docket holder monitor for pH, temperature, dissolved oxygen and total dissolved solids in Greenwalk Creek upstream and downstream of the groundwater discharge and monitor total dissolved solids at the weir located on Greenwalk Creek above its confluence with Waltz Creek. PADEP requires that the field measurements and water sample collections occur at a minimum frequency of 2 times per month and the results must be reported monthly as a supplement to the PADEP discharge monitoring report.

**B. FINDINGS**

**Special Protection Waters**

In 1992, the DRBC adopted Special Protection Waters requirements, as part of the DRBC *Water Quality Regulations* (WQR), designed to protect existing high water quality in applicable areas of the Delaware River Basin. One hundred twenty miles of the Delaware River from Hancock, New York downstream to the Delaware Water Gap were classified by the DRBC as SPW. This stretch includes the sections of the river federally designated as "Wild and Scenic" in 1978 -- the Upper Delaware Scenic and Recreational River and the Delaware Water Gap National Recreation Area -- as well as an eight-mile reach between Milrift and Milford, Pennsylvania which is not federally designated. The SPW regulations apply to this 120-mile stretch of the river and its drainage area.

On July 16, 2008, the DRBC approved amendments to its *Water Quality Regulations* that provide increased protection for waters that the Commission classifies as Special Protection Waters. The portion of the Delaware River and its tributaries within the boundary of the Lower Delaware River Management Plan Area was approved for Special Protection Waters designation and clarity on definitions and terms were updated for the entire program.

Article 3.10.3A.2.e.1). and 2). of the *Water Quality Regulations, 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 Special Protection Waters 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 Special Protection Waters. The groundwater interception project is located within in the drainage

area to the Special Protection Waters. Erosion and sediment control measures such as straw-bailing, mulching, and re-seeding were employed for construction of the interception well. Additionally, a dual-rotary drilling method was employed to drill the well which minimizes sedimentation in the drilling discharge water. Since this project does not entail additional construction and expansion of facilities and there are not any new or increased non-point source loads associated with this approval, the non-point source pollution control plan requirement is not applicable at this time. Accordingly, Special Condition C.I.v. has been included in the Decision section of this docket.

In consideration of the scope of the project, the Commission does not require monitoring of BOD<sub>5</sub>, total suspended solids, ammonia nitrogen, or fecal coliform as the discharge involves untreated groundwater which is already naturally discharging to the receiving stream.

The docket holder must continue instream monitoring and sample collection as required by the PADEP. The instream sample data must be made available to the Commission upon the request of the Executive Director. The docket holder must continue to submit the required monitoring results of parameters contained in EFFLUENT TABLE A-1 electronically to the Commission on an annual basis (Condition C.I.g.).

The DRBC estimates that the project withdrawals, used for the purpose of groundwater interception and discharge, result in a consumptive use of nearly 0 percent of the total water withdrawal. 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* and *Water Quality Regulations* 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**

- I. Effective on the approval date for Docket No. D-2013-020-2 below:
  - a. The project described in Docket No. D-2013-020-1 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-2013-020-2; and
  - b. Docket No. D-2013-020-1 is terminated and replaced by Docket No. D-2013-020-2.
  - c. The project and the appurtenant facilities described in the Section A “Physical features” shall be added to the Comprehensive Plan.

II. The project and appurtenant facilities as described in the Section A “Physical features” are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

a. The docket holder shall register and report 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).

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

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

d. The well shall not be pumped above the maximum rate and monthly allocation as indicated below:

WELL NO.	MAXIMUM RATE (GPM)	MONTHLY ALLOCATION (MG)
IW-1	262 gpm	11.696 mgm

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

f. 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 weekly 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.

g. The docket holder shall comply with the requirements contained in the EFFLUENT TABLES in Section A.4.c. of this docket. The docket holder shall submit the required monitoring results electronically to the DRBC Project Review Section via email [aemr@drbc.state.nj.us](mailto:aemr@drbc.state.nj.us) on the **Annual Effluent Monitoring Report Form** located at this web address: <http://www.state.nj.us/drbc/programs/project/pr/info.html>. The monitoring results shall be submitted annually, absent any observed limit violations, by January 31. If a DRBC effluent limit is violated, the docket holder shall submit the result(s) to the DRBC within 30 days of the violation(s) and provide a written explanation that states the action(s) the docket holder has taken to correct the violation(s) and protect against any future violations.

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

i. 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.

j. 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.

k. The docket holder is permitted to treat and discharge wastewaters as set forth in the Area Served Section of this docket, which incorporates by reference Sections B (Type of Discharge) and D (Service Area) of the docket holder's Application to the extent consistent with all other conditions of this DECISION Section.

l. The docket holder shall discharge wastewater in such a manner as to avoid injury or damage to fish or wildlife and shall avoid any injury to public or private property.

m. The docket holder may request of the Executive Director in writing the substitution of specific conductance for TDS. The request should include information that supports the effluent specific correlation between TDS and specific conductance. Upon review, the Executive Director may modify the docket to allow the substitution of specific conductance for TDS monitoring.

n. 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.

o. 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).

p. 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).

q. 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).

r. 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.

s. 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.

t. 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.

u. 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.

v. Prior to commencing construction of any new facilities, 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.

w. 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 30, 2026**