

**DOCKET NO. D-1984-002-6**

**DELAWARE RIVER BASIN COMMISSION**

**Drainage Area to Special Protection Waters**

**Nestle Purina PetCare Company  
Groundwater Withdrawal  
South Whitehall Township, Lehigh County, Pennsylvania**

**PROCEEDINGS**

This docket is issued in response to an Application submitted by EarthRes Group, Inc. on behalf of Nestle Purina PetCare Company to the Delaware River Basin Commission (DRBC or Commission) on August 31, 2016 for renewal of an allocation of groundwater and review of a groundwater water withdrawal project (Application). This docket was previously approved by the Commission on May 10, 2012.

The Application was reviewed for continued 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 February 15, 2017.

**A. DESCRIPTION**

1. **Purpose.** The purpose of this project is to renew the approval of an existing groundwater withdrawal project to supply up to 26.784 million gallons per month (mgm) of groundwater to the docket holder's manufacturing facility from existing Wells 2, 5, 6, 7 and new Well 8. Nestle Purina PetCare Company is not requesting an increase in groundwater withdrawal allocation from that contained in its prior approval.

2. **Location.** The project wells are completed in the Epler Limestone and Dolomite Formation, which is part of the Beekmantown Group and are located in the Jordan Creek Watershed in South White Township, Lehigh County, Pennsylvania. The Jordan Creek near the project site is designated by the Pennsylvania Department of Environmental Protection (PADEP) as supporting Trout Stocking Fishery (TSF) and Migratory Fishes (MF).

Specific location information has been withheld for security reasons.

3. **Area Served.** The docket holder's wells serve only the Nestle Purina PetCare Company South Whitehall Plant site. 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. Physical features.**

**a. Design criteria.** Nestle Purina PetCare Company produces pet food from meat, meat byproducts, textured vegetable proteins, grains, minerals, vitamins and food colors. Water is used at the facility for canned product cooking, cooling, process equipment cleaning, and sanitary purposes. Based on groundwater withdrawal data, the docket holder reports that the current average and maximum water demand of the plant is 0.566 million gallons per day (mgd) and 0.695 mgd, respectively. The docket holder reports that the 10-year projected maximum water demand is 0.864 mgd. The allocation of 26.784 mgm should be sufficient to meet the future demands of Nestle Purina PetCare Company facility.

**b. Facilities.** The existing and new project wells have the following characteristics:

<b>WELL NO.</b>	<b>DEPTH (FEET)</b>	<b>CASED DEPTH/ CASING DIAMETER</b>	<b>PUMP CAPACITY (GPM)</b>	<b>YEAR DRILLED</b>
2	383	58’/ 10”	400	1960
5	410	87’/ 8”	30	1972
6	700	252’/ 12”	600	1983
7	500	50’/ 12”	400	2011
8 (New)	450	410’/ 8”	TBD	2016

TBD – To Be Determined

All water service connections are metered.

All wells are metered.

Prior to entering the distribution system, the water from Wells 2, 6 and 7 is chlorinated. Once in operation, water from Well 8 may also need to be chlorinated.

The project wells and facility are above the 100-year flood elevation.

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

Storage facilities consist of one 0.020 mg storage tank, which is presently less than 1 day’s supply for the Nestle Purina PetCare Company plant.

c. **Other.** Wastewater is conveyed to the Nestle Purina PetCare Company on-site wastewater treatment facility most recently approved by DRBC Docket No. D-1983-018 CP-2 on September 15, 2015. The PADEP issued its most recent NPDES Permit No. PA0014681 on September 24, 2010 for this treatment facility. A renewal application has been submitted to the PADEP and is currently under review. The treatment facility has adequate capacity to receive wastewater from this project.

d. **Cost.** The overall cost of the new construction of Well 8 at the Nestle Purina PetCare Company Facility is \$500,000.

## 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 has been 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 Nestle Purina PetCare wells provide water supply to the docket holder is located within in the drainage area to the Special Protection Waters. Since this project does entail additional construction and expansion of facilities/service areas and there are potential new or increased non-point source loads associated with this approval, the non-point source pollution control plan requirement is applicable at this time. Accordingly, Special Conditions C.II.w. and x. has been included in the Decision section of this docket.

## Well 8 Hydrogeologic Evaluation

On June 15, 2016, Well 8 was drilled to a depth of 450 feet. Four hundred and ten (410) feet of 8" diameter casing was installed and grouted. The major water-bearing zones were encountered between 435 and 438 feet.

On August 9 through August 12, 2016, a 72-hour continuous-rate pumping test was conducted to assess withdrawal capabilities of Well 8 and the underlying aquifer characteristics and potential impacts to the local hydrologic system. The average pumping rate of the test on Well 8 was approximately 548.8 gallons per minute (gpm). Discharge from the pumping well was conveyed via a 6-inch hose to the stormwater inlet located along the southeast corner of the warehouse, as approved by the Lehigh County Conservation District. Discharge was conveyed through the stormwater system discharged to a swale south of the site warehouse. The swale fed into a fire pond, which discharges to the west via a spill way and conveys water through a vegetated swale and a series of culverts along the western perimeter offsite. Well 8 was pumped for a total period of 4,330 minutes.

Groundwater response monitoring was conducted in the pumping well (Well 8) and three (3) monitoring wells (monitored electronically and manually). Monitoring wells ranged in distance to the pumping well from approximately 533 feet (Well OW-1) to approximately 1,973 feet (Well MW-2).

Prior to the start of the pumping test, the water level in Well 8 was 164.16 feet below top of casing (btoc). Maximum drawdown observed at the pumping well, after approximately 72 hours of pumping at a rate of 548.8 gpm, was 19.78 feet (water level of 183.94 feet btoc). Drawdown as a result of pumping was observed in Monitoring Well OW-1 which had a drawdown of 4.13 feet. Drawdown as a result of the withdrawals from the Well 8 was not observed in any of the other monitoring wells.

The observed drawdown data was used to calculate aquifer parameters to characterize the underlying aquifer. The average transmissivity value for Well 8 test data was 11,862 ft<sup>2</sup>/day using various methods (Theis and Cooper-Jacob), at the test rate of 548.8 gpm. A Storativity value was calculated from the drawdown data observed at Monitoring Well OW-1 monitored during the pumping test, the value was  $4.12 \times 10^{-3}$ . The storage coefficients are indicative of confined conditions.

The DRBC has reviewed the Hydrogeologic Report for the Well 8 pumping test. No adverse impacts are expected to occur to the local hydrologic system due to the pumping from Well 8.

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 pet food processing, result in a consumptive use of 36 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**

I. Effective on the approval date for Docket No. D-1984-002-6 below, Docket No. D-1984-002-5 is terminated and replaced by Docket No. D-1984-002-6.

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. Docket approval is subject to all conditions, requirements, and limitations imposed by the PADEP, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission’s. The wells and operational records shall be available at all times for inspection by the DRBC.

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

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

d. During any month, the combined withdrawal from all well sources shall not exceed 26.784 million gallons. No well shall be pumped above the maximum instantaneous rate and monthly allocation as indicated below:

<b>WELL NO.</b>	<b>MAXIMUM INSTANTANEOUS RATE (GPM)</b>	<b>MONTHLY ALLOCATION (MGM)</b>
2	400	12.960
5	30	0.050
6	600	21.600
7	400	12.960
8	500	23.708

e. 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.

f. 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 (a) 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; (b) report the project’s final construction cost as such cost is defined by the project review fee schedule in effect at the time application was made; and (c) indicate the date on which the project was (or is to be) placed in operation. In the event that the final project cost exceeds the estimated cost used by the applicant to calculate the DRBC project review fee, the statement must also include (d) the amount of any outstanding balance owed for DRBC review. Such outstanding balance will equal the difference between the fee paid to the Commission and the fee calculated on the basis of the project’s final cost, using the formula and definition of “project cost” set forth in the DRBC’s project review fee schedule in effect at the time application was made.

g. This approval of the construction related to Well 8 as described in paragraph A.4.b of this docket shall expire three years from date below unless prior thereto the docket holder has commenced operation of the subject project or has provided the Executive Director with written notification that is has expended substantial funds (in relation to the cost of the project) in reliance upon this docket approval.

h. The project withdrawals shall be metered with an automatic continuous recording device that measures to within 5 percent of actual flow. An exception to the 5 percent performance standard, but no greater than 10 percent, may be granted if maintenance of the 5 percent performance is not technically feasible or economically practicable. 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.

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

j. In accordance with DRBC Resolutions No. 87-6 (Revised) and No. 2009-1, the docket holder shall continue to implement to the satisfaction of the PADEP, the systematic program to monitor and control leakage within the water supply system. The program shall at a minimum include: periodic surveys to monitor leakage, enumerate non-revenue water and determine the current status of system infrastructure; recommendations to monitor and control leakage; and a schedule for the implementation of such recommendations. The docket holder shall proceed expeditiously to correct leakages and unnecessary usage identified by the program.

k. The docket holder shall implement to the satisfaction of the PADEP, the 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.

l. 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).

m. 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.

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

o. 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.

p. 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.

q. 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.

r. 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*.

s. Unless the docket holder requests an extension and that is approved by the Commission in advance, in accordance with paragraph 11 of the Commission's Project Review Fee schedule (Resolution No. 2009-2), the docket holder is responsible for timely submittal of a docket renewal application on the appropriate DRBC application form at least 6 months in advance of the docket expiration date set forth below. The docket holder will be subject to late charges 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 (or the later date established by an extension that has been timely requested and approved), 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.

t. 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.

u. 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 permit 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 permit holder shall provide written notice to all potentially affected water users of the permit holder's responsibilities under this condition. **Any well or surface water supply that is impaired as a result of the permit holder's project withdrawal shall be repaired, replaced or mitigated at the permit 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 permit holder to take interim actions to mitigate such impacts, pending completion of the investigative report and any long-term repair, replacement or mitigation.

v. 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.

w. 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 is in compliance with a DRBC approved NPSPCP.

x. Concurrent with submission to the PADEP, the docket holder shall submit for approval by the Executive Director of the DRBC, a NPSPCP that includes post-construction stormwater management plans in accordance with Article 3.10.3A.2.e.1). and 2). of the Water Quality Regulations. The Executive Director can, for good cause, extend the date of the NPSPCP submission.



y. 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: March 15, 2017**

**EXPIRATION DATE: March 15, 2027**