

DOCKET NO. D-1994-050 CP-3

DELAWARE RIVER BASIN COMMISSION

**Southeastern Pennsylvania
Ground Water Protected Area**

**Delaware Valley University
Groundwater Withdrawal
Doylestown Township and New Britain Borough, Bucks County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted by Delaware Valley University (DVU) to the Delaware River Basin Commission (DRBC or Commission) on December 5, 2014 (Application), for a renewal and approval of an allocation of groundwater and review of a groundwater withdrawal project in the Ground Water Protected Area of Southeastern Pennsylvania. The prior docket was approved by the Commission on December 7, 2005. The project wells were reviewed under the Pennsylvania Safe Drinking Water Act for public water supply permits and approved by the Pennsylvania Department of Environmental Protection (PADEP) on November 3, 1994 (PADEP Permit No. 0994507).

The Application was reviewed for continuation of the project in the Comprehensive Plan and approval under Section 3.8 and for a withdrawal permit under Section 10.3 of the *Delaware River Basin Compact*. The Bucks County Planning Commission has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on June 9, 2015.

A. DESCRIPTION

- 1. Purpose.** The purpose of this docket is to approve the renewal of an existing supply of groundwater to the docket holder's distribution system to serve DVU from existing Wells Nos. 1, 3, 4, 5, 6 and 7 and to approve an increase in withdrawal allocation from 6.34 million gallons per month (mgm) to 7.192 mgm.
- 2. Location.** The project wells are located in the Neshaminy Creek Watershed, in Doylestown Township, Bucks County, Pennsylvania. The Neshaminy Creek near the project site is designated by the PADEP as Warm Water Fishes (WWF) and Migratory Fishes (MF). The wells are completed in the Stockton Formation.

Specific location information has been withheld for security reasons.

3. **Area Served.** The docket holder’s water distribution system serves DVU including potable water for the campus and stadium, the dairy farm and irrigation for the athletic fields and greenhouse as shown on a map entitled “Site Location Map”, submitted with the Application.

4. **Physical features.**

a. **Design criteria.** DVU currently serves an estimated population of 1,600 students and faculty with an average and maximum water demand of 0.086 million gallons per day (mgd) and 0.204 mgd, respectively. The docket holder projects an increase in the average and maximum water demand to 0.096 mgd and 0.232 mgd, respectively, with an increase in population to 1,905 by the year 2025. Delaware Valley College became a University on April 8, 2015, because of this DVU projected an increase in enrollment leading to an increase in water demand. The allocation of 7.192 mgm should be sufficient to supply the docket holder’s water supply system.

The docket holder currently has six (6) wells in operation. Well No. 1 supplies water to the University’s sports stadium. Well No. 3 serves the dairy farm located on campus. Wells Nos. 4 and 5 serve potable water to the campus. Well No 6 supplies water to the campus greenhouse. Well No. 7 is used to irrigate the University’s athletic fields.

b. **Facilities.** The docket holder’s existing wells have the following characteristics:

WELL NO.	DEPTH (FEET)	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY (GPM)	YEAR DRILLED
1	Unknown	Unknown	Unknown	Pre-1960s
3	Unknown	Unknown	Unknown	Pre-1960s
4	390	45’/ 8”	100	1964
5	325	42’/ 6”	140	1984
6	225	40’/ 6”	25	2002
7	400	42’/ 6”	150	2005

The wells and all water service connections are metered.

Prior to entering the distribution system, groundwater for potable use is treated with hypochlorite for disinfection and a blend of caustic soda and orthopolyphosphate for lead and copper sequestering. Groundwater used for irrigation is not treated.

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

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

c. **Other.** Wastewater is conveyed to the Chalfont-New Britain Townships Joint Sewerage Authority sewage treatment facility most recently approved by DRBC Docket No. D-1999-063 CP-2 on July 11, 2012. The Authority has submitted a renewal application and is currently awaiting Commission approval. The PADEP issued its most recent NPDES Permit No. PA0025917 on September 16, 2014 for this treatment facility. The treatment facility has adequate capacity to receive wastewater from this project.

d. **Relationship to the Comprehensive Plan.** The docket holder's wells were previously included in the Comprehensive Plan by Dockets Nos. D-1965-142 CP, D-1994-050 CP and D-1994-050 CP-2, which were approved on November 24, 1965, December 7, 1994 and December 7, 2005, respectively. Issuance of this docket will continue the water supply system in the Comprehensive Plan.

B. FINDINGS

The project is located within the Southeastern Pennsylvania Ground Water Protected Area delineated by the DRBC pursuant to *Compact* Section 10.2. The project is designed to conform to the requirements of the *Water Code*, *Water Quality Regulations* and *Ground Water Protected Area Regulations (GWPAR)* of the DRBC.

Review and analysis of the application pursuant to Section 6.D. of the *GWPAR* result in the following:

1. The withdrawal is consistent with the Commission's Comprehensive Plan and the policies and purposes of these regulations.
2. Opportunities to satisfy water requirements on a timely basis from existing available supplies and facilities have been explored and found infeasible.
3. The withdrawal, in conjunction with other withdrawals in the applicable ground water basin, should not exceed withdrawal limits of the ground water basin, aquifer or aquifer system.
4. The withdrawal should not significantly impair or reduce the flow of perennial streams in the area.
5. Existing ground and surface water withdrawals should not be adversely impacted, or will be otherwise assured of adequate supplies in accordance with the requirements of Section 10 of the *GWPAR*.

6. The withdrawal should not cause substantial, permanent adverse impact to the overlying environment.

7. The docket holder adopted and will implement conservation and management programs as required by Section 7 of the *GWPAR*.

The DVU wells are located in the Doylestown Neshaminy Creek subbasin, where the total net annual groundwater withdrawal of 557 million gallons per year (mgy) is less than the withdrawal limit set in Section 6.I of the *GWPAR* of 948.02 mgy. The docket holder is requesting a monthly allocation of 7.192 mgm, which equates to 86.304 mgy, a fraction of which will be returned to groundwater. However, even if no water from this project was returned to groundwater, the total net annual groundwater withdrawal from this subbasin would remain below the withdrawal limits set in Section 6.I of the *GWPAR*. Therefore, the withdrawals from the DVU wells in conjunction with other withdrawals in the subbasins are in accordance with the requirements of Section 6.I of the *GWPAR*.

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

The DRBC estimates that the project withdrawals, used for the purpose of potable water use and irrigation, result in a consumptive use of 10 and 90 percent of the total water use, respectively. 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*.

C. DECISION

I. Effective on the approval date for Docket No. D-1994-050 CP-3 below:

a. The project described in Docket No. D-1994-050 CP-2 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-1994-050 CP-3; and

b. Docket No. D-1994-050 CP-2 is terminated and replaced by Docket No. D-1994-050 CP-3; and

c. The project and the appurtenant facilities described in the Section A “Physical Features” of this docket shall be added to the Comprehensive Plan.

II. The project as described in the Section A “Physical features” is approved pursuant to Section 3.8 of the *Compact* and is granted this withdrawal permit pursuant to Section 10.3 of the *Compact* and *GWPAR*, 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 shall be operated at all times to comply with the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.

c. During any month, the combined withdrawal from all wells shall not exceed 7.192 mgm or 86.304 mgy. No well shall be pumped above the maximum instantaneous rate and monthly allocation as indicated below:

WELL NO.	INSTANTANEOUS RATE (GPM)	MONTHLY ALLOCATION (MILLION GALLONS)
1	5	0.158
3	5	0.042
4	100	2.286
5	140	3.235
6	25	0.134
7	150	1.336

d. The wells shall be equipped with readily accessible capped ports and 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 drop pipes as repairs or modifications are made at each existing well.

e. 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 annually by March 31, to the PADEP. Withdrawal records shall be available at any time to the Commission if requested by the Executive Director.

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

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

h. 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).

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

j. 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.

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

l. 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.

m. The area served by this project is limited to the service area as described above. Any expansion beyond this area is subject to review in accordance with Section 3.8 of the *Compact* and the *GWPAR*.

n. Unless an extension is requested and 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 12 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.

o. 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 right 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.

p. If the monitoring required herein, or any other data or information demonstrates that the operation of this project significantly affects or interferes with any domestic or other existing wells or surface water supplies, or if the docket holder receives a complaint by any user of wells or surface water supplies within the zone of influence of the withdrawal, the docket holder shall immediately notify the Executive Director of any complaints by users of wells or surface water supplies within the zone of influence of the withdrawal, and unless excused by the Executive Director, shall investigate such complaints. Any well or surface water supply which is substantially adversely affected, or rendered dry or otherwise unusable as a result of the docket holder's project withdrawal, shall be repaired, replaced or otherwise mitigated at the expense of the docket holder in accordance with Section 10B of the *GWPAR*. A

report of investigation and/or mitigation plan prepared by a hydrologist shall be submitted to the Executive Director as soon as practicable. The Executive Director shall make the final determination regarding the validity of such complaints, the scope or sufficiency of such investigations, and the extent of appropriate mitigation measures, if required. The Executive Director may modify or suspend this docket approval, or require mitigating measures, pending additional review.

q. 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.

r. 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.

s. 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 10, 2015

EXPIRATION DATE: June 10, 2025