

**DOCKET NO. D-1984-033 CP-4**

**DELAWARE RIVER BASIN COMMISSION**

**Special Protection Waters**

**Borough of Pennington**

**Groundwater Withdrawal**

**Borough of Pennington, Mercer County, New Jersey**

**PROCEEDINGS**

This docket is issued in response to an Application submitted by Van Note-Harvey Associates on behalf of the Borough of Pennington to the Delaware River Basin Commission (DRBC or Commission) on June 26, 2014 (Application), for a renewal and approval of an existing allocation of groundwater and review of a groundwater withdrawal and water export project. This docket was previously approved by the Commission on July 20, 2005. The project wells were reviewed by the New Jersey Department of Environmental Protection (NJDEP) on June 28, 2011 (NJDEP Permit No. 5276).

The Application was reviewed for continuation in the Comprehensive Plan and for approval under Section 3.8 of the *Delaware River Basin Compact*. The Mercer County Department of Planning has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on December 9, 2014.

**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 public water supply system from existing Well No. 7 and to renew the groundwater exportation from the Delaware River Basin to the Raritan River Basin. The Borough of Pennington water supply distribution system includes four (4) additional groundwater sources (Wells Nos. 5, 6, 8 and 9) which are located outside the Delaware River Basin. The total allocation of groundwater from Well No. 7 will remain 6.48 million gallons per 30 days. The Borough of Pennington is not requesting an increase in groundwater withdrawal allocation from that contained in its prior approval.

**2. Location.** The project well is located in the Jacobs Creek Watershed, within the drainage area to the Lower Delaware Special Protection Waters, in the Borough of Pennington, Mercer County, New Jersey. The Borough of Pennington is located along the divide between the Delaware River Basin and the Raritan River Basin. Well No. 7 is completed in the Brunswick Aquifer - Passaic Formation.

Specific location information has been withheld for security reasons.

**3. Area Served.** The docket holder’s water distribution system serves the Borough of Pennington and the high school to the west of the Borough in Hopewell Township as shown on a map entitled “Pennington Borough Water Distribution System”, submitted with the Application.

**4. Physical features.**

**a. Design criteria.** Borough of Pennington supplies water to an estimated population of 2,600 (estimated in 2010) via 1,006 connections. The average and maximum groundwater demand for this project are 0.268 million gallons per day (mgd) and 0.286 mgd, respectively. The docket holder estimates an increase in average and maximum demand over the next ten years. The projected average and maximum demand is estimated to be 0.391 mgd and 0.470 mgd, respectively. Only the southwest portion of the water service area is located within the Delaware River Basin.

Approximately 0.216 mgd of groundwater from Well No. 7 is exported from the Delaware River Basin to the Raritan River Basin.

**b. Facilities.** The existing project well has 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>
5 (Out of Basin)	400	43’/ 10”	73	1967
6 (Out of Basin)	272	NA/ 10”	202	1957
7	300	81’/ 10”	190	1963
8 (Out of Basin)	300	61’/ 10”	152	1965
9 (Out of Basin)	300	50’/ 12”	250	1993

All wells and water service connections are metered (including the wells located outside of the basin).

Prior to entering the distribution system, all groundwater is treated with liquid sodium-hypochlorite for disinfection. The groundwater is also treated for elevated volatile organic compounds (VOCs) levels via air stripping.

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

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

Storage facilities consist of one 0.600 mg storage tank, which is approximately 1 day supply.

**c. Other.** Wastewater is conveyed to the Stony Brook Regional Sewerage Authority - Pennington sewage treatment facility which is located outside of the Delaware River Basin. The NJDEP issued its most recent NJPDES Permit No. NJ0035319 on September 3, 2013 for this treatment facility. The treatment facility has adequate capacity to receive wastewater from this project.

**d. Relationship to the Comprehensive Plan.** The Borough of Pennington Well No. 7 was included in the Comprehensive Plan via DRBC Docket No. D-1984-033 CP issued on August 3, 1988. Docket Nos. D-1984-033 CP REN and D-1984-033 CP-3 renewed the approval of Well No. 7 issued on September 22, 1993 and July 20, 2005, respectively. Issuance of this docket will continue the groundwater withdrawal of Well No. 7 in the Comprehensive Plan.

## **B. FINDINGS**

The Borough of Pennington water distribution system serves the Borough of Pennington and the high school to the west of the Borough in Hopewell Township. Only the southwestern portion of the Borough is located in the Delaware River Basin, which is where Well No. 7 is located. According to Section 2.3.5.B.4. of the Commission's *Rules of Practice and Procedure (RPP)*, projects that divert or transfer water from the Delaware River Basin (export) at a rate of 100,000 gallons per day (gpd) or more are subject to review and approval by the Commission pursuant to Section 3.8 of the *Delaware River Basin Compact*. The Borough of Pennington currently exports up to 0.216 mgd from the Delaware River Basin to the Raritan River Basin to supply water to the portion of the distribution system which is located outside the Delaware River Basin.

### **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 well providing water supply to the Borough of Pennington is located within in the drainage area to the Special Protection Waters. Since this project does not entail additional construction and expansion of facilities or service areas (i.e., there aren't 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.

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

The docket holder estimates that the project withdrawals, used for the purpose of public water supply, result in a consumptive use of 10 percent of the total water use. However, wastewater from the project withdrawal is exported from the Delaware River Basin and consequently, the consumptive use to the Basin is estimated to be 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.

### **Water Audits for Public Water Supply Systems Serving Greater than 100,000 gpd**

Section 2.1.8 of the *Water Code* states that it is the policy of the Commission to establish a standardized water audit methodology for owners of water supply systems serving the public to ensure accountability in the management of water resources. Voluntary Water Audits were encouraged for public water supply systems through December 31, 2011 (Section 2.1.8.B.). Effective January 1, 2012, the owners of each public water supply system are required to implement an annual calendar year water audit program conforming to IWA/AWWA Water Audit Methodology (AWWA Water Loss Control Committee (WLCC) Water Audit Software) and corresponding AWWA guidance (Section 2.1.8.C). Water audits shall be submitted annually to the Commission by March 31. The Borough of Pennington submitted their most recent Water Audit on April 11, 2014.

**C. DECISION**

I. Effective on the approval date for Docket No. D-1984-033 CP-4 below:

- a. The project described in Docket No. D-1984-033 CP-3 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-1984-033 CP-4; and
- b. Docket No. D-1984-033 CP-3 is rescinded and replaced by Docket No. D-1984-033 CP-4.
- c. The project and the appurtenant facilities described in the Section entitled “Physical features” above shall be added to the Comprehensive Plan.

II. The project as described in the Section entitled “Physical features” above is approved pursuant to Section 3.8 of the *Compact* and is granted this withdrawal permit pursuant to Section 10.3 of the *Compact*, subject to the following conditions:

- a. Docket approval is subject to all conditions, requirements, and limitations imposed by the NJDEP in its water allocation permit, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission’s.
- b. The well and operational records shall be available at all times for inspection by the DRBC.
- c. The well 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 6.48 mg/ 30 days. The well shall not be pumped above the maximum instantaneous rate and monthly allocation as indicated below:

WELL NO.	MAXIMUM INSTANTANEOUS RATE (GPM)	MONTHLY ALLOCATION (MG/ 30 DAYS)
7	190	6.48

e. Well No. 7 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 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 NJDEP quarterly and shall be available at any time to the Commission if requested by the Executive Director.

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

h. 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 NJDEP, 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.

i. In accordance with DRBC Resolution No. 2009-1 and Section 2.1.8 of the *Water Code*, the docket holder shall implement an annual calendar year water audit program conforming to IWA/AWWA Water Audit Methodology (AWWA Water Loss Control Committee (WLCC) Water Audit Software) and corresponding guidance. Water audits shall be submitted annually to the Commission by March 31 every year.

j. The docket holder shall implement to the satisfaction of the NJDEP, 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 NJDEP on the actions taken pursuant to this program and the impact of those actions as requested by the NJDEP.

k. 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).

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

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

n. 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.

o. 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.

p. 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*.

q. 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.

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 data or information demonstrates that the operation of this project significantly affects or interferes with any domestic or other existing uses of ground or surface water, or if the docket holder receives a complaint by any existing ground or surface water users within the zone of influence of the withdrawal, the docket holder shall immediately notify the Executive Director of any complaints by any ground or surface users within the zone of influence of the withdrawal, and unless excused by the Executive Director, shall investigate such complaints. The docket holder should direct phone call notifications of potential well or surface water interference or complaints of interference to the DRBC Project Review Section at 609-883-9500, extension 216. Oral notification must always be followed up in writing directed to the Executive Director. In addition, the docket holder shall provide written notification to all potentially impacted users of wells or surface water supplies of the docket holder's responsibilities under this condition. Any ground or surface water user which is substantially adversely affected, rendered dry or otherwise diminished as a result of the docket holder's project withdrawal, shall be repaired, replaced or otherwise mitigated at the expense of the docket holder. 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.

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. During any water emergency or other non-emergency declaration by the Governor of New Jersey, NJDEP or the Commission, water service or use by the project docket holder pursuant to this docket approval shall be subject to any order or restriction governing those non-essential uses specified by the NJDEP to the extent that they may be applicable, and to any other emergency resolutions or orders adopted by the Commission.

v. 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: December 10, 2014**

**EXPIRATION DATE: December 10, 2024**