

DOCKET NO. D-97-12 CP-3

DELAWARE RIVER BASIN COMMISSION

Ground Water Protected Area

Located Within the Drainage Area of Special Protected Waters

**Perkasie Borough Authority
Ground Water Withdrawal
Perkasie Borough, Bucks County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by Mercuri and Associates, Inc. on behalf of the Perkasie Borough Authority (PBA) on November 8, 2004 (Application), for an allocation of ground water and review of a ground water withdrawal project in the Ground Water Protected Area of Southeastern Pennsylvania. This project was previously approved by the DRBC on April 3, 2002. The project revision was approved by the Pennsylvania Department of Environmental Protection (PADEP) on June 16, 2008 (Public Water Supply Permit No. 0908503), subject to approval by the DRBC.

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 September 24, 2008.

A. DESCRIPTION

1. Purpose. The purpose of this project is to continue to supply water to the docket holder's distribution system by increasing its number of wells from six to seven.

The total allocation of ground water will remain unchanged at 40.2 mg/30 days.

2. **Location.** The project wells are located in the Tohickon Three Mile Run Watershed and East Branch Perkiomen Creek Watershed, in the Brunswick and Locketong Formations, in Perkasie Borough, Bucks County, Pennsylvania within the Southeastern Pennsylvania Ground Water Protected Area. The Tohickon Three Mile Run Watershed is included in the Special Protected Waters (SPW) program. Specific location information has been withheld for security reasons.

3. **Area Served.** PBA wells supply water to Perkasie Borough and adjacent portions of East Rockhill Township in Bucks County, Pennsylvania as delineated on the map entitled “Water System Map”, submitted with the application.

4. **Physical features.**

a. **Design criteria.** The docket holder currently serves an estimated population of 9,787 with an average and maximum water demand of 21.27 mg/30 days and 30 mg/30 days respectively. The year 2014 expected average and maximum water demand is 27.65 mg/30 days and 39 mg/30 days respectively. To better serve the community at large, PBA will utilize a well drilled in 1977 (Well No. 7) that was previously not connected to the docket holders well network, with an 11.67 mg/30 days limit, while maintaining the same allocation.

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

WELL NO.	DEPTH	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY	YEAR DRILLED
5	309'	32'/10"	190 gpm	1949
6	300'	14'/12"	400 gpm	1965
7	420'	250'/ 10"	300 gpm	1977
9	339'	33'/10"	160 gpm	1977
10	400'	40'/10"	200 gpm	1978
11	400'	80'/10"	500 gpm	1986
12	450'	70'/12"	500 gpm	1996

All wells and all water service connections are metered.

Well water is treated by chlorination prior to entering the distribution system. Additionally, water withdrawn from Well No. 10 is treated for the removal of volatile organic compounds prior to entering the distribution system. The docket holder anticipates placing Well Nos. 10 and 11 out of service when Well No. 7 is connected to the well network.

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

PBA has interconnections with the Borough of Sellersville, Hilltown Township, and North Penn Water Authority.

c. **Other.** Wastewater is conveyed to Pennridge Wastewater Treatment Authority's sewage treatment facility which received approval under Section 3.8 of the *Compact* by DRBC Docket No. D-2001-1 CP on May 31, 2002. The PADEP issued its most recent NPDES Permit No. PA-0020460 on August 28, 2006 for this treatment facility. The treatment facility has adequate capacity to receive wastewater from the proposed project.

d. **Cost.** The overall cost of this project is estimated to be \$68,000.

e. **Relationship to the Comprehensive Plan.** The project wells were previously included in the Comprehensive Plan via Resolution No. 62-14, and Dockets Nos. D-65-111, D-78-75 CP, D-79-28 CP, D-87-75 CP, D-92-75 CP, D-97-12 CP, and D-97-12 CP Revision.

B. FINDINGS

The project is located within the Southeastern Pennsylvania Ground Water Protected Area delineated by the DRBC pursuant to *Compact* Section 10.2. Tests conducted by the docket holder indicate the operation of this project will not create a local water shortage. The project is designed to conform to the requirements of the *Water Code*, *Water Quality Regulations* and *Ground Water Protected Area Regulations (GWPAP)* of the DRBC.

As noted above in Section A.2., the Tohickon Three Mile Run Watershed is included in the Special Protected Waters (SPW) program. 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 January 19, 2005, September 26, 2005, September 27, 2006, September 26, 2007, and May 14, 2008, the DRBC approved interim amendments to its *Water Quality Regulations* that provide increased protection for downstream waters that the Commission classifies as Special Protection Waters. On July 16, 2008, the DRBC approved permanent amendments to its *Water Quality Regulations* that included the portion of the Delaware River and its tributaries within the

boundary of the Lower Delaware River Management Plan Area as Special Protection Waters (Lower SPW).

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 wells (Nos. 5, 6, 7 and 9) providing water supply to the docket holder are located within in the drainage area to the Special Protection Waters. Since this project does not entail additional construction and expansion of service areas (i.e., 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 II.x. has been included in the Decision section of this docket.

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*. There have been no reported complaints of well interference since the April 3, 2002 approval of this renewal project. No adverse impact is anticipated due to continued operation of this project.
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 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.

PBA Wells Nos. 5, 6, 7 and 9 are located in the Tohickon Three Mile Run subbasin, where total net annual ground water withdrawal (427.63 mgy) is less than the withdrawal limit set in Section 6.I of the *GWPAR* (968 mgy). PBA Wells Nos. 10, 11, and 12 are located in the East Branch Perkiomen Morris Run subbasin, where total net annual ground water withdrawal (603.28 mgy) is less than the withdrawal limit set in Section 6.I of the *GWPAR* (1,619 mgy). The docket holder is requesting an annual allocation of 482.4 mgy, a fraction of which will be returned to ground water. However, even if no water from this project were returned to ground water, the total net annual ground water withdrawal from this subbasin would remain below the withdrawal limits set in Section 6.I of the *GWPAR*. Therefore, the withdrawals from Wells 5, 6, 7, 9, 10, 11, and 12, in conjunction with other withdrawals in the subbasin, are in accordance with the requirements of Section 6.I of the *GWPAR*.

The DRBC estimates that the project withdrawals, used for the purpose of domestic supply, result in a consumptive use of 10 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*.

C. DECISION

- I. Effective on the approval date for Docket No. D-97-12 CP-3 below:
 - a. Docket No. D-97-12 CP (Revision) is terminated and replaced by Docket No. D-97-12 CP-3.
 - b. The project and the appurtenant facilities described in the Section A “Physical features” 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 docket holder shall register with the PADEP all surface and ground water sources described in this docket in accordance with the Pennsylvania Water Resources Planning Act (Pennsylvania Act 220).

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 30-day period, the total withdrawal from all wells shall not exceed 40.2 million gallons. Total withdrawal from wells located in the Tohickon Three Mile Run subbasin (Well Nos. 5, 6, 7, and 9) shall not exceed 21 mg/30 days. Total withdrawal from wells located in the East Branch Perkiomen Morris Run subbasin (Well Nos. 10, 11, and 12) shall not exceed 19.2 mg/30 days.

e. The wells (new and existing) shall be equipped with readily accessible capped ports and drop pipes 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 Bureau of Watershed Management, PADEP annually 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. 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.

i. 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).

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

k. In accordance with DRBC Resolution No. 87-6 (Revised), the docket holder shall continue to implement to the satisfaction of the Bureau of Watershed Management, 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 unaccounted-for 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.

l. 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.

m. A long-term monitoring program is required to obtain data on ground water and surface water hydrologic conditions in the project area. The docket holder shall continue to implement the long-term monitoring program as submitted by the docket holder in a letter dated September 25, 1997. This program will include the following:

1. **Ground Water Level Monitoring** – Thirty-seven monitoring wells shall be measured to estimate annual ground water fluctuations caused by seasonal changes and/or production well pumping, and detect water level declines that may affect the performance of public and private wells in the areas adjacent to the docket holder's production wells.

2. **Reports** - All monitoring data, including records required in Conditions "f." and "m." herein shall be submitted to the Commission annually beginning one month after the first year of operation. The docket holder is encouraged to submit the annual report electronically. 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.

n. The Executive Director may modify the monitoring program or temporarily suspend or modify this docket at any time if review of the hydrologic data and/or any other information indicates such action is necessary or appropriate.

o. 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.

p. 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.

q. 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* and the *GWPAR*.

r. The docket holder shall undertake studies of additional sources to supplement its existing water supply and shall file a progress report thereon with the DRBC annually, from the date of this docket approval.

s. A complete application for the renewal of this docket, or a notice of intent to cease the operations (withdrawal, discharge, etc.) approved by this docket by the expiration date, must be submitted to the DRBC at least 12 months prior to the expiration date below (unless permission has been granted by the DRBC for submission at a later date), using the appropriate DRBC application form. 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 this docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

t. The docket holder shall incorporate and implement reasonable conservation practices and measures consistent with efficient utilization of water resources.

u. 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.

v. If 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. 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 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 *GWP*. 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 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. 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.

x. 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.

y. The docket holder and any other person aggrieved by a reviewable action or decision taken by the Executive Director or Commission pursuant to this docket may seek an administrative hearing pursuant to Articles 5 and 6 of the Commission's *Rules of Practice and Procedure*, and after exhausting all administrative remedies may seek judicial review pursuant to Article 6, section 2.6.10 of the *Rules of Practice and Procedure* and section 15.1(p) of the Commission's *Compact*.

BY THE COMMISSION

APPROVAL DATE:

EXPIRATION DATE: September 24, 2018