

**DOCKET NO. D-2015-001 CP-1**

**DELAWARE RIVER BASIN COMMISSION**

**Aqua Pennsylvania – Pickering Plant-Perkiomen Creek Intake  
Surface Water Withdrawal  
Lower Providence Township, Montgomery County, Pennsylvania**

**PROCEEDINGS**

This docket is issued in response to an Application submitted by GHD on behalf of the Aqua Pennsylvania (Aqua PA) to the Delaware River Basin Commission (DRBC or Commission) on December 17, 2014 for approval of an allocation of surface water and review of a surface water withdrawal project (Application). The surface water withdrawal project was reviewed under the Pennsylvania Safe Drinking Water Act for public water supply permits and approved by the Pennsylvania Department of Environmental Protection (PADEP) on December 31, 2012 (PADEP Permit No. WA-67).

The Application was reviewed for inclusion in the Comprehensive Plan and for approval under Section 3.8 of the *Delaware River Basin Compact*. The Montgomery 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 project is to approve the withdrawal of up to 16.5 million gallons per day (mgd) (511.5 million gallons per month (mgm)) of surface water to serve a portion of the docket holder's Main Division public water supply distribution system from existing surface water Pickering Plant-Perkiomen Creek Wetherill Dam Intake.
- 2. Location.** The project intake is located in the Perkiomen Creek Watershed in Lower Providence Township, Montgomery County, Pennsylvania. The Perkiomen Creek near the project site is designated by the PADEP as supporting Warm Water Fishes (WWF) and Migratory Fishes (MF).

Specific location information has been withheld for security reasons.

3. **Area Served.** The docket holder’s Pickering Plant-Perkiomen intake supplies a portion of Aqua PA’s Main Division water distribution system which serves King of Prussia, Chesterbrook, Valley Forge, Wayne, Broomall, Bryn Mawr, Haverford, Ardmore, Gladwyne, Narberth, Bala-Cynwyd, Merion Station, Penn Wynne, Drexel Hill, Havertown, Lawrence Park, Malvern, Cheyney, Plymouth Meeting; Plymouth Whitemarsh, Haverford, Newtown, Radnor, Upper Merion, Schuylkill, Uwelan, East Goshen, Willistown Townships and Conshohocken and West Conshohocken Boroughs. The service area is outlined on a map entitled Perkiomen Creek DRBC Application – Service Area Map “” submitted with the Application. 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.** The Aqua PA – Perkiomen Intake combined with the Main system currently serves water to approximately 788,496 customers via 310,208 domestic connections plus an additional 20,914 commercial, 1,073 industrial, 20,092 institutional and other service connections and records an existing average and maximum water demand of 98.10 mgd and 128.00 mgd, respectively. The Pickering Plant – Perkiomen Creek Intake will supply up to 16.5 mgd of the daily water demand. Aqua PA projects the 10-year average and maximum water demand to increase to 100.45 mgd and 131.400 mgd, respectively by the year 2025. The allocation of 16.5 mgd or 511.5 mgm should be sufficient to meet the future demands of the Aqua PA – Pickering Plant-Perkiomen intake.

The Perkiomen Creek is impounded in the Green Lane Reservoir then released for recapture at the Wetherill Dam and Pump Station which is located approximately 4,000 feet above the mouth of the Perkiomen Creek in Lower Providence Township, Montgomery County, Pennsylvania. The Perkiomen Creek Intake is one of several raw water resources used by the Pickering Water Treatment Plants (West and East Plants), which provide a major portion of the water used by the Aqua PA Main Division public water supply distribution system.

The docket holder has a Certificate of Entitlement (Certificate No. 133) from the Commission for withdrawal from their surface water source, Perkiomen Creek. The entitlement allows the docket holder to withdraw up to 94.848 million gallons per month consumptive and 634.752 million gallons per month non-consumptive without being subject to the Commission’s water supply charge.

b. **Facilities.** The docket holder’s existing surface water intake has the following characteristics:

<b>INTAKE NO.</b>	<b>WITHDRAWAL WATER BODY</b>	<b>PUMP CAPACITY (MGD)</b>	<b>YEAR CONSTRUCTED</b>
Pickering Plant-Perkiomen	Perkiomen Creek	24	2011

All water service connections are metered.

Prior to entering the distribution system, the raw water will be treated by the following; West Plant treats the raw water with lime, alum, carbon, chlorine, ammonia, polymer and phosphate; the East Plant treats raw water with chlorine, lime, alum, ammonia, phosphate, carbon and polymer.

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

The water system is presently interconnected with the following:

WATER COMPANY	INTERCONNECTION CAPACITY (MGD)	STATUS
Chester Water Authority – Eddystone and 8 <sup>th</sup> Sts.	3.5	Emergency
Chester Water Authority – Ridley 8 <sup>th</sup> Blvd and Bullens Ln.	2.00	Regular
Chester Water Authority – T. 926 and Cheyney Rd.	1.25	Regular
Chester Water Authority – Birney Hwy.	0.15	Regular
Chester Water Authority – Convent Rd. and Hollow Hill Rd.	1.44	Emergency
BCWSA – Southampton Authority	5.0	Regular
BCWSA – Old Lincoln Hwy at Neshaminy	5.0	Emergency
BCWSA – Lawson Rd. and County Line Rd.	5.0	Emergency
BCWSA – Rail Ave. Intc.	5.0	Regular
BCWSA – Middletown	5.0	Regular
Philadelphia Water Dept. - Tinicum	8.50	Regular
Philadelphia Water Dept. - Cheltenham	2.50	Regular
Lower Bucks County Joint Municipal Authority – Radcliff St.	2.5	Emergency
North Wales Water Authority – Susquehanna Rd.	1.4	Emergency
Downingtown Municipal Authority – Lancaster Ave.	1.4	Emergency
Horsham Water and Sewer Authority – Welsh Rd. and Electronic Dr.	0.60	Regular
Warwick Twp. Water and Sewer Authority – Mearns Rd.	2.00	Regular
PA American Water Co. Norristown District	0.5	Emergency

c. **Other.** Wastewater in the service area is conveyed to the following sewage treatment facilities:

WASTEWATER TREATMENT PLANT	DRBC DOCKET	DRBC APPROVAL DATE	PADEP NPDES/WQM PERMIT	PADEP NPDES/WQM APPROVAL DATE
Aqua PA Media	D-1986-042 CP	June 25, 1986	PA0024121	November 1, 2012

WASTEWATER TREATMENT PLANT	DRBC DOCKET	DRBC APPROVAL DATE	PADEP NPDES/WQM PERMIT	PADEP NPDES/WQM APPROVAL DATE
Bridlewood Sewer System	D-1996-047 CP	March 26, 1997	WQM1596410	October 1, 2010
Bridlewood Farm	D-1996-047 CP	March 26, 1997	PA0057011	April 1, 2013
Deerfield Knoll	Below Commission Threshold	NA	WQM1586408	June 2, 2008
Brandywine River Estates	Below Commission Threshold	NA	WQM1596404	March 21, 2011
Culbertson Run	D-1996-008	April 24, 1996	WQM 1596401	November 15, 2012
Aqua PA Culbertson Run	D-1996-008	April 24, 1996	PA0050458	July 1, 2013
New Daleville Wrigley	Below Commission Threshold	NA	WQM1505402	March 1, 2011
Newlin Greene	Below Commission Threshold	NA	WQM1503410	November 5, 2010
Peddler's View	D-1993-041	February 23, 1994	WQM0993408	September 29, 2011
Greens at Penn Oaks	Below Commission Threshold	NA	WQM1596403	December 2, 2010
Penn Township	Below Commission Threshold	NA	WQM1501401	June 3, 2014
Penn Township	No Docket	NA	PA0058572	May 21, 2014
Plumsock at Willistown	D-2000-024	July 26, 2000	WQM1592402	January 6, 2011
Sage Hill	Below Commission Threshold	NA	WQM1506409	August 23, 2011
Stony Creek Farms	Below Commission Threshold	NA	PA0244074	April 1, 2011
Twin Hills	No Docket	NA	WQM1598409	February 1, 2013
Willistown Woods	D-2000-024	July 26, 2000	PA0050075	January 1, 2010

NA – Not Applicable

d. **Relationship to the Comprehensive Plan.** The project was not formerly included in the Comprehensive Plan.

## B. FINDINGS

### 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 (Condition II.1. in the Decision section of this docket).

The DRBC 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. 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*.

Aqua PA shall pay for surface water use in excess of 94.848 mgm consumptive use and 634.752 mgm non-consumptive use as shown in the Certificate of Entitlement No. 133 in accordance with the provisions of *Administrative Manual Part III Basin Regulations – Water 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-2014-001 CP-1 below:

a. 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. 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.

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

c. The surface water intake 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 total withdrawal from the surface water intake shall not exceed 511.5 mgm or 16.5 mgd. The intake shall not be pumped above the maximum instantaneous rate and monthly allocation as indicated below:

INTAKE NO.	INSTANTANEOUS RATE (GPM)	MONTHLY/DAILY ALLOCATION (MILLION GALLONS)
3	12,000	511.5/ 16.5

e. The docket holder shall pay for surface water use in excess of 94.848 mgm consumptive use and 634.752 mgm non-consumptive use as shown in the Certificate of Entitlement No. 133 in accordance with the provisions of *Administrative Manual – Part III – Basin Regulations – Water Supply Charges*.

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 annually by June 30, to the PADEP. Withdrawal records 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 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.

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 PADEP, a drought or other water supply emergency plan.

k. 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.

l. 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.

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

n. No new water service connections shall be made to the 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 permit. 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. 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 non-essential 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. 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**