

DOCKET NO. D-2015-001 CP-2

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 to the Delaware River Basin Commission (DRBC or Commission) on June 6, 2024 for renewal 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 July 27, 2016 (PADEP Permit No. WA-46-67I).

The Application was reviewed for continuation 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 November 5, 2025.

A. DESCRIPTION

1. **Purpose.** The purpose of this docket is to renew the approval of a withdrawal of up to 16.5 million gallons per day (mgd) (511.5 million gallons per month (mgm)) of surface water to the docket holder's Main Division public water supply distribution system from the 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, Uwclan, 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 Section C. DECISION of this docket.

4. Design Criteria. The docket holder's Perkiomen Intake combined with the Main system supplies potable water to an estimated population of approximately 693,004 via 274,499 domestic, 18,139 commercial, 783 industrial and 17,503 institutional/other connections. The average and maximum water demand for this project are 80.588 million gallons per day (mgd) and 82.393 mgd, respectively. The docket holder projects an average and maximum water demand of 86.834 mgd and 88.778 mgd, respectively, by the year 2035. 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 intake and pumping facilities were originally constructed in the 1930s and included Wetherill Dam, a low head dam on the Perkiomen Creek, and a raw water intake and pump station located on the south end of the dam. Aqua PA replaced the intake structure in 2011 as part of their Perkiomen River Raw Water Intake and Pumping Station Facility project.

The Perkiomen intake pump station has four (4) 8.0 mgd raw water pumps which are manifolded to the able to pump either the Pickering East or the Pickering West Water Treatment Plant based on the valving configuration. During normal operations, Pumps 1 through 3 pump raw water to the West Plant and Pump 4 supplies raw water to the East Plant.

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.

5. Facilities. The docket holder's existing surface water intake has the following characteristics:

INTAKE NO.	WITHDRAWAL WATER BODY	PUMP CAPACITY (MGD)	YEAR CONSTRUCTED
Pickering Plant- Perkiomen	Perkiomen Creek	24.0	2011

All water service connections are metered.

The surface water intake is metered.

Prior to entering the distribution system, the raw water will be treated by the following:

At the West Plant, all three water sources are combined at the raw water inlet flume at the pretreatment building, where chemicals (lime, alum, carbon and chlorine) are added to the raw water flow. After chemical addition, flow is split between the Old Sedimentation Basin (OSB) and the main rapid mix, flocculation, and sedimentation basin treatment train.

At the East Plant, raw water from the Schuylkill and Perkiomen intakes is metered by venturi meters located in the metering room at the East Plant before being mixed in the raw water mixing chamber. In this chamber, combined raw water is treated with chlorine and mixed before flowing into one of two rapid mix chambers where lime and alum are added to coagulate the raw water. Although there are two chambers, normal operation is to operate one rapid mix chamber at a time. After rapid mixing coagulate water flows through the flocculator influent channel from where it is distributed to three dual stage flocculators/sedimentation basins. Each sedimentation basin is equipped with two circular sludge collectors.

Settled water exits the basins through finger weir effluent troughs into a common filter top inlet channel. Alum, carbon and polymer are applied to the settled water at the filter top before being split between six filters. Filter effluent is discharged to the filter effluent well where chlorine, ammonia and phosphate are added.

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 th Streets	5.0	Emergency
Chester Water Authority – Ridley 8 th Blvd and Bullens Ln.	2.00	Regular
Chester Water Authority – Route 926 and Cheyney Rd.	1.25	Regular
Chester Water Authority – Birney Hwy.	0.15	Regular
BCWSA – Southampton Authority	7.5	Regular
Phoenixville Water - Ross Lane	NA	Emergency
BCWSA – Lawson Rd. and County Line Rd.	5.0	Emergency
Philadelphia Water Dept. - Tinicum	8.50	Regular
Philadelphia Water Dept. - Cheltenham	2.50	Regular
North Wales Water Authority – Susquehanna Rd.	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 Norristown District	0.5	Emergency

The docket holder's water distribution system also has interconnections with their Main System.

6. **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
Aqua PA Media	D-1986-042 CP-3	December 7, 2022	PA0024121
Bridlewood Sewer System	D-1996-047 CP	March 26, 1997	WQM1596410
Bridlewood Farm	D-1996-047 CP	March 26, 1997	PA0057011
Deerfield Knoll	Below Commission Threshold	NA	WQM1586408
Brandywine River Estates	Below Commission Threshold	NA	WQM1596404
Culbertson Run	D-1996-008	April 24, 1996	WQM 1596401
Aqua PA Culbertson Run	D-1996-008	April 24, 1996	PA0050458
New Daleville Wrigley	Below Commission Threshold	NA	WQM1505402
Newlin Greene	Below Commission Threshold	NA	WQM1503410
Peddler's View	D-1993-041	February 23, 1994	WQM0993408
Greens at Penn Oaks	Below Commission Threshold	NA	WQM1596403
Penn Township	Below Commission Threshold	NA	WQM1501401
Penn Township	No Docket	NA	PA0058572
Plumsock at Willistown	D-2000-024-3	June 11, 2025	PA0050075
Sage Hill	Below Commission Threshold	NA	WQM1506409
Stony Creek Farms	Below Commission Threshold	NA	PA0244074
Twin Hills	No Docket	NA	WQM1598409
Willistown Woods	D-2000-024-3	June 11, 2025	PA0050075

NA – Not Applicable

7. **Relationship to the Comprehensive Plan.** The docket holder's intake was previously included in the Comprehensive Plan by Docket No. D-2015-001 CP-1, which was approved on June 10, 2015. Issuance of this docket will continue the public water supply distribution system in the Comprehensive Plan.

B. FINDINGS

1. Water Audits for Public Water Supply Systems Serving Greater than 100,000 gpd

Section 2.1.8 of the *Water Code (WC)* 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 docket holder submitted their most recent Water Audit on March 30, 2025.

2. Surface Water Charges / Entitlement

On July 15, 1976, DRBC issued Certificate of Entitlement No. 133 to the docket holder. The Certificate entitled the docket holder to use, withdraw or divert up to 94.848 mgm consumptive use and up to 634.752 mgm non-consumptive use without charge from its surface water intake on the Perkiomen Creek in Lower Providence Township, Montgomery County, Pennsylvania. The docket holder shall pay for surface water use in excess of the consumptive use and non-consumptive use listed in Entitlement No. 133 in accordance with the provisions of 18 C.F.R. Part 420 as described in Section C. DECISION Condition C.3.

3. Pass-by Flow

PADEP Water Allocation Permit WA-46-67I, which was approved on July 27, 2016 contains the following pass-by flow requirements:

- A continuous flow of not less than 0.25 cubic feet per second per square mile (csm) from the 71.1 square miles of watershed area above the Green Lane Reservoir Dam shall be released into the Perkiomen immediately below the dam at all times unless the natural inflow into the Green Lane Reservoir is less than 0.25 csm. This flow is equivalent to 11.5 mgd or 17.8 cubic feet per second (cfs). When the natural flow into the reservoir is less than 0.25 csm, the release from the reservoir shall be equal to either (a) the natural inflow into the reservoir or (b) 0.15 csm, whichever is greater. The release shall be in addition to any water released from the impounding reservoir for recapture at the Wetherill Dam allocated under this permit.
- A continuous flow of not less than 0.0552 csm from the 362.0 square miles of watershed area above Wetherill dam shall be allowed to pass at all times. This flow is equivalent to 13.0 mgd or 20.0 cfs. When the stream flow below the Wetherill dam is less than this amount, the withdrawal shall be reduced to maintain 13.0 mgd in the stream channel below the intake.

4. **Other Findings**

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 *Basin Regulations-Water Supply Charges* 18 C.F.R. 420.1(d).

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

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**

Effective on the approval date for Docket No. D-2015-001 CP-2 below, the project described in Docket No. D-2015-001 CP-1 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-2015-001 CP-2; Docket No. D-2015-001 CP-1 is terminated and replaced by Docket No. D-2015-001 CP-2; and the project and the appurtenant facilities described in Section A.4. (Design Criteria) and A.5. (Facilities) shall be continued in the Comprehensive Plan. The project and appurtenant facilities as described in in Section A.4. (Design Criteria) and A.5. (Facilities) are approved subject to the following conditions, pursuant to Section 3.8 of the *Compact*:

Monitoring and Reporting

1. The docket holder shall continue to report to the PADEP all surface and groundwater sources described in this docket in accordance with the Pennsylvania Regulations (Title 25 - Environmental Protection, [25 PA. CODE CH. 110], Water Resources Planning).
2. The project withdrawals shall be metered by means of an automatic continuous recording device, flow meter, or other method, and shall be measured to within 5 percent of actual flow. Meters or other methods of measurement shall be subject to approval and inspection by the PADEP as to the type, method, installation, maintenance, calibration, reading and accuracy. 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.
3. The docket holder shall pay for surface water use in excess of 94.848 million gallons per month consumptive and 634.752 mgm non-consumptive use as shown in the Certificate of Entitlement No. 133 in accordance with *Basin Regulations – Water Supply Charges 18 C.F.R. Part 420*.

4. 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.

5. In accordance with DRBC Resolution No. 2009-1 and Section 2.1.8 of the *Water Code (WC)*, 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.

6. 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.

7. 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.

Other Conditions

8. During any month, the withdrawal from the surface water intake shall not exceed 16.5 mgd or 511.5 mgm. The surface water intake shall not be pumped above the maximum rate and monthly allocation as indicated below:

INTAKE ID.	MAXIMUM RATE (GPM)*	DAILY/ MONTHLY ALLOCATION (MILLION GALLONS)
Pickering Plant- Perkiomen	16,668	16.5/511.5

* Based on a 24-Hour Average

9. In accordance with 18 C.F.R. 401.8. of the Commission's *Rules of Practice and Procedure (RPP)*, if at any future time the Project is changed materially from the Project as described in this docket, it will be deemed to constitute a new and different project for the purposes of Article 11 of the *Delaware River Basin Compact* and will require Commission amendment of the Comprehensive Plan. In accordance with the same section of the *RPP*, whenever a change to the Project is made, the sponsor must advise the Executive Director, who will determine whether the change is deemed materially for the purposes of this provision.

10. This approval shall expire on the expiration date set forth below unless prior thereto the docket holder has applied to the Commission to renew or extend this approval.

11. The docket holder is responsible for timely submittal to the DRBC of a docket renewal application on the appropriate application form including the appropriate docket application filing fee (see 18 C.F.R. 401.43) at least 6 months in advance of the docket expiration date set forth below. The docket holder will be subject to late filed renewal surcharges in the event of untimely submittal of its renewal application whether DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. If the docket holder has not applied to renew the docket or the DRBC is unable to reissue the docket before the expiration date below, the terms and conditions of the current docket will remain fully effective and enforceable pending the renewal of the docket.
12. The surface water, facility and operational records shall be available at all times for inspection by the DRBC.
13. The surface water intake and facility shall be operated at all times to comply with the requirements of the *WC* and *WQR* of the DRBC.
14. Each new water service connection shall include a water meter in accordance with the DRBC's Resolution No. 87-7 (Revised).
15. 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).
16. The docket holder shall implement to the satisfaction of the PADEP, a drought or other water supply emergency plan.
17. 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.
18. 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.
19. 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*.
20. The docket holder shall be subject to applicable DRBC regulatory program fees, in accordance with duly adopted DRBC resolutions and/or regulations. (see 18 CFR 401.43).
21. This approval is transferable by request to the DRBC Executive Director provided that the project purpose and area served approved by the Commission in this docket will not be materially altered because of the change in project ownership. The request shall be submitted on the appropriate form and be accompanied by the appropriate fee (see 18 CFR 401.43).

22. The docket holder shall request a name change of the entity to which this approval is issued if the name of the entity to which this approval is issued changes its name. The request for name change shall be submitted on the appropriate form and be accompanied by the appropriate fee (see 18 C.F.R. 401.43).

23. 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 to ensure the proper control, use and management of the water resources of the Basin.

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

25. 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.

26. 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, 2025

EXPIRATION DATE: December 10, 2035