

DOCKET NO. D-1985-029 CP-2

DELAWARE RIVER BASIN COMMISSION

**Aqua Pennsylvania, Inc. – Main System - Chester Creek and Ridley Creek Intakes
Surface Water Withdrawal
Middletown Township, Delaware County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) on March 10, 2020 (revised application submitted on November 22, 2021) for a renewal and approval of an allocation of surface water and review of a surface water withdrawal project. The project intakes 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 March 3, 2022 (PADEP Water Allocation Permit No. WA-46-34F).

The Application was reviewed for continuation of the project in the Comprehensive Plan and approval under Section 3.8 of the *Delaware River Basin Compact*. The Delaware County Planning Commission has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on August 10, 2022.

A. DESCRIPTION

- 1. Purpose.** The purpose of this project is to renew the approval of an existing surface water withdrawal with an allocation of up to 248.0 million gallons per month (mgm) to supply the docket holder's Main public water supply distribution system from existing intakes on Chester Creek and Ridley Creek. The docket holder can withdraw up to 6.0 million gallons per day (mgd) from Chester Creek and 3.0 mgd from Ridley Creek.
- 2. Location.** The project is located in the Chester Creek and Ridley Creek Watersheds, in Middletown Township, Delaware County, Pennsylvania. Chester near the project site is designated by the PADEP as supporting Trout Stocking Fishes (TSF) and Migratory Fishes (MF). Ridley Creek near the project site is designated by the PADEP as supporting High Quality-Trout Stocking Fishes (HQ-TSF) and Migratory Fishes (MF).

Specific location information has been withheld for security reasons.

3. **Area Served.** The docket holder’s Main System which is supplied by the Chester Creek and Ridley Creek intakes serves Nether Providence, Middletown, Upper Providence, Aston Townships and Media, Rose Valley and Chester Heights Boroughs all in Delaware County, Pennsylvania. The service area is outlined on a service area map entitled “Aqua Pennsylvania Southeastern Division Distribution System” 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. **Design Criteria.** The Aqua Pennsylvania’s (Aqua PA) Main System which is supplied by the Chester Creek and Ridley Creek intakes currently serves water to a population of 32,636 through 13,412 domestic connections plus 901 commercial, 34 industrial and 820 institutional and other connections and records an existing average and maximum water demand of 4.268 mgd and 6.707 mgd, respectively. The docket holder projects an average and maximum water demand of 4.700 mgd and 8.320 mgd, respectively, with a population of 36,051 by the year 2032. The allocation of 248.0 mgm (8.0 mgd) should be sufficient to meet the future demands of the docket holder’s system.

5. **Facilities.** The existing project intakes have the following characteristics:

INTAKE	WITHDRAWAL WATER BODY	PUMP CAPACITY (GPM)	7Q10 FLOW AT INTAKE (CFS)	YEAR CONSTRUCTED
Chester Creek	Chester Creek	5,000	0.23	1976
Ridley Creek	Ridley Creek	2,083.3	0.205	1976

Both surface water intakes are metered.

All water service connections are metered.

Prior to entering the distribution system, the water from Chester Creek and Ridley Creek will be treated with alum, lime, carbon, and chlorine prior to entering a flocculation tank. Water is then sent to a sedimentation basin where larger particles are removed from the process. Water is then treated with ammonia and fluoride prior to final filtration for the distribution system. Backwash from the system is sent to an equalization tank prior to being discharged to Ridley Creek.

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

The Ridley Water Treatment Plant water system is presently interconnected with:

Interconnection #1 – This system is connected with the Aqua PA Crum Creek Plant. This is a two-way (bidirectional) connection with a dual purpose. Water can be delivered up to 2.0 mgd to the Crum Service Area which can assist supply to Springfield Twp if there is issue at the Crum facility. In addition, water can be delivered to the Media system at rate of 3.0 mgd to the Media [high pressure] system. This interconnection is typically closed and is utilized only as necessary.

Interconnection #2 – This system also has an intra-connection within the Main Division, located on Providence Road in Upper Providence Township. The connection supplies between 300,000 to 500,000 gpd to the Media [high-pressure] system. Most of the water through this interconnection is sourced from the Aqua Pickering Plant.

Interconnection #3 – This system also purchases water through a connection with Chester Water Authority (CWA) on Birney Highway in Aston Township. By contract, Aqua PA can purchase 100,000 gpd which is pumped into the Media [high-pressure] system.

Interconnection #4 – There is an intra-connection within the Main Division, in Ridley Township on Macdade Blvd. The Media [low pressure] system supplies up to 2.0 mgd at this connection. This connection supplies around 200,000 gpd on a regular basis.

System storage facilities have the following capacities:

LOCATION	CAPACITY (MG)
Hunter Street Tank	1.0
Middletown Tank No. 1	1.0
Middletown Tank No. 2	1.0
Monroe No. 1	1.4
Monroe No. 2	2.0
Monroe No. 3	0.15
State Park Tank	1.2
TOTAL:	7.75

The storage facilities of 7.75 mg are approximately 1.0 day of supply for the docket holder’s system.

6. Other. Wastewater is conveyed to the Delaware County Regional Water Quality Control Authority (DELCORA) sewage treatment facility most recently approved by DRBC Docket No. D-1992-018 CP-4 on March 13, 2019. The PADEP issued NPDES Permit No. PA0027103 for this facility. The treatment facility has adequate capacity to receive wastewater from the proposed project.

7. **Relationship to the Comprehensive Plan.** The Ridley Intake was previously included in the Comprehensive Plan by the Commission in Resolution No. 62-14 approved on July 25, 1962. The Chester Intake was previously included in the Comprehensive Plan by the Commission in Docket No. D-1985-029 CP approved on December 18, 1985. Issuance of this docket will continue the withdrawal project 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 17, 2022.

2. **Surface Water Charges**

The docket holder shall pay for surface water use in accordance with the provisions of Resolution No. 74-6, as amended as described in Section C. DECISION Condition C.3.

3. **Passby Flow**

PADEP Water Allocation Permit No. WA-184 contains passby requirements for the two Delaware River Basin surface water withdrawals (Chester Creek and Ridley Creek). The docket holder's sources will continue to be subject to the same approved PADEP passby flow requirements as outlined below.

Chester Creek Passby Flow, Measuring Device and Reporting Requirement: A flow of not less than 0.23 cubic feet per second per square mile from the 55.16 square miles of watershed area above the intake measured at USGS Gage No. 1477000 shall be allowed to pass the Chester Creek intake at all times. This flow is equivalent to 8.12 mgd or 12.56 cubic feet per second. When the stream flow below the intake is less than this amount, the withdrawal shall be reduced to maintain 8.12 mgd in the stream channel below the intake. When the natural flow is equal to or less than 8.12 mgd, no water may be withdrawn and the entire natural flow shall be allowed to pass the intake, to maintain such natural flow in the stream channel below the intake as may prevail above. The permittee shall continue to operate and maintain accurate measuring and recording instruments or devices to determine the amount of water withdrawn from the Chester Creek.

Ridley Creek Passby Flow, Measuring Device and Reporting Requirement: A flow of not less than 0.205 cubic feet per second per square mile from the 29.57 square miles of watershed area above the intake measured at USGS Gage No. 1476480 shall be allowed to pass the Ridley Creek intake at all times. This flow is equivalent to 3.9 mgd or 6.0 cubic feet per second. When the stream flow below the intake is less than this amount, the withdrawal shall be reduced to maintain 3.9 mgd in the stream channel below the intake. When the natural flow is equal to or less than 3.9 mgd, no water may be withdrawn and the entire natural flow shall be allowed to pass the intake, to maintain such natural flow in the stream channel below the intake as may prevail above. The permittee shall continue to operate and maintain accurate measuring and recording instruments or devices to determine the amount of water withdrawn from the Ridley Creek.

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 Article 5.5.1.D of the *Administrative Manual – Part III – Basin Regulations – Water Supply Charges*.

The project is designed to conform to the requirements of the *Water Code* 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-1985-029 CP-2 below, the project(s) described in Docket No. D-1985-029 CP is removed from the Comprehensive Plan to the extent that they are not included in Docket No. D-1985-029 CP-2; Docket No. D-1985-029 CP-1 is terminated and replaced by Docket No. D-1985-029 CP-2; and the project and the appurtenant facilities described in 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 accordance with *Administrative Manual – Part III Basin Regulations – Water Supply Charges 18 CFR 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*, 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.

8. The docket holder shall continue to implement the passby flow requirements as approved by PADEP in Water Allocation Permit No. WA-184 and described in Section B.3. above.

Other Conditions

9. During any month, the combined withdrawal from all intake sources shall not exceed 248.0 million gallons (8.0 mgd). No intake shall be pumped above the maximum rate and monthly allocation as indicated below:

INTAKE	MAXIMUM RATE (GPM)*	MONTHLY ALLOCATION (MGM)
Chester Creek	5,000	186
Ridley Creek	2,083.3	93

* Based on a 24-Hour Average

10. Section 2.3.10 of the Commission’s *Rules of Practice and Procedure* (18 C.F.R. 401.41), limiting the Commission’s approval to three years in the absence of an expenditure of substantial funds by the project sponsor in reliance on the approval, is hereby waived for good cause shown in accordance with Section 2.9.3 (18 C.F.R. 401.123) of the same regulations. 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 CFR 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 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, 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.

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

13. The surface water intakes 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 CFR 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: September 8, 2022

EXPIRATION DATE: September 8, 2032