DOCKET NO. D-1985-055 CP-4

DELAWARE RIVER BASIN COMMISSION

Special Protection Waters

Aqua Pennsylvania, Inc. – Hamilton System Groundwater Withdrawal Hamilton and Ross Townships, Monroe County, Pennsylvania

PROCEEDINGS

This docket is issued in response to an Application submitted by East Latitude, LLC on behalf of Aqua Pennsylvania (Aqua PA) to the Delaware River Basin Commission (DRBC or Commission) on January 31, 2017 (Application), for a renewal and approval of an existing allocation of groundwater and review of a groundwater withdrawal project. This docket was previously approved by the Commission on April 24, 1996. The project wells were reviewed under the Pennsylvania Safe Drinking Water Act for public water supply permits and approved by the Pennsylvania Department of Environmental Protection (PADEP) as follows:

WELL NO.	PADEP PERMIT NO.	PADEP APPROVAL DATE
Lily Street Well 1 and Well 2	2450044	4/4/2011
 Anchorage Well 		
Lily Street Well 2	4509509	9/13/2013

The Application was reviewed for continued inclusion in the Comprehensive Plan and for approval under Section 3.8 of the *Delaware River Basin Compact*. The Monroe 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 16, 2017.

A. <u>DESCRIPTION</u>

- 1. Purpose. The purpose of this project is to renew the approval of an existing supply of groundwater to the docket holder's distribution system and to approve a decrease in withdrawal allocation from 5.5 million gallons per 30 days (mg/30 days) to 5.0 million gallons per month (mgm) from an existing Wells Lily Street Well 1, Lily Street Well 2 and Well 2 Anchorage Well. Lily Street Well 2 has been installed and tested, but has not yet been connected to the Hamilton system. Once Lily Street Well 2 is operational, Lily Street Well 1 will be abandoned.
- **Location.** The project wells are located in the Buckwha Creek Watershed, Lily Street Well 1 and 2 are in Hamilton Township and Well 2 Anchorage is in Ross Township, all are in

Monroe County, Pennsylvania. The Buckwha Creek near the project site is designated by the PADEP as Cold Water Fishes (CWF) and Migratory Fishes (MF). The project wells are completed in the Marcellus Formation.

Specific location information has been withheld for security reasons.

3. <u>Area Served.</u> The docket holder's distribution system serves portions of Ross and Hamilton Townships, primarily around Saylors Lake, in Monroe County, Pennsylvania. The service area is outlined on a map entitled "Hamilton System Service Territory 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.** <u>Design criteria.</u> Aqua PA Hamilton system supplies water to an estimated population of 1,085 via 422 connections and 25 commercial connections. The average and maximum groundwater demand for this project are 0.114 million gallons per day (mgd) and 0.156 mgd, respectively. The docket holder projects an average and maximum water demand of 0.122 mgd and 0.190 mgd, respectively, by the year 2027. The allocation of 5.0 mgm should be sufficient to meet the future demands of the Aqua PA Hamilton system.
 - **b. Facilities.** The existing project wells have the following characteristics:

WELL NO.	DEPTH (FEET)	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY (GPM)	YEAR DRILLED
Lily Street Well 1	200	Unknown	44	1933
Lily Street Well 2	603	101'	72	2008
Well 2 – Anchorage Well	Unknown	Unknown	69	Unknown

All water service connections are metered.

All wells are metered.

Prior to entering the distribution system, the water will be treated by pH adjustment, corrosion control and 4-Log disinfection.

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

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

c. Other. Wastewater is conveyed to on-lot septic tanks in the vicinity of the project.

- **d.** Cost. The overall cost For Lily Street Well 2 is estimated to be \$750,000.
- **e.** Relationship to the Comprehensive Plan. The project was previously included in the Comprehensive Plan by the Commission in Docket Nos. D-1985-055 CP, D-1985-055 CP RENEWAL, D-1985-055 CP RENEWAL 2, approved on September 24, 1985, August 8, 1990 and April 24, 1996, respectively. Issuance of this docket will continue the withdrawal project in the Comprehensive Plan.

B. <u>FINDINGS</u>

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 by action of the docket holders at these particular facilities which is also located within the drainage area of Special Protection Waters. The wells providing water supply to the docket holders are located within in the drainage area to the Special Protection Waters. Since this project does entail additional construction and expansion of facilities and there are new or increased non-point source loads associated with this approval, the non-point source pollution control plan requirement is applicable at this time. Accordingly, Special Conditions C.II.z. and C.II.aa. have been included in the Decision section of this docket.

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

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. Aqua PA submitted their most recent Water Audit on March 31, 2017.

Lily Street Well 2 Hydrogeologic Evaluation

On May 1 through May 3, 2012, a 48-hour continuous-rate pumping test was conducted to assess withdrawal capabilities of the Lily Street Well 2 and the underlying aquifer characteristics and potential impacts to the local hydrologic system. The average pumping rate of the test on Lily Street Well 2 was approximately 72 gallons per minute (gpm). Lily Street Well 2 was pumped for a total period of 2,910 minutes.

Prior to the start of the pumping test, the water level in Lily Street Well 2 was 19.32 feet below top of casing (btoc). Maximum drawdown observed at the pumping well, after approximately 48 hours of pumping at a rate of 72 gpm, was 381.14 feet (water level of 400.46 feet btoc). The specific capacity of the pumping well is approximately 0.2 gpm/foot of drawdown.

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 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-1985-055 CP-4 below:
- a. The projects described in Docket No. D-1985-055 CP RENEWAL 2 is removed from the Comprehensive Plan to the extent that they are not included in Docket No. D-1985-055 CP-4; and
- b. Docket No. D-1985-055 CP RENEWAL 2 is terminated and replaced by Docket No. D-1985-055 CP-4.

- c. 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. The docket holder shall register with and report to the PADEP all surface and ground water sources described in this docket in accordance with the Pennsylvania Regulations (Title 25 Environmental Protection, [25 PA. CODE CH. 110], Water Resources Planning).
- 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 month, the combined withdrawal from all well sources shall not exceed 5.0 million gallons. No well shall be pumped above the maximum instantaneous rate and monthly allocation as indicated below:

WELL NO.	MAXIMUM INSTANTANEOUS RATE (GPM)	MONTHLY ALLOCATION (MGM)
Lily Street Well 1	44	1.96
Lily Street Well 2	72	3.21
Well 2 – Anchorage Well	69	3.08

- e. The wells shall be equipped with readily accessible capped ports and minimum ½ inch inner diameter (ID) drop pipes so that water levels may be measured under all conditions. Existing wells are to be similarly equipped, where possible, with readily accessible ports and ½ inch ID drop pipes as repairs or modifications are made at each existing well.
- 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 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. Within 30 days of completion of construction of the approved project, the docket holder is to submit to the attention of the Project Review Section of DRBC a Construction Completion Statement ("Statement") signed by the docket holder's professional engineer for the project. The Statement must (a) either confirm that construction has been completed in a manner consistent with any and all DRBC-approved plans or explain how the as-built project deviates from such plans; (b) report the project's final construction cost as such cost is defined by the project review fee schedule in effect at the time application was made; and (c) indicate the date on which the project was (or is to be) placed in operation. In the event that the final project cost exceeds the estimated cost used by the applicant to calculate the DRBC project review fee, the statement must also include (d) the amount of any outstanding balance owed for DRBC review. Such outstanding balance will equal the difference between the fee paid to the Commission and the fee calculated on the basis of the project's final cost, using the formula and definition of "project cost" set forth in the DRBC's project review fee schedule in effect at the time application was made.
- i. This approval of the construction related to Lily Street Well 2 as described in paragraph A.4.a of this docket shall expire three years from date below unless prior thereto the docket holder has commenced operation of the subject project or has provided the Executive Director with written notification that is has expended substantial funds (in relation to the cost of the project) in reliance upon this docket approval.
- j. 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.
- k. 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.
- l. The docket holder shall implement to the satisfaction of the PADEP, 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 PADEP on the actions taken pursuant to this program and the impact of those actions as requested by the PADEP.
- m. 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).
- n. The docket holder shall 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.

- o. The docket holder shall implement to the satisfaction of the PADEP, a drought or other water supply emergency plan.
- p. 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.
- q. 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.
- r. 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*.
- s. 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.
- t. 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).
- u. 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).
- v. 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).
- w. 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.

- x. Sound practices of excavation, backfill and reseeding shall be followed to minimize erosion and deposition of sediment in streams from any new facilities or repair related construction.
- If the monitoring required herein or any other relevant data or information у. demonstrates that the operation of this project is interfering with or otherwise impairing existing uses of ground or surface water, or if the permit 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 permit holder shall provide written notice to all potentially affected water users of the permit holder's responsibilities under this condition. Any well or surface water supply that is impaired as a result of the permit holder's project withdrawal shall be repaired, replaced or mitigated at the permit 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 permit holder to take interim actions to mitigate such impacts, pending completion of the investigative report and any long-term repair, replacement or mitigation.
- z. 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.
- aa. The docket holder shall submit for approval by the Executive Director of the DRBC, a Non-Point Source Pollution Control Plan (NPSPCP) that includes post-construction stormwater management plans in accordance with Article 3.10.3A.2.e.1). and 2). of the *Water Quality Regulations*. The Executive Director can, for good cause, extend the date of the NPSPCP submission.
- bb. 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.

cc. 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 13, 2017

EXPIRATION DATE: September 13, 2027