

DOCKET NO. D-2001-025 CP-2

DELAWARE RIVER BASIN COMMISSION

**Artesian Water Company, Inc – Northern Kent County Regional System
Groundwater Withdrawal & Inclusion into Comprehensive Plan
Town of Clayton, Kent County, Delaware**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) on May 7, 2024 for renewal of a groundwater withdrawal and inclusion into Comprehensive Plan project (Application). The docket holder's groundwater withdrawals will continue to be regulated by DNREC in accordance with the Administrative Agreement (AA) between DRBC and the State of Delaware, Section IV.C.4, enacted in July 2010 and modified on May 8, 2013. The project wells were approved by the Delaware Department of Natural Resources and Environmental Control (DNREC) as follows:

WELL NO.	DNREC PERMIT NO.	DNREC EFFECTIVE DATE
Clayton Wells 1, 2R and 3	87-002RM	August 11, 1992
Windsong Well 1	01-0008A	April 6, 2021
Windsong Well 2	01-0008B	June 10, 2002

The docket holder submitted a renewal application to DNREC to consolidate all the above permits into one permit for the Northern Kent County Regional System. The application is currently under review.

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 Kent County Planning Department has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on November 6, 2024.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to consolidate Docket Nos. D-2001-025 CP and D-1984-034 RENEWAL 3 into a single docket which makes up the docket holder's Northern Kent County Regional System. The approval will also include Clayton Well 4 in the Commission's Comprehensive Plan. The docket also approves the withdrawal of up to 21.02 mgm of groundwater from six (6) groundwater sources. The docket holder's existing groundwater withdrawals are approved by DNREC and will continue to be regulated in accordance with the

Administrative Agreement (AA) between DRBC and the State of Delaware, Section IV.C.4, enacted in July 2010 and modified on May 8, 2013.

2. Location. The project wells are completed in the Rancocas Formation, except for Windsong Well 2 which is completed in the Mt. Laurel Formation and are all located in the Smyrna River Watershed in the Town of Clayton, Kent County, Delaware.

Specific location information has been withheld for security reasons.

3. Area Served. The project wells will continue to serve northern Kent County, Delaware as outlined on the map entitled “Northern Kent Regional Service Area” submitted with the renewal 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 currently operates six (6) wells to supply their public water supply distribution system. The system currently serves an estimated population of 7,408 through 2,421 domestic service connections, 25 commercial and 6 institutional/other connections with an average and maximum water demand of 0.345 mgd and 0.561 mgd, respectively. The docket holder projects the population served to increase to 7,941 via 2,647 domestic connections along with 27 commercial and 7 institutional/other connections with an average and maximum water demand of 0.376 mgd and 0.613 mgd, respectively, by the year 2034. The allocation of 21.02 mgm should be sufficient to meet the future demands of the docket holder’s public water supply distribution system.

5. Facilities. The existing project wells have the following characteristics:

WELL NO.	DEPTH (FEET)	CASED DEPTH (FEET)	WELL SCREENED INTERVAL (FT. TO FT.)	PUMP CAPACITY (GPM)	YEAR DRILLED
Windsong Well 1	358	300	300 to 350	200	1996
Windsong Well 2	510	440	440 to 510	250	2001
Clayton Well 1	293	235	235 to 270	300	1953
Clayton Well 2R	334	212	212 to 330	350	1984
Clayton Well 3	320	237	237 to 320	300	1976
Clayton Well 4	342	210	210 to 430	500	2008

All wells and water service connections are metered.

Prior to entering the distribution system, all the water is treated with chlorine for disinfection, arsenic removal and fluoridation.

The project well-heads are above the 100-year flood elevation.

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

6. Other. Wastewater is conveyed to the Kent County Levy Court sewage treatment facility most recently approved by DRBC Docket No. D-1977-087 CP-5 on June 7, 2023. DNREC issued NPDES Permit No. DE0020338 for this treatment facility. The treatment facility has adequate capacity to receive wastewater from the proposed project.

7. Relationship to the Comprehensive Plan. The existing project water facilities were previously included in the Comprehensive Plan by the following DRBC Dockets:

DOCKET NO.	DATE APPROVED	APPROVED WELLS
D-2001-025 CP	August 28, 2002	Windsong Wells 1 and 2
D-1984-034 CP	September 25, 1984	Clayton Wells 1, 2R and 3
D-1984-034 CP (RENEWAL)	September 22, 1987	Clayton Wells 1, 2R and 3
D-1984-034 CP RENEWAL 2	March 24, 1993	Clayton Wells 1, 2R and 3
D-1984-034 CP RENEWAL 3	September 3, 2003	Clayton Wells 1, 2R and 3

Issuance of this docket will continue the withdrawal project and include Clayton Well 4 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* 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.

2. Water Allocation

The docket holder's groundwater water use is from six (6) wells and is not expected to exceed 21.01 mgm. As such, the docket holder requested a monthly allocation of 21.01 mgm in their DRBC withdrawal Application. However, the docket holder's existing groundwater withdrawals are approved by the DNREC in Permit Nos. 87-002RM, 01-0008A and 01-0008B will continue to be regulated by DNREC in accordance with the Administrative Agreement (AA) between DRBC and the State of Delaware, Section IV.C.4, enacted on July 2010 and modified on May 8, 2013. As such, this allocation may change as a result of future permit actions by DNREC (See Condition C.5.). The docket holder submitted a renewal application to DNREC to consolidate all the above permits into one permit for the Northern Kent County Regional System. The application is currently under review.

3. Other Findings

The DNREC water allocation permit is valid for a period of 30 years from date of issue, with review every five years.

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* 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-2001-025 CP-2 below, the projects described in Docket Nos. D-2001-025 CP and D-1984-034 CP RENEWAL 3 are removed from the Comprehensive Plan to the extent that they are not included in Docket No. D-2001-025 CP-2; Docket Nos. D-2001-025 CP and D-1984-034 CP RENEWAL 3 are terminated and replaced by Docket No. D-2001-025 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 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 DNREC 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 DNREC annually and shall be available at any time to the Commission if requested by the Executive Director.
2. In accordance with DRBC Resolutions No. 87-6 (Revised) and No. 2009-1, the docket holder shall continue to implement to the satisfaction of DNREC, 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.
3. 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.
4. The docket holder shall continue to implement its Water Conservation Plan as approved by DNREC and shall report to the state agency on actions taken pursuant to this program and the impact of those actions as requested by DNREC.

Other Conditions

5. During any month, the total withdrawal of groundwater from the docket holder's six (6) wells shall not exceed 21.02 million gallons (based on 31 days). This allocation may be modified as a result of future permit actions by DNREC in accordance with the Administrative Agreement (AA) between DRBC and the State of Delaware, Section IV.C.4, enacted on July 2010 and modified on May 8, 2013.
6. 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 purposes of this provision.
7. 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 five years is hereby waived for good cause shown in accordance with Section 2.9.3 (18 C.F.R. 401.123) of the same regulations.

- 8.** 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 401.35).
- 9.** 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 401.35).
- 10.** 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*.
- 11.** The wells and operational records shall be available at all times for inspection by the DRBC.
- 12.** The wells shall be operated at all times to comply with the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.
- 13.** 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.
- 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 DNREC, 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 shall be subject to applicable DRBC regulatory program fees, in accordance with duly adopted DRBC resolutions and/or regulations. (see 18 CFR 401.43).

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

21. 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.

22. 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.

23. 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 5, 2024