

DOCKET NO. D-2002-004 CP-3

DELAWARE RIVER BASIN COMMISSION

**Tidewater Utilities, Inc.
Groundwater Withdrawal and Exportation
Lewes/Rehoboth, Sussex County, Delaware**

PROCEEDINGS

This docket is issued in response to an Application submitted by Tidewater Utilities, Inc. (Tidewater or docket holder) to the Delaware River Basin Commission (DRBC or Commission) on July 13, 2017 for renewal of an allocation of groundwater and review of a groundwater withdrawal and water exportation project (Application). The groundwater withdrawal was previously approved by the Commission in Docket No. D-2002-4 CP-2 on July 16, 2008 and by the Delaware Department of Natural Resources (DNREC) under Permit No. 01-0020M3 effective on December 26, 2001 last modified August 8, 2011. The 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 docket holder's existing exportation of water remains reviewable by the Commission and is the primary subject of this docket renewal.

The Application was reviewed for continuation in the Comprehensive Plan and for approval under Section 3.8 of the *Delaware River Basin Compact*. The Sussex County Planning Department has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on May 16, 2018.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to renew the approval of an existing export of up to 1.302 million gallons per day (mgd) of water from the Delaware River Basin (DRB) to the Atlantic Basin. The export results from the withdrawal of up to 53.791 million gallons per month of groundwater from four existing wells in the DRB that is used in the docket holder's public water system and after use is largely conveyed to a treatment facility outside of the Basin. The withdrawals are approved by DNREC and will continue to be regulated in accordance with the AA entered into in July 2010 and modified on May 8, 2013 by the Commission and the State of Delaware.

2. **Location.** The four DRB project wells are completed in the Columbia-Pocomoke and Beaverdam Formations in the Canary Creek-Broadkill River Watershed in Sussex County, Delaware. After use, approximately 75 percent of the water withdrawn from the wells is conveyed out of basin to the Sussex County Wolfe Neck Regional Wastewater Facility where it is treated and land applied.

Specific location information has been withheld for security reasons.

3. **Area Served.** The four in basin wells supply a portion of the water to the docket holder's Rehoboth – Lewes District, located in southeastern Delaware located along Route 1 between Oyster Rocks Road and the Lewes & Rehoboth Canal. The service area is outlined on a figure entitled "DRBC Watershed 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 Rehoboth-Lewes District system contains a total of 14 interconnected wells (4 of which are in the DRB) and currently serves water to approximately 25,389 persons on 11,593 service connections. In 2015 the DRB wells accounted for approximately 40 percent of the total water demand. The DRB wells presently supply an existing average and maximum water demand of 0.711 mgd and 1.259 mgd, respectively. Tidewater projects the average and maximum water demands met by the DRB wells will increase to 1.095 mgd and 1.735 mgd, respectively over the next 10 years.

b. **Facilities.** The existing project wells have the following characteristics:

WELL NO.	DEPTH	SCREENED INTERVAL/ DIAMETER	PUMP CAPACITY	YEAR DRILLED
193788	155'	115'-155' / 10"	315 gpm	2003
193789	170'	120'-170' / 10"	300 gpm	2003
74787	123'	113'-123' / 8"	260 gpm	1989
184338	85'	65'-85' / 10"	330 gpm	2002

All water service connections are metered.

All wells are metered.

Prior to entering the distribution system, the water is treated by sodium hypochlorite and sodium hydroxide and ionic exchange for disinfection, neutralization and nitrate removal, respectively.

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

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

c. Other. The majority of wastewater (approximately 75 percent) from the project's service area is conveyed to the Sussex County Wolfe Neck Wastewater Treatment Facility, which is located in the Atlantic Basin. DNREC issued its most recent Spray Irrigation Permit No. LTS 5005-95-12 on August 2, 2012, amended October 16, 2012 for this treatment facility. The treatment facility has adequate capacity to continue to receive wastewater from the existing project. A portion of the wastewater from the service area is treated by on-site disposal systems in and out of the DRB.

d. Cost. There are no construction related costs related to this renewal project.

e. Relationship to the Comprehensive Plan. The project was previously included in the Comprehensive Plan by the Commission in Docket Nos. D-2002-4 CP and D-2002-4 CP-2 on May 31, 2002 and July 16, 2008, respectively. Issuance of this docket will continue the project in the Commission's Comprehensive Plan.

B. FINDINGS

Water Exportation

The Tidewater Rehoboth-Lewes District system is located on the divide between the DRB and the Atlantic Basin. Four (4) of the docket holder's 14 groundwater sources are located in the DRB and the remainder of the wells are located in the Atlantic Basin. The majority of the wastewater (estimated at 75 percent) generated in the Tidewater service area is conveyed to the Sussex County Wolfe Neck Regional Wastewater Treatment Facility located in the Atlantic Basin. The remainder of the wastewater is disposed through on-site septic systems. The Tidewater project results in a maximum exportation of approximately 1.302 mgd from the DRB to the Atlantic Basin, based on the combined allocation of the DRB wells (53.791 mgm).

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

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. Tidewater submitted their most recent Water Audit on March 24, 2017.

The docket holder estimates that the project withdrawals, used for public water supply and exported out of the basin, results in a consumptive use of 75 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

- I. Effective on the approval date for Docket No. D-2002-004 CP-3 below:
 - a. The project described in Docket No. D-2002-4 CP-2 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-2002-004 CP-3; and
 - b. Docket No. D-2002-4 CP-2 is terminated and replaced by Docket No. D-2002-004 CP-3.
 - 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 DNREC in its Water Allocation Permit.
 - 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 total exportation of water from the Delaware River Basin to the Atlantic Basin shall not exceed 40.35 million gallons. Any increase in the amount of exportation of water included in this docket shall be approved by the Commission.

e. During any month, the combined withdrawal from all DRB well sources shall not exceed 53.791 million gallons. No well shall be pumped above the maximum instantaneous rate and monthly allocation as indicated below:

WELL NO.	MAXIMUM INSTANTANEOUS RATE	MONTHLY ALLOCATION
193788	315	14.062
193789	300	13.392
74787	260	11.606
184338	330	14.731

f. The wells shall be equipped, where possible, with readily accessible capped ports and minimum ½ inch inner diameter (ID) drop pipes as repairs or modifications are made at each existing well so that water levels may be measured under all conditions.

g. 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 DNREC annually and shall be available at any time to the Commission if requested by the Executive Director.

h. Each new water service connection shall include a water meter in accordance with the DRBC’s Resolution No. 87-7 (Revised).

i. 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 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.

j. 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.

k. The docket holder shall implement to the satisfaction of the DNREC, 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 DNREC on the actions taken pursuant to this program and the impact of those actions as requested by the DNREC.

l. 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).

m. The docket holder shall implement to the satisfaction of the DNREC, a drought or other water supply emergency plan.

n. 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.

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 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*.

q. 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.

r. 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).

s. 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).

t. 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).

u. 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.

v. 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.

w. 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.

x. For the duration of any drought emergency declared by either Delaware or the Commission, water service or use by the docket holder pursuant to this approval shall be subject to the prohibition of those nonessential uses specified by the Governor of Delaware, to the extent that they may be applicable, and to any other emergency resolutions or orders adopted hereafter by the Commission.

y. 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:

EXPIRATION DATE: July 16, 2028

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