

DOCKET NO. D-1994-021 CP-3

DELAWARE RIVER BASIN COMMISSION

**Lower Township Municipal Utilities Authority
Groundwater Withdrawal, Importation and Exportation
Lower Township, Cape May County, New Jersey**

PROCEEDINGS

This docket is issued in response to an Application submitted by Remington & Vernick Engineers on behalf of Lower Township Municipal Utilities Authority (LTMUA) to the Delaware River Basin Commission (DRBC or Commission) on September 1, 2015 for renewal of an allocation of groundwater and review of a groundwater withdrawal project and an importation/exportation project (Application). The project was previously approved by the Commission in Docket No. D-1994-021 CP-2 on March 1, 2006. The docket holder's existing groundwater withdrawals will continue to be regulated by the New Jersey Department of Environmental Protection (NJDEP) in accordance with the NJDEP Water Allocation Permit No. 5240 issued on March 28, 2013 with superseding minor modifications of August 31, 2013, September 30, 2013, and April 30, 2015 with an expiration date of March 31, 2023.

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 Cape May County Planning Board has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on May 11, 2016.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to approve the renewal of an existing import of up to 35.7 million gallons per month (mgm) of groundwater from the Atlantic Basin to the Delaware River Basin (DRB) from existing LTMUA Well No. 7 to supply the docket holder's public water supply distribution system and an exportation of up to 139.5 mgm of water from the DRB to the Atlantic Basin through the LTMUA wastewater treatment plant (4.0 mgd) and water supply interconnection with the City of Cape May (0.5 mgd). The application also requested to renew the approval to withdraw up to 143 million gallons per month (mgm) of groundwater from five (5) DRB groundwater sources, Wells Nos. 1, 2, 6, 8 and 9. The DRB allocation corresponds to the allocation in NJDEP Permit No. 5240. The LTMUA's existing groundwater withdrawals are approved by the NJDEP and will continue to be regulated in accordance with the March 2015 Administrative Agreement between the Commission and the NJDEP.

2. Location. The project wells are completed in the Cohansey Formation and are located in the Delaware River Watershed in Lower Township, Cape May County, New Jersey.

Specific location information has been withheld for security reasons.

3. Area Served. The project wells supply water to portions of Lower Township, the City of Cape May, West Cape May, Cape May Point and the United States Coast Guard facility, all located in Cape May County, New Jersey, as outlined on the map entitled “Location Map” submitted with the renewal 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 docket holder operates six (6) wells to supply their public water supply distribution system. These include Well No. 7 which is located in the Atlantic Basin. The system currently serves an estimated population of 14,915 through 6,979 domestic service connections and an additional 203 commercial with an average and maximum water demand of 1.28 million gallons per day (mgd) and 2.674 mgd, respectively. The docket holder projects an average and maximum water demand of 1.59 mgd and 4.647 mgd, respectively, by the year 2026. The allocation of 143 mgm should be sufficient to supply the docket holder’s public water supply system. Groundwater from Well No. 7, is imported into the DRB from the Atlantic Basin to supplement the water demand with up to 35.7 mgm, but on average imports approximately 0.02 mgd.

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

WELL NO.	DEPTH (FEET)	CASED DEPTH (FEET)	SCREENED INTERVAL (FEET)	PUMP CAPACITY (GPM)	YEAR DRILLED
1	262	241	241 to 262	800	1956
2	247	217	217 to 247	550	1962
6	280	205	205 to 210 220 to 262 267 to 275	500	2003
8	269	224	224 to 240 250 to 264	1,000	2011
9	280	235	245 to 275	600	2008
7 (Out of Basin)	308	248	248 to 298	800	2005

All water service connections are metered.

All wells are metered.

Prior to entering the distribution system, the water is chlorinated.

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

The water system is presently interconnected with the City of Cape May distribution system, which has a capacity of 0.5 mgd. The City of Cape May is located outside of the DRB.

c. Other. Wastewater is conveyed to the Township of Lower Municipal Utilities Authority sewage treatment facility most recently approved by DRBC Docket No. D-68-98 CP on June 26, 1968. In 2000, the LTMUA modified the treatment plant to treat the wastewater and subsequently convey the treated water to the Cape May County Municipal Utilities Authority outfall for discharge to the Atlantic Ocean. The NJDEP issued its most recent NPDES Permit No. NJ0023809 on July 11, 2012 for the LTMUA sewage treatment facility. The treatment facility has adequate capacity to receive wastewater from the proposed project.

d. Cost. There is no cost associated with this project.

e. Relationship to the Comprehensive Plan. The project wells were included in the Comprehensive Plan via DRBC Dockets Nos. D-1970-103 CP, D-1994-021 CP and D-1994-021 CP-2 issued on July 22, 1970, August 10, 1994 and March 1, 2006, respectively. Issuance of this docket will continue the water importation, exportation and withdrawal project in the Comprehensive Plan.

B. FINDINGS

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. LTMUA submitted their most recent Water Audit on March 31, 2016.

Water Importation and Exportation

The LTMUA water distribution system includes Well No. 7 which is located in the Atlantic Basin and provides groundwater from the Atlantic Basin with an allocation of 35.7 mgm for use in the DRB. Groundwater from Well No. 7 is imported into the DRB from the Atlantic Basin to supplement the water demand with up to 35.7 mgm, but on average, LTMUA imports approximately 0.02 mgd. The docket holder also exports up to 139.5 mgm of treated wastewater and water from the DRB to the Atlantic Basin through the LTMUA wastewater treatment plant (4.0 mgd design capacity) and water supply interconnection with the City of Cape May (0.5 mgd capacity), respectively. The continued importation of water to the DRB from Well No. 7 located outside of the DRB reduces reliance on in-basin sources, the withdrawals from which are largely exported to the Atlantic Basin through the LTMUA wastewater treatment plant. No other significant benefit or impairment is incurred to the basin from the ongoing importation and exportation of water. In accordance with Section 2.3.11 (18 CFR 401.43) of the Rules of Practice and Procedure, and the DRBC/NJDEP March, 2015 Administrative Agreement (AA), any increases in the imports or exports of water included in this docket shall be approved by the DRBC (See Condition C.II.q.).

The NJDEP water allocation is valid for a period of 10 years from the original major modification effective date of April 1, 2013. Water Allocation Permit No. 5240 expires on March 31, 2023. The allocations for the DRB included in the NJDEP permit are:

- Monthly Water Diverted – 143 mgm
- Well No. 1 Rated Pump Capacity – 800 gpm
- Well No. 2 Rated Pump Capacity – 550 gpm
- Well No. 6 Rated Pump Capacity – 500 gpm
- Well No. 8 Rated Pump Capacity – 1,000 gpm
- Well No. 9 Rated Pump Capacity – 600 gpm

The DRBC estimates that the project withdrawals, used for the purpose of public water supply, result in a consumptive use of 100 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-1994-021 CP-3 below:

a. The projects described in Docket No. D-1994-021 CP-2 is removed from the Comprehensive Plan to the extent that they are not included in Docket No. D-1994-021 CP-3; and

b. Docket No. D-1994-021 CP-2 is terminated and replaced by Docket No. D-1994-021 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 NJDEP in its water allocation permit, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission’s.

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 143 mgm. No well shall be pumped above the maximum instantaneous rate as indicated below:

WELL NO.	MAXIMUM INSTANTANEOUS RATE (GPM)
1	800
2	550
6	500
8	1,000
9	600

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

i. 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).

j. The docket holder shall continue to implement its Water Conservation Plan as approved by NJDEP, and shall report to the NJDEP on actions taken pursuant to this program and the impact of those actions as requested by the NJDEP.

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

l. 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.

m. 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.

n. 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 NJDEP, 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.

o. 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.

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. In accordance with Section 2.3.11 (18 CFR 401.43) of the Rules of Practice and Procedure, and the DRBC/NJDEP March, 2015 Administrative Agreement (AA), this docket shall be deemed administratively continued upon the docket holder submitting an application to the NJDEP for the renewal of its NJDEP Water Allocation Permit in a timely manner and compliance with the terms of Section III of the AA.

r. In accordance with Section 2.3.11 (18 CFR 401.43) of the Rules of Practice and Procedure, and the DRBC/NJDEP March, 2015 Administrative Agreement (AA), any increases in the imports or exports of water included in this docket shall be approved by the DRBC.

s. 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.

t. 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 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.

u. 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.

v. 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: June 15, 2016

EXPIRATION DATE: June 15, 2026