

DOCKET NO. D-2005-26 CP-2

DELAWARE RIVER BASIN COMMISSION

**Tidewater Utilities, Inc.
Garrison Lake-North Dover District
Ground Water Withdrawal
Kent County, Delaware**

PROCEEDINGS

This docket is issued in response to an Application referred to the Delaware River Basin Commission (DRBC or Commission) pursuant to an Administrative Agreement under Sections 2-3.4 (a) and 2-3.7 of the *Administrative Manual - Part II, Rules of Practice and Procedure* by the Delaware Department of Natural Resources and Environmental Control (DNREC) on April 29, 2008, for an increase in allocation of ground water and review of a ground water withdrawal project (Application). The project was approved by the DNREC on April 22, 2008 (Permit Nos. 05-0003AM1, 05-0003BM1, and 05-0003CM1), subject to approval by the DRBC.

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 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 September 24, 2008.

A. DESCRIPTION

1. Purpose. The purpose of this project is to increase the docket holder's number of wells from 3 to 8, and to increase the ground water withdrawal allocation from 3.85 mg/30 days to 29.458 mg/30 days. The docket holder has requested an allocation of 47.443 mg/30 days, however DNREC has permitted a water withdrawal allocation of 29.458 mg/30 days.

The wells previously docketed are Wells Nos. SF-01, SF-02 and KWE-02 (also known as Nos. 74410, 92095, and 69618 respectively) and the new wells are Wells Nos. 154547, 71057, 71058, 192844 and 109193. The increased allocation is requested in order to interconnect formerly independent service districts and to meet projected increases in service area demand for the docket holder's North Dover and Garrisons Lake public supply distribution systems.

Furthermore, the permits granted by DNREC will be for the following:

WELL NO.	PERMIT NO.	STATUS
92095	05-0003BM1	Existing
69618	05-0003BM1	Existing
74410	05-0003AM1	Existing
192844	05-0003BM1	New
109193	05-0003BM1	New
71057	05-0003CM1	New
154547	05-0003CM1	New
71058	05-0003CM1	New

2. Location. The 8 project wells are located in the Leipsic River Watershed. Well Nos. 92095, 69618, 192844, and 109193 are located in the Cheswold Aquifer. Well Nos. 71058, 154547, and 71058 are located in the Piney Point Aquifer. Well No. 74410 is located in the Federalsburg Aquifer. Specific location information has been withheld for security reasons.

3. Area Served. The docket holder’s ground water withdrawal will service the North Dover and Garrisons Lake public supply distribution systems. 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 current service area of 1,895 connections for 5,685 people will rise to 5,408 connections and 16,224 people upon approval of this docket. The docket holder currently has an average and maximum demand of 2.64 and 3.32 mg/30 days respectively. The change in service area will increase the average and maximum demand to 18.495 and 29.458 mg/30 days respectively.

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

WELL NO.	DEPTH	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY	YEAR DRILLED
92095	180’	160’/8”	320 gpm	1992
69618	192’	177’/8”	250 gpm	1997
74410	100’	80’/8”	160 gpm	1988
192844	103’	72’/12”	410 gpm	2003

WELL NO.	DEPTH	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY	YEAR DRILLED
109193	100'	77'6"	75 gpm	1996
71057	245'	215'8"	6 gpm	1998
154547	251'	201'6"	6 gpm	1997
71058	220'	210'8"	200 gpm	1987

All water service connections are metered.

All wells are metered.

Prior to entering the distribution system, the water will be treated by sodium hydrochlorite for disinfection, CP723 for sequestering iron, and ionic exchange for iron removal.

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

Interconnects exist between the Garrison Lake District, Central Delaware Business Park, and the North-Dover District. The water system is not presently interconnected with any other distribution system.

c. **Other.** Wastewater is conveyed to the Kent County Levy Court wastewater treatment facility most recently approved by DRBC Docket No. D-77-87 CP-2 on July 18, 2007. The DNREC issued its most recent NPDES Permit No. DE0020338 on November 1, 2006. The treatment facility has adequate capacity to receive wastewater from the proposed project.

d. **Cost.** The overall cost of this project is estimated to be \$75,000.

e. **Relationship to the Comprehensive Plan.** The three existing project wells were previously included in the Comprehensive Plan via Docket No. D-2005-26 CP-2. The five new wells shall be added to the Comprehensive Plan.

B. FINDINGS

The docket holder has requested an allocation of 47.443 mg/30 days, however DNREC has permitted a water withdrawal allocation of 29.458 mg/30 days. The 29.458 mg/30 days allocation is consistent with the docket holder's 10 year demand as indicated in the Application. Additionally, the docket holder has not conducted pump tests as outlined in the *Application for a Ground and/or Surface Water Withdrawal in the Delaware River Basin*. If the docket holder wishes to pursue an increase in the docketed amount to the requested 47.443 mg/30 days, it must provide additional justification based on need and a 48-hour concurrent pumping test must be conducted on all of the wells at a constant rate equal to 150 percent of the total requested groundwater allocation or approximately 1,650 gallons per minute (gpm) and obtain state approval. The docket holder must submit an *Application for a Ground and/or Surface Water Withdrawal in the Delaware River Basin* in order amend their existing docket. A complete hydrogeologic study including the results of the 48-hour pumping test(s) should be submitted to the DRBC and DNREC as part of the Application. The docket holder must also submit an application to DNREC and receive DNREC approval for the requested increase.

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

The DNREC water allocation 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 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-2005-26 CP-2 below:
 - a. Docket No. D-2005-26 CP-1 is terminated and replaced by Docket No. D-2005-26 CP-2.
 - b. 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, 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 30-day period, the withdrawal limits for permits 05-0003AM1, 05-0003BM1, and 05-0003CM1 are 6.696, 15.727, and 7.035 million gallons, and the withdrawal from all 8 wells shall not exceed 29.458 million gallons.

e. The wells shall be equipped with readily accessible capped ports and drop pipes so that water levels may be measured under all conditions.

f. Upon completion of construction of the approved project, the docket holder shall submit a statement to the DRBC, signed by the docket holder’s engineer or other responsible agent, advising the Commission that the construction has been completed in compliance with the approved plans, giving the final construction cost of the approved project and the date the project is placed in operation.

g. This docket approval shall expire three years from date below unless prior thereto the docket holder has commenced operation of the subject project or has expended substantial funds (in relation to the cost of the project) in reliance upon this docket approval.

h. 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.

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

j. In accordance with DRBC Resolution No. 87-6 (Revised), 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 unaccounted-for 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. 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).

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

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. A complete application for the renewal of this docket, or a notice of intent to cease the operations (withdrawal, discharge, etc.) approved by this docket by the expiration date, must be submitted to the DRBC at least 12 months prior to the expiration date below (unless permission has been granted by the DRBC for submission at a later date), using the appropriate DRBC application form. 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 this docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

r. 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.

s. If the operation of this project significantly affects or interferes with any domestic or other existing wells or surface water supplies, or if the docket holder receives a complaint by any user of wells or surface water supplies within the zone of influence of the withdrawal, the docket holder shall immediately notify the Executive Director of any complaints by users of wells or surface water supplies within the zone of influence of the withdrawal, and unless excused by the Executive Director, shall investigate such complaints. The docket holder should direct phone call notifications of potential well or surface water interference or complaints of interference to the DRBC Project Review Section at 609-883-9500, extension 216. Oral notification must always be followed up in writing directed to the Executive Director. In addition, the docket holder shall provide written notification to all potentially impacted users of wells or surface water supplies of the docket holder's responsibilities under this condition. Any well or surface water supply which is substantially adversely affected, or rendered dry or otherwise unusable as a result of the docket holder's project withdrawal, shall be repaired, replaced or otherwise mitigated at the expense of the docket holder. A report of investigation and/or mitigation plan prepared by a hydrologist shall be submitted to the Executive Director as soon as practicable. The Executive Director shall make the final determination regarding the validity of such complaints, the scope or sufficiency of such investigations, and the extent of appropriate mitigation measures, if required. 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.

t. 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 or DNREC to the extent that they may be applicable, and to any other emergency resolutions or orders adopted hereafter by the Commission.

u. The docket holder and any other person aggrieved by a reviewable action or decision taken by the Executive Director or Commission pursuant to this docket may seek an administrative hearing pursuant to Articles 5 and 6 of the Commission's *Rules of Practice and Procedure*, and after exhausting all administrative remedies may seek judicial review pursuant to Article 6, section 2.6.10 of the *Rules of Practice and Procedure* and section 15.1(p) of the Commission's *Compact*.

v. Prior to adding any new wells to the Garrison Lake-North Dover District distribution system or seeking any increase in allocation from existing wells the docket holder must conduct a 48-hour pumping test on the new well(s) as outlined in the *Application for a Ground and/or Surface Water Withdrawal in the Delaware River Basin*.

BY THE COMMISSION

APPROVAL DATE:

EXPIRATION DATE: September 24, 2018

DRAFT