

**DOCKET NO. D-93-16 CP-3**

**DELAWARE RIVER BASIN COMMISSION**

**Upper Deerfield Township  
Ground Water Withdrawal  
Upper Deerfield Township, Cumberland County, New Jersey**

**PROCEEDINGS**

This docket is issued in response to an Application submitted by Upper Deerfield Township to the Delaware River Basin Commission (DRBC or Commission) on May 21, 2007 (Application), for renewal of an allocation of ground water and review of a ground water withdrawal project originally approved by the DRBC on September 26, 2005. The project was approved by the New Jersey Department of Environmental Protection (NJDEP) on March 26, 2008 (Permit No. 5376), subject to approval by the DRBC.

The Application was reviewed for inclusion of the project in the Comprehensive Plan and approval under Section 3.8 of the *Delaware River Basin Compact*. The Cumberland County Department of Planning and Development has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on July 16, 2008.

**A. DESCRIPTION**

- 1. Purpose.** The purpose of this project is to increase the existing allocation from 19.8 million gallons per thirty days (mg/30 days) to 40 mg/30 days from two existing wells (previously approved by Docket No. D-93-16 CP-2) and two new wells (replacement wells for two wells previously approved by Docket No. D-94-48 CP, issued to the Seabrook Water Corporation). Upper Deerfield Township has assumed ownership of the sources of the Seabrook Water Corporation and the associated allocation is transferred herein.
- 2. Location.** The project wells are located in the Cohansey River Watershed, in the Cohansey Formation. Specific location information has been withheld for security reasons.
- 3. Area Served.** The docket holder serves Upper Deerfield Township, Cumberland County, New Jersey. 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 has an existing average and maximum water demand of 17.023 mg/30 days and 21.561 mg/30 days, respectively. The docket holder anticipates a future ten-year average and maximum water demand of 33.166 mg/30 days and

50.50 mg/30 days, respectively. Upper Deerfield Township now serves customers of the defunct Seabrook Water Corporation. The docket holder is seeking additional sources to meet the anticipated maximum demand and will submit new applications to the DRBC, as appropriate.

On September 12, 2003 the NJDEP notified Upper Deerfield Township (UDT) that the Seabrook Water Corporation (SWC) failed to meet the National Primary Drinking Water Regulations in respect to gross alpha particles. Since the area served by SWC lay completely within UDT and provided water for the schools and municipal building within the township, UDT was directed to connect with the SWC to provide safe drinking water. On December 29, 2003, the NJDEP filed a *Verified Notice of Decision to Invoke and Initiate Provisions of the Small Water Companies Takeover Act* against SWC. It was recommended in 2004 that UDT takeover the SWC distribution system. On December 15, 2005, an *Initial Decision* was issued that required UDT to take over the SWC assets that were necessary to serve safe, potable water to the SWC customers and to provide fire protection.

Wells Nos. 3 and 4 were previously approved by DRBC Docket No. D-93-16 CP-2, issued to Upper Deerfield Township. Wells Nos. 15 and 17 are new wells. New Well No. 17 is a replacement well for Well No. 12, which was approved by DRBC Docket No. D-94-48 CP, issued to the Seabrook Water Corporation. New Well No. 15 will be used as a backup well to Well No. 17, and replaces Well No. 13, also approved by DRBC Docket No. D-94-48 CP. Wells Nos. 12 and 13 will be abandoned and sealed.

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

WELL NO.	DEPTH (FEET)	CASED DEPTH (FEET)	PUMP CAPACITY	YEAR DRILLED
3	177	125	750	1995
4	176	116	750	1995
15	169	135	800	1999
17*	175	<i>Proposed</i>	800	<i>Proposed</i>

\*Well No. 17 is proposed.

All water service connections are metered.

Wells Nos. 3, 4 and 15 are metered. Well No. 17 will be metered.

Prior to entering the distribution system, the water will be treated for pH adjustment and disinfection.

The project wells 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 the Cumberland County Sewerage Authority sewage treatment facility most recently approved by DRBC Docket No. D-76-19 CP on July 28, 1976. The NJDEP issued its most recent NPDES Permit No. NJ0024651 on May 3, 2004 for this treatment facility. The treatment facility has adequate capacity to receive wastewater from the project.

**d. Cost.** The overall cost of the new wells is estimated to be \$400,000.

**e. Relationship to the Comprehensive Plan.** The docket holder's existing wells were previously approved by DRBC Dockets Nos. D-93-16 CP and D-93-16 CP-2.

## **B. FINDINGS**

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

The DRBC estimates that the project withdrawals, used for the purpose of public water supply, result in a consumptive use of ten 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.

A pumping test was not conducted on new Wells Nos. 15 or 17. The NJDEP issued *An Administrative Consent Order* on June 19, 2006 that required Upper Deerfield Township to seek modeling assistance from the New Jersey Geological Survey (NJGS) to assess the impact of Wells Nos. 15 and 17, which are intended to replace Wells Nos. 12 and 13. The NJGS utilized aquifer test data supplied by the docket holder from a test conducted in 1994 for Wells Nos. 12 and 13. Representative values from the NJGS database for the Kirkwood-Cohansey aquifer system were used to simulate the potential hydrologic impact of proposed Well No. 17. The model simulation was run for three months without recharge to simulate peak summer use in the absence of recharge. The average pumping rate assigned was based on the requested maximum diversion of 20 million gallons per month. The model yielded a 928 feet radius of influence based upon 93 days of pumping. Five small capacity private wells are located within this radius of influence. NJDEP records indicate that all of these wells are screened in the Cohansey Formation but should not be negatively impacted by the proposed withdrawal since they have

between 15 and 21 feet of water above the pump setting. In addition, there have been no reports of adverse impact from the pumping of the former Seabrook Water Corporation at the rate of 1200 gallons per minute. Upper Deerfield Township is proposing to pump a maximum of 800 gallons per minute from Well No. 17, with Well No. 15 acting as a backup source. Both wells will not operate at the same time.

### **C. DECISION**

I. Effective on the approval date for Docket No. D-93-16 CP-3 below:

a. The projects described in Dockets Nos. D-93-16 CP, D-93-16 CP-2 and D-94-48 CP are removed from the Comprehensive Plan to the extent that they are not included in Docket No. D-93-16 CP-3; and

b. Dockets Nos. D-93-16 CP, D-93-16 CP-2 and D-94-48 CP are terminated and replaced by Docket No. D-93-16 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 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 from the Wells Nos. 3 and 4 shall not exceed 20 million gallons, the withdrawal from Wells Nos. 15 and 17 shall not exceed 20 and the withdrawal from all wells shall not exceed 40 million gallons. Well No. 15 is a backup source of supply to Well No. 17 and Wells Nos. 15 and 17 are not permitted to operate simultaneously.

e. The wells shall be equipped with readily accessible capped ports and 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 drop pipes as repairs or modifications are made at each existing well.

f. Upon completion of construction of the Well No. 17, 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. The docket holder shall also submit a map showing the location of Well No. 17 in relation to existing wells and the well construction details. If a significant change is made to the construction plans, the docket holder may be required to conduct a minimum 48-hour pumping test on Well No. 17.

g. This docket approval for Well No. 17 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 NJDEP quarterly 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 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 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. 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.

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 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.

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

o. Sound practices of excavation, backfill and reseeded shall be followed to minimize erosion and deposition of sediment in streams.

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. 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.

t. 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.

u. 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 Branch 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.

v. During any water emergency or other non-emergency declaration by the Governor of New Jersey, NJDEP or the Commission, water service or use by the project docket holder pursuant to this docket approval shall be subject to any order or restriction governing those non-essential uses specified by the NJDEP to the extent that they may be applicable, and to any other emergency resolutions or orders adopted by the Commission.

w. 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*.

**BY THE COMMISSION**

**APPROVAL DATE: July 16, 2008**

**EXPIRATION DATE: July 16, 2018**