

DOCKET NO. D-96-27-2

DELAWARE RIVER BASIN COMMISSION

Ground Water Protected Area

**Matrix Realty, Inc.
d/b/a Commonwealth National Country Club
Ground and Surface Water Withdrawal
Horsham Township, Montgomery County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted by Matrix Realty, Inc. to the Delaware River Basin Commission (DRBC or Commission) on February 21, 2008, for an allocation of ground and surface water and review of a ground and surface water withdrawal project in the Ground Water Protected Area of Southeastern Pennsylvania (Application). The project was originally approved by the DRBC on August 7, 1996.

The Application was reviewed for approval under Section 3.8 and for a withdrawal permit under Section 10.3 of the *Delaware River Basin Compact*. The Montgomery County Planning Commission 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 continue to supply up to 5 million gallons per thirty days (mg/30 days) of water to the docket holder's golf course irrigation system through one existing well and one existing pond intake, without an increase in the existing allocation.
2. **Location.** The project well is located in the Park Creek Watershed, in the Stockton Formation. Specific location information has been withheld for security reasons. The pond is located on an unnamed tributary of Park Creek.
3. **Area Served.** The project well and pond serve the docket holder's golf course as outlined on a map entitled "Well Location 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 docket holder operates one well and one intake as sources of supply to its golf course irrigation system with an existing average and maximum water

demand of 3 mg/30 days and 4.998 mg/30 days, respectively. No increase in demand is anticipated within the next ten years. The 18-hole golf course occupies 150 acres. Approximately 70 acres are irrigated.

The ground water withdrawal supplements the pond during dry periods. The pond is located on an unnamed tributary to Park Creek, itself a tributary to the Little Neshaminy Creek. The pond has a surface area of approximately 1.5 acres, with a usable storage capacity of 3 million gallons. Water flows from the pond via a broad-crested weir, approximately 30 feet wide. An 8-inch pipe at the bottom of the weir is controlled by a gate valve which can be used to regulate the flow and/or lower the pond. The docket holder estimated that if the pond is used exclusively as storage (i.e. no supplementation from the well), the pond can provide 40 days of irrigation water for tees and greens only.

b. **Facilities.** The docket holder’s existing wells have the following characteristics:

SOURCE	DEPTH	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY	YEAR CONSTRUCTED
Well CW-2	500 feet	61.5 feet / 8 inches	245 gpm	1996
Pond Intake	--	--	1600 gpm	1998

The well and pond are metered.

Well water is not treated prior to entering the distribution system.

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

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

B. FINDINGS

The project is located within the Southeastern Pennsylvania Ground Water Protected Area delineated by the DRBC pursuant to *Compact* Section 10.2. Tests conducted by the docket holder indicate the operation of this project will not create a local water shortage. The project is designed to conform to the requirements of the *Water Code*, *Water Quality Regulations* and *Ground Water Protected Area Regulations (GWPARG)* of the DRBC.

Review and analysis of the application pursuant to Section 6.D. of the *GWPARG* result in the following:

1. The withdrawal is consistent with the Commission's Comprehensive Plan and the policies and purposes of these regulations.
2. Opportunities to satisfy water requirements on a timely basis from existing available supplies and facilities have been explored and found infeasible.
3. The withdrawal, in conjunction with other withdrawals in the applicable ground water basin, should not exceed withdrawal limits of the ground water basin, aquifer or aquifer system.
4. The withdrawal should not significantly impair or reduce the flow of perennial streams in the area.
5. Existing ground and surface water withdrawals should not be adversely impacted, or will be otherwise assured of adequate supplies in accordance with the requirements of Section 10 of the *GWPAR*. There have been no reported complaints of well interference since the 1996 approval of this renewal project. No adverse impact is anticipated due to continued operation of this project.
6. The withdrawal should not cause substantial, permanent adverse impact to the overlying environment.
7. The docket holder adopted and will implement conservation and management programs as required by Section 7 of the *GWPAR*.

The project does not conflict with the Comprehensive Plan, and is designed to prevent substantial adverse impact to the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

The docket holder's golf course is located in the Park Creek subbasin, where total net annual ground water withdrawal (520.43 mgd) is less than the withdrawal limit set in Section 6.I of the *GWPAR* (776 mgd). The docket holder is requesting an annual allocation of 60 mgd, a fraction of which will be returned to ground water. However, even if no water from this project were returned to ground water, the total net annual ground water withdrawal from this subbasin would remain below the withdrawal limits set in Section 6.I of the *GWPAR*. Therefore, the withdrawals from Well CW-2, in conjunction with other withdrawals in the subbasin, are in accordance with the requirements of Section 6.I of the *GWPAR*.

The estimated Q_{7-10} flow of the unnamed tributary that feeds and drains the pond is 0.071 mgd (0.110 cfs). The docket holder will continue the passby flow requirement as stipulated in D-96-27, such that the docket holder must allow the Q_{7-10} flow to pass downstream of the pond,

or if the natural flow into the pond is less than the Q_{7-10} flow, the natural flow must pass downstream of the pond at all times in order to withdraw from the pond.

The DRBC estimates that the project withdrawals, used for the purpose of golf course irrigation, result in a consumptive use of 90 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*.

C. DECISION

I. Effective on the approval date for Docket No. D-96-27-2 below, Docket No. D-96-27 is terminated and replaced by Docket No. D-96-27-2.

II. The project as described in the Section A “Physical features” is approved pursuant to Section 3.8 of the *Compact* and is granted this withdrawal permit pursuant to Section 10.3 of the *Compact* and *GWP*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the PADEP, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission’s. The docket holder shall register with the PADEP all surface and ground water sources described in this docket in accordance with the Pennsylvania Water Resources Planning Act (Pennsylvania Act 220).

b. The wells and intake and operational records shall be available at all times for inspection by the DRBC.

c. The wells and intake 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 Well No. CW-2 shall not exceed 5 million gallons, the withdrawal from the pond intake shall not exceed 5 million gallons and the total combined withdrawal from all sources shall not exceed 5 million gallons.

e. A flow of not less than 0.071 mgd shall be allowed to pass at all times in the unnamed tributary of Park Creek immediately below the docket holder’s irrigation pond. When streamflow downstream of the pond is less than this passby flow, no water may be withdrawn from the pond unless the entire natural streamflow is allowed to pass. When storage in the pond is depleted, irrigation withdrawal must not exceed ground water withdrawal.

f. The well shall be equipped with a readily accessible capped port and drop pipe 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 Bureau of Watershed Management, PADEP annually and shall be available at any time to the Commission if requested by the Executive Director.

h. The docket holder shall implement to the satisfaction of the Bureau of Watershed Management, PADEP, a drought or other water supply emergency plan.

i. A long-term monitoring program is required to obtain data on ground water and surface water hydrologic conditions in the project area. The docket holder shall continue to implement the long-term monitoring program as outlined in Docket No. D-96-27. This program will include the following:

1. **Ground Water Level Monitoring** - Five monitoring wells shall be measured to estimate annual ground water fluctuations caused by seasonal changes and/or production well pumping, and detect water level declines that may affect the performance of public and private wells in the area of Well No. CW-2.

2. **Surface Water Monitoring** - Stream gaging stations located on the unnamed tributary that feeds and drains the pond shall be monitored to determine possible effects of the ground water withdrawal and/or changes in runoff characteristics.

3. **Reports** - All monitoring data, including records required in Conditions "g." and "i." herein shall continue to be submitted to the Commission annually. The docket holder is encouraged to submit the annual report electronically. The report shall be prepared by a hydrogeologist and shall assess the effects of well withdrawals on hydrologic conditions in the area. This report shall include an evaluation of the monitoring data required by this docket approval and such information as deemed appropriate by the hydrogeologist or required by the Executive Director.

j. The Executive Director may modify the monitoring program or temporarily suspend or modify this docket at any time if review of the hydrologic data and/or any other information indicates such action is necessary or appropriate.

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

l. 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.

m. 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* and the *GWPAR*.

n. 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.

o. The docket holder shall incorporate and implement reasonable conservation practices and measures consistent with efficient utilization of water resources.

p. 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.

q. If the monitoring required herein, or any other data or information demonstrates that 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 in accordance with Section 10B of the *GWPAR*. 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.

r. For the duration of any drought emergency declared by either Pennsylvania 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 Pennsylvania, the Pennsylvania Emergency Management Council, PADEP, or the Commonwealth Drought Coordinator, to the extent that they may be applicable, and to any other emergency resolutions or orders adopted hereafter by the Commission.

s. 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