

DOCKET NO. D-1996-027-3

DELAWARE RIVER BASIN COMMISSION

**Southeastern Pennsylvania
Ground Water Protected Area**

**Commonwealth/ Matrix, L.P.
d/b/a Commonwealth National Golf Club
Ground and Surface Water Withdrawal
Horsham Township, Montgomery County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted by Commonwealth/ Matrix, L.P. to the Delaware River Basin Commission (DRBC or Commission) on June 12, 2017 (Application), for a renewal and approval of an allocation of groundwater and surface water and review of a groundwater and surface water withdrawal project in the Ground Water Protected Area of Southeastern Pennsylvania. This docket was previously approved by the Commission on July 16, 2008.

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 May 16, 2018.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to renew the approval of an existing groundwater and surface water withdrawal of up to 5.17 million gallons per month (mgm) to irrigate the Commonwealth National Golf Club (CNGC) golf course from existing Well CW-2 and an existing intake on an unnamed tributary (UNT) to Park Creek.

2. Location. The project well is located in the Park Creek Watershed, in Horsham Township, Montgomery County, Pennsylvania. Well CW-2 is completed in the Stockton

Formation. Park Creek near the project site is designated by the Pennsylvania Department of Environmental Protection (PADEP) as supporting Warm Water Fishes (WWF) and Migratory Fishes (MF).

Specific location information has been withheld for security reasons.

3. **Area Served.** The project withdrawals will only be used to supply water to the docket holder's golf course irrigation system. 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.** CNGC golf course is an 18-hole golf course located on 150 acres, and consists of approximately 36 acres of fairways and tees and 6 acres of greens.

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.

The average and maximum demand is 0.05 million gallons per day (mgd) and 0.167 mgd, respectively. The docket holder does not estimate an increase in the 10-year average or maximum daily demand. CNGC is not requesting an increase in groundwater and surface water withdrawal allocations from that contained in its prior approval. The allocation of 5.17 million gallons per month (mgm) should be sufficient to meet the future demands of the CNGC system.

The potable water at the golf course's clubhouse is provided by Horsham Water & Sewer Authority (Docket No. D-1997-016 CP-3).

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

WELL ID.	DEPTH (FEET)	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY (GPM)	YEAR DRILLED
CW-2	500	61' / 8"	245	1996

POND ID.	PUMP CAPACITY (GPM)	STORAGE CAPACITY (MG)	YEAR CONSTRUCTED
Pond	1,600	3.0	1988

The project well and surface water intake are metered.

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

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

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

c. **Other.** Wastewater is conveyed to the Horsham Water & Sewer Authority sewage treatment facility which received approval most recently under Section 3.8 of the *Compact* by DRBC Docket No. D-1988-017 CP-3 on December 14, 2016. The PADEP issued its most recent NPDES Permit No. PA0051985A-2 on February 13, 2012 for this treatment facility. The treatment facility has adequate capacity to receive wastewater from the proposed project.

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

B. FINDINGS

Ground Water Protected Area

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 (GWPAR)* of the DRBC.

Review and analysis of the application pursuant to Section 6.D. of the *GWPAR* 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 last 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 docket holder's withdrawals were approved by the Commission in Docket No. D-1996-027-1 and D-1996-027-2 on August 7, 1996 and July 16, 2008, respectively. Issuance of this docket will continue the approval of this groundwater and surface water withdrawal project.

The CNGC is located in the Park Creek subbasin (Subbasin No. 9), where total net annual ground water withdrawal (388 mgd) is significantly less than the withdrawal limit set in Section 6.I of the *GWPAR* (777.5 mgd). The docket holder is requesting a monthly allocation of 5.17 mgd, which equates to 31.02 million gallons per year (mgd) (6 months x 5.17 mgd), a fraction of which will be returned to groundwater. However, even if no water from this project were returned to groundwater, the total net annual groundwater withdrawal from this subbasin would remain well 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*.

Pass-by Flow

The docket holder's UNT to Park Creek surface water withdrawal will continue to be subject to pass-by flow requirements. The estimated contributing drainage area to Park Creek above the CNGC irrigation pond is approximately 1.84 square miles. The estimated seven-day low flow with a recurrence interval of 10 years (Q_{7-10}) at the point of withdrawal is 0.110 cubic feet per second (cfs) or 0.071 mgd. The project withdrawal must not cause the stream flow in the UNT to Park Creek to be less than 0.110 cfs at the point of taking and daily withdrawal rates shall be reduced as appropriate to ensure that a minimum of 0.110 cfs passes by the irrigation pond. Withdrawals shall cease entirely if the 24-hour average flow as measured below the irrigation pond, less the withdrawal, is 0.110 cfs or less. Whenever the stream flow below the irrigation pond is less than 0.110 cfs, no withdrawal from the river shall be made and the entire natural stream flow must be allowed to pass. No withdrawals shall be made until flow in the UNT to Park Creek as measured below the irrigation pond is above 0.276 cfs for at least a 24-hour period. The docket holder shall continue to monitor the pass-by requirement in accordance with Condition C.II.f. in this docket.

Monitoring Network

The docket holder has been monitoring the network outlined in Docket No. D-1996-027 for over twenty years. CNGC has not had an increase in groundwater allocation in this time. In late 2015, the United States Environmental Protection Agency (USEPA) reported contamination in the groundwater in the area surrounding the Horsham Air National Guard Station, which was formerly known as the Willow Grove Naval Air Station. The contamination was caused by the navy base. Since that time, most domestic wells in this area have been abandoned and sealed up and the homes are now connected to public water. The wells that were part of the CNGC monitoring network have all been abandoned and there is no access to these wells. The docket holder has submitted annual monitoring reports for over 20 years and no well interference have been reported during this time. Since there had been no groundwater well interferences associated with the CNGC water usage and there are no wells left in their network to monitor, the CNGC monitoring network will be discontinued with this docket approval.

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

CNGC shall pay for surface water use, if the irrigation water withdrawal exceeds the amount of the total combined well withdrawals, in accordance with the provisions of *Administrative Manual Part III Basin Regulations – Water Charges* (Condition C.II.e.).

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*.

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.

C. DECISION

I. Effective on the approval date for Docket No. D-1996-027-3 below, Docket No. D-1996-027-2 is terminated and replaced by Docket No. D-1996-027-3.

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 *GWPAR*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the PADEP.

b. The well, pond and operational records shall be available at all times for inspection by the DRBC.

c. The well and pond 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 withdrawal from the wells and pond shall not exceed 5.17 mgm or 31.02 mgy (5.17 mgm x 6 months). The wells and pond shall not be pumped above the maximum instantaneous rate and monthly allocation as indicated below:

WELL OR INTAKE NO.	INSTANTANEOUS RATE (GPM)	MONTHLY ALLOCATION (MILLION GALLONS)
PW-2	245	5.17
Pond	1,600	5.17

e. The docket holder shall pay for surface water use, if the irrigation water withdrawal exceeds the amount of the total combined well withdrawals, in accordance with the provisions of *Administrative Manual Part III Basin Regulations – Water Charges*.

f. The project withdrawal must not cause the stream flow in the UNT to Park Creek to be less than 0.110 cfs (0.071 mgd) at the point of taking and daily withdrawal rates shall be reduced as appropriate to ensure that a minimum of 0.110 cfs passes by the irrigation pond. Withdrawals shall cease entirely if the 24-hour average flow as measured below the irrigation pond, less the withdrawal, is 0.110 cfs or less. Whenever the stream flow below the irrigation pond is less than 0.110 cfs, no withdrawal from the creek shall be made and the entire natural stream flow must be allowed to pass. No withdrawals shall be made until flow in the UNT to Park Creek as measured below the irrigation pond is above 0.276 cfs for at least a 24-hour period.

g. The well 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.

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 annually by June 30, to the PADEP. Withdrawal records 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. The docket holder shall implement to the satisfaction of the PADEP, a 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 PADEP, on the actions taken pursuant to this program and the impact of those actions as requested by the PADEP.

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

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 permit. 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*.

m. 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).

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

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

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. 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.

t. 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).

u. 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 401.43).

v. 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 401.43).

w. 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.

x. 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.

y. 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.

z. 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.

aa. 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: June 13, 2028