

DOCKET NO. D-2002-024-2

DELAWARE RIVER BASIN COMMISSION

Special Protection Waters

**Morgan Hill Golf Club
Groundwater Withdrawal**

Williams Township, Northampton County, Pennsylvania

PROCEEDINGS

This docket is issued in response to an Application submitted by M2 Associates, Inc. on behalf of Morgan Hill Golf Club (MHGC) to the Delaware River Basin Commission (DRBC or Commission) on January 17, 2014 (Application), for a renewal and approval of an existing allocation of groundwater and review of a groundwater withdrawal project. This docket was previously approved by the Commission on April 28, 2002.

The Application was reviewed for continuation and approval under Section 3.8 of the Delaware River Basin Compact. The Northampton County Planning Commission has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on September 9, 2014.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to approve the renewal of an existing supply of groundwater for irrigation of the MHGC golf course from existing Well No. IW-1. The total allocation of groundwater will remain 7.03 million gallons per month (mgm). MHGC is not requesting an increase in groundwater withdrawal allocation from that contained in its prior approval.

2. Location. The project wells are located in the Delaware River Watershed, within the drainage area to the Lower Delaware Special Protection Waters, in Williams Township, Northampton County, Pennsylvania. Well No. IW-1 is completed in the Leithsville Dolomite Formation. The Delaware River 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. **Service area.** The project withdrawals will be used to supply water to the docket holder's golf course irrigation system only.

4. **Physical features.**

a. **Design criteria.** The project golf course is an 18-hole golf course located on 160 acres, and consists of 70 acres of fairways and tees and 6 acres of greens. Potable water at the golf course clubhouse is served by the City of Easton Water Department.

The average and maximum demand is 0.23 million gallons per day (mgd) and 0.25 mgd, respectively. The docket holder does not estimate an increase in average and maximum demand over the next ten years. The allocation of 7.03 million gallons per month (mgm) should be sufficient to meet the future demands of the MHGC system.

Groundwater is pumped from Well No. IW-1 to a storage pond and then pumped from the pond as needed for irrigation. The pond is used for temporary storage, which also collects storm water from the site.

MHGC Well No. IW-1 will supply up to 7.03 mgm of groundwater for supplemental irrigation. Maximum irrigation demand is 7.75 mgm. The difference between the maximum demand and the groundwater allocation (0.72 mgm) will be provided by on-site management and storage of storm water. On-site storage is approximately 2.4 million gallons.

The irrigation system is managed with a Site Pro central computer, which receives hourly weather data from an on-site weather station. The weather measurements made with this station include air temperature, wind speed and direction, precipitation, solar radiation and relative humidity. These data with the exception of wind direction are used by the Site pro system to calculate evapotranspiration.

b. **Facilities.** The docket holder's existing well has the following characteristics:

WELL NO.	DEPTH (FEET)	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY (GPM)	YEAR DRILLED
IW-1	246	90' / 10"	180	2002

The well is metered.

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

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

c. **Other.** Wastewater from the site is conveyed to City of Easton sewage treatment facility most recently approved by DRBC Docket No. D-1987-010 CP on May 27, 1987. The PADEP issued its most recent NPDES Permit No. PA0027235 A-1 on April 11, 2012 for this treatment facility. The treatment facility has adequate capacity to receive wastewater from the project.

B. FINDINGS

Special Protection Waters

In 1992, the DRBC adopted Special Protection Waters requirements, as part of the DRBC *Water Quality Regulations (WQR)*, designed to protect existing high water quality in applicable areas of the Delaware River Basin. One hundred twenty miles of the Delaware River from Hancock, New York downstream to the Delaware Water Gap were classified by the DRBC as SPW. This stretch includes the sections of the river federally designated as "Wild and Scenic" in 1978 -- the Upper Delaware Scenic and Recreational River and the Delaware Water Gap National Recreation Area -- as well as an eight-mile reach between Milrift and Milford, Pennsylvania which is not federally designated. The SPW regulations apply to this 120-mile stretch of the river and its drainage area.

On July 16, 2008, the DRBC approved amendments to its *Water Quality Regulations* that provide increased protection for waters that the Commission classifies as Special Protection Waters. The portion of the Delaware River and its tributaries within the boundary of the Lower Delaware River Management Plan Area was approved for Special Protection Waters designation and clarity on definitions and terms were updated for the entire program.

Article 3.10.3A.2.e.1). and 2). of the *Water Quality Regulations*, Administrative Manual - Part III, states that projects subject to review under Section 3.8 of the Compact that are located in the drainage area of Special Protection Waters must submit for approval a Non-Point Source Pollution Control Plan that controls the new or increased non-point source loads generated within the portion of the docket holder's service area which is also located within the drainage area of Special Protection Waters. The wells providing water supply to MHGC are located within in the drainage area to the Special Protection Waters. Since this project does not entail additional construction and expansion of facilities or service areas (i.e., there aren't any new or increased non-point source loads associated with this approval), the non-point source pollution control plan requirement is not applicable at this time.

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

MHGC has incorporated a number of conservation practices into daily operations. Irrigation is applied at night to reduce evaporation, and is managed with a computerized system. Fairways and tees are planted with only drought resistant grass (rye). Best management practices (BMPs) are used to reduce the amount of fertilizers and pesticides, and to buffer zones

near streams. During periods of drought, the project withdrawals are subject to curtailment in accordance with the PADEP's drought operating plans and procedures.

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 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-2002-024-2 below, Docket No. D-2002-024-1 is terminated and replaced by Docket No. D-2002-024-2.

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 PADEP, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission's.

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

c. The well 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 withdrawal from the well shall not exceed 7.03 mgm or 42.18 mgy (7.03 mgm times 6 months). The well shall not be pumped above the maximum instantaneous rate and monthly allocation as indicated below:

WELL NO.	INSTANTANEOUS RATE (GPM)	MONTHLY ALLOCATION (MILLION GALLONS)
IW-1	180	7.03

e. If possible, the well shall be equipped with a readily accessible capped port and drop pipe so that water levels may be measured under all conditions.

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 annually by June 30, to the PADEP. Withdrawal records shall be available at any time to the Commission if requested by the Executive Director.

g. The docket holder shall pay for surface water use which exceeds the amount of water withdrawn from Well No. IW-1 in accordance with *Administrative Manual – Part III Basin Regulations – Water Supply Charges*.

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

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

j. No new water service connections shall be made to the 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.

k. 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.

l. 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 *GWP*.

m. Unless an extension is requested and approved by the Commission in advance, in accordance with paragraph 11 of the Commission's Project Review Fee schedule (Resolution No. 2009-2), the docket holder is responsible for timely submittal of a docket renewal application on the appropriate DRBC application form at least 12 months in advance of the docket expiration date set forth below. The docket holder will be subject to late charges 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 (or the later date established by an extension that has been timely requested and approved), 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.

n. 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.

o. If any information demonstrates that the operation of this project significantly affects or interferes with any domestic or other existing uses of ground or surface water, or if the docket holder receives a complaint by any existing ground or surface water users within the zone of influence of the withdrawal, the docket holder shall immediately notify the Executive Director of any complaints by any ground or surface users 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. The docket holder shall provide the potentially impacted user(s) of wells or surface water supplies with copies of the correspondence submitted to the Commission. Any ground or surface water user which is substantially adversely affected, rendered dry or otherwise diminished 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's 2., 6.D., 10.B., and 13.A. 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.

p. 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.

q. 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.

r. 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: September 10, 2014

EXPIRATION DATE: September 10, 2024