

# SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20020828 Approval Date: August 15, 2002

#### HANOVER COUNTRY CLUB

Consumptive Water Use of Up to 0.244 mgd, for Golf Course Irrigation, Abbottstown Borough and Berwick Township, Adams County, and Paradise Township, York County, Pennsylvania

#### **Review Authority**

This project is subject to review pursuant to Article 3, Section 3.10 of the Susquehanna River Basin Compact, P.L. 91-575, and Commission Regulations §803.4, relating to projects requiring review and approval, and §803.42, relating to the consumptive use of water. The Commission received the application on June 29, 2000.

## **Description**

**Purpose.** The purpose of the application is to request approval for the consumptive use of water for irrigation of greens, tees, and fairways at an existing 18-hole golf course.

**Location.** The project is located in the Lower Susquehanna Subbasin, HUC 02050306, Beaver Creek Watershed, Abbottstown Borough and Berwick Township, Adams County, and Paradise Township, York County, Pennsylvania.

**Project Features.** The project sponsor has requested approval for the consumptive use of water of up to 0.244 million gallons per day (mgd). Based on 2001 data, the project sponsor calculates the project's maximum average 30-day consumptive water use to be 0.200 mgd and current peak-day consumptive water use to be 0.294 mgd. The project sponsor is aware that the historical peak-day consumptive use is in excess of the requested peak-day use and has agreed to manage its water usage to stay within the requested quantities.

The project was constructed as an 18-hole golf course in 1923, and has been in continuous operation since that time. The irrigation system for the tees, greens, and fairways of the golf course, including a storage pond, was installed in 1968. Prior to that time, all irrigation was accomplished by hand-watering. The original irrigation system was used until 1996, when the current irrigation system was installed.

The primary source of water is an existing spring-fed pond. Water also can be withdrawn from three wells located on the property. The wells predate Commission Regulation §803.43, relating to ground-water withdrawals.

The metered irrigation system pumps water from the spring-fed storage pond to irrigate greens, tees, and fairways. Ground water also can be pumped to the pond from of the three wells that are located in the Beaver Creek stream valley. One of the wells (Well 3) is located immediately adjacent to Beaver Creek. The project sponsor reports the static water level in Well 3 to be approximately 12 feet below the ground surface, or approximately 10 feet below the bottom of the Beaver Creek stream channel.

According to the project sponsor, the storage pond was constructed in 1968. The project sponsor has calculated that the pond has a surface area of 1.5 acres and an average depth of approximately 8 feet. Commission staff has calculated a maximum storage capacity for the storage pond to be approximately 3.91 million gallons, which is sufficient storage for approximately 19 days of irrigation, based on the maximum 30-day average use of 0.200 mgd.

## **Findings**

The project's consumptive water use is subject to the Commission's approval and reporting requirements, as per Commission Regulations §803.42.

All water withdrawn from the storage pond and used for golf course irrigation is considered to be used consumptively. The irrigation system is equipped with a meter that measures the quantity of water used for irrigation.

The project sponsor originally requested a consumptive water use approval of up to 0.343 mgd. Based on an analysis of 2001 irrigation records supplied by the project sponsor, Commission staff is recommending approval of up to 0.244 mgd. Should the project's future consumptive water use exceed, or be expected to exceed 0.244 mgd, the project sponsor must apply for a modification to this docket at that time.

Commission staff has agreed to the project sponsor's calculated pre-1971 consumptive water use of 145,000 gallons per day (gpd) for the project and, for purposes of this docket, this quantity of water is considered "grandfathered" and is exempt from water compensation requirements.

The project's ground-water withdrawals have been in operation since 1968 but are not metered. The on-site wells are used to fill the storage pond as needed. It appears from available data that the project relies almost exclusively on ground water during the summer months. It is assumed that the grandfathered consumptive use amount of 145,000 gpd also applies to the total ground-water withdrawal. The project sponsor has reported that the wells are utilized at less than 100,000 gpd in excess of the grandfathered amount of 145,000 gpd during a 24-hour pumping period and, therefore, this withdrawal is less than the threshold contained in Commission Regulation §803.43. However, since the project sponsor does not currently meter the actual quantity of ground water withdrawn, and has no records associated with the wells that

could be used to estimate the withdrawal, staff recommends that the project sponsor install appropriate metering and provide to the Commission documentation of the wells' usage.

Three ground-water supply wells are located within the Beaver Creek stream valley. The reported static water level in Well 3 indicates that the ground-water withdrawal from the wells may impact the flow of Beaver Creek.

Beaver Creek is classified as a warm-water fishery (WWF) (Title 25, Chapter 93, Pa. Code). Commission staff has calculated the 7-day 10-year low flow (Q7-10 flow) for Beaver Creek to be 0.112 cubic feet per second (cfs) (50 gallons per minute (gpm)) adjacent to Well 3. The project sponsor's maximum average 30-day consumptive use of 0.200 mgd requires a minimum constant ground-water withdrawal of 139 gpm to maintain the average consumptive use. If more than 3.6 percent of the ground-water withdrawal originates from Beaver Creek, the operation of the ground-water wells would result in a surface-water withdrawal greater than 10 percent (5.0 gpm) of the Q7-10 for Beaver Creek, and a passby flow would be required to protect aquatic resources and downstream users.

Staff recommends the project sponsor monitor the stream conditions during the 2003 irrigation season to document to the Commission whether or not the existing ground-water withdrawal is impacting Beaver Creek. The project sponsor should submit its proposed monitoring plan within 60 days following Commission action for review and approval by Commission staff.

The project's consumptive use of water in excess of the grandfathered quantity is subject to water compensation requirements, as per Commission Regulation §803.42. To satisfy these requirements, the project sponsor proposes to make quarterly payments to the Commission inlieu-of providing actual compensation water. The payment will be based on the daily quantity of water used for irrigation minus the pre-1971 consumptive use of 0.145 mgd. If the daily grandfathered quantity exceeds the project's daily consumptive water use, that day's consumptive water use is considered to be zero.

The project is subject to water conservation requirements, as per Commission Regulation §804.20(c).

The project sponsor has paid the appropriate application fee in accordance with Commission Regulation §803.28 and in accordance with Commission Resolution 98-19, as amended by Commission Resolution 2000-06. The project sponsor has provided all proofs of notification, as called for in Commission Regulation §803.25.

The project is physically feasible, does not conflict with or adversely affect the Commission's Comprehensive Plan, and does not adversely influence the present or future use and development of the water resources of the basin.

## **Compliance Incentive Program**

Commission staff has determined that the project sponsor is eligible to participate in the Commission's Compliance Incentive Program (CIP). Therefore, the project sponsor would not be subject to penalties for water consumed in violation of Commission Regulation §803.42 prior to January 1, 2001. In accordance with the CIP, payment to the Commission as a method of compensation for the project's consumptive water use shall be effective and applicable to all consumptive water used by the project beginning January 1, 2001.

#### **Decision**

The project's consumptive water use of up to 0.244 mgd is approved pursuant to Article 3, Section 3.10 of the Compact subject to the following conditions:

- a. The project sponsor shall comply with all Commission regulations, including consumptive water use reporting requirements, as per Commission Regulation §803.42.
- b. The project sponsor shall keep daily records of the project's consumptive water use, and shall report the data to the Commission quarterly, and as otherwise required. The daily quantity of water consumptively used shall be the quantity pumped to the irrigation system. The project sponsor shall maintain metering on the irrigation system, accurate to within five (5) percent.
- c. Within sixty (60) days from the date of this approval, the project sponsor shall install and maintain metering on the three on-site wells, accurate to within five (5) percent, to measure its ground-water withdrawal. The project sponsor shall keep daily records of the project's ground-water withdrawal and shall report the data to the Commission quarterly, and as otherwise required. The project sponsor may propose alternative monitoring to the Commission for staff review and approval. If the ground-water withdrawal exceeds the threshold contained in Commission Regulation §803.43, the project sponsor shall submit the appropriate application for review and approval by the Commission.
- d. Within sixty (60) days from the date of this approval, the project sponsor shall submit its proposed monitoring plan for Beaver Creek to the Commission for review and approval.
- e. To satisfy the Commission's current compensation requirements for consumptive water use set forth in Commission Regulation §803.42, the project sponsor shall make quarterly payments to the Commission based on the rate of \$0.14 per 1,000 gallons of water consumptively used by the project in excess of the grandfathered quantity. The daily quantity of water consumptively used shall be the quantity pumped to the irrigation system. Payment amounts shall be calculated by applying this rate to the daily amount of water used consumptively by the project, less the grandfathered quantity of 145,000 gpd. If the daily grandfathered quantity exceeds the project's daily consumptive water use, that day's consumptive water use is considered to be zero. Quarterly payments are due and payable within thirty (30) days after the close of the preceding quarter. The rate of payment, after appropriate

notice to consumptive users of water using this method of compliance, is subject to change at the Commission's discretion.

- f. The project sponsor shall comply with the water conservation requirements contained in Commission Regulation §804.20(c).
- g. The project sponsor is eligible to participate in the Commission's Compliance Incentive Program (CIP). Therefore, the project sponsor is not subject to penalties for its prior noncompliance. In accordance with the CIP, payment to the Commission as a method of compensation for the project's consumptive water use shall be effective and applicable to all water consumptively used by the project beginning January 1, 2001. The project sponsor shall provide records of its consumptive water use, and make a payment to the Commission based on the rate of \$0.14 per 1,000 gallons of water consumptively used in excess of the grandfathered quantity of 145,000 gpd during the period from January 1, 2001 until the effective date of this approval. This payment shall be calculated and included in the first quarterly payment made by the project sponsor in accordance with the requirements of condition (d) above.
- h. Commission approval shall not be construed to exempt the project sponsor from obtaining all necessary permits and/or approvals required for the project from other federal, state, or local government agencies having jurisdiction over the project. The Commission reserves the right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.
- i. The Commission reserves the right to inspect or investigate the project facility, and the project sponsor shall allow authorized employees or agents of the Commission, without advance notice or a search warrant, at any reasonable time and upon presentation of appropriate credentials, and without delay, to have access to and to inspect all areas where the project is being constructed, operated, or maintained. Such employees or agents shall be authorized to conduct tests or sampling, to take photographs, to perform measurements, surveys, and other tests, to inspect the methods of construction, operation, or maintenance, to inspect all measurement equipment, to audit, examine, and copy books, papers, and records pertinent to any matter under investigation, and to take any other action necessary to assure that the project is constructed, operated, or maintained in accordance with the terms and conditions of this approval or any other rule, regulation, or order of the Commission.
- j. If the project sponsor fails to comply with any term or condition of this docket, the Commission may suspend, modify, or revoke its approval of same, and may impose appropriate fines and penalties. Upon written notice by the Commission, the project sponsor shall have thirty (30) days to correct such noncompliance, unless an alternate period is specified in the notice. Failure to comply within thirty (30) days, or within the alternate period identified in the notice, shall result in a ninety (90) day suspension of approval of this docket. If the project sponsor fails to address the noncompliance to the satisfaction of the Commission within the suspension period, this approval may be revoked. Nothing herein shall preclude the Commission from exercising its authority to immediately modify, suspend, or revoke this approval where it determines exigent circumstances warrant such action, or from imposing fines and penalties, regardless of the period of non-compliance.

- k. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect the public health, safety, welfare, or the environment.
- l. Commission approval confers no property rights upon the project sponsor. The securing of all rights necessary and incident to the project sponsor's development and operation of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.
- m. This approval is effective until August 15, 2027. The project sponsor shall submit a renewal application by February 15, 2026, and obtain Commission approval prior to continuing operation beyond August 15, 2027.
- n. If the project is discontinued for such a period of time and under such circumstances that an abandonment of the project may reasonably be inferred, the Commission may rescind the approval of the project unless a renewal is requested by the project sponsor and approved by the Commission.

By the Commission:

Dated: <u>August 15, 2002</u>

John T. Hichs

John T. Hicks

Chairman