



# SUSQUEHANNA RIVER BASIN COMMISSION

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**Docket No. 20020811**

**Approval Date: August 15, 2002**

## **SINKING VALLEY COUNTRY CLUB**

Consumptive Water Use of Up to 0.315 mgd, for Golf Course Irrigation,  
Tyrone Township, Blair 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 July 21, 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 Juniata Subbasin, HUC 02050302, Sinking Run Watershed, Tyrone Township, Blair County, Pennsylvania.

**Project Features.** The project sponsor has requested approval for the consumptive use of water of up to 0.315 million gallons per day (mgd). Based on irrigation data for the year 2001 submitted by the project sponsor, the project has a maximum average 30-day consumptive use of water of 0.104 mgd and a peak-day consumptive water use of 0.286 mgd. The primary sources of water for the irrigation system are an existing withdrawal from an unnamed tributary to Sinking Run and two on-site wells.

The project was constructed as a 9-hole golf course in 1963, and has been in continuous operation since that time. The course was expanded to 18 holes in 1965. The original irrigation system was installed concurrently with the golf course construction, and was used to irrigate greens, tees, and fairways. An automatic irrigation system was installed in 1999.

As part of the 1963 golf course project, the project sponsor constructed one off-stream pond to provide for irrigation water storage at the site. Commission staff has calculated the surface area of the storage pond to be 1.09 acres, and the volume of the pond to be approximately 1.8 million gallons. The project sponsor has sufficient storage on-site for approximately 17 days of irrigation, based on the maximum average 30-day consumptive use of 0.104 mgd.

Water is pumped from the storage pond using a 60-horsepower centrifugal pump with a pumping capacity of 500 gallons per minute (gpm) to irrigate greens, tees, and fairways.

The storage pond receives water from an unnamed tributary to Sinking Run, two on-site wells, and stormwater runoff. The withdrawal from the unnamed tributary to Sinking Run predates Commission Regulation §803.44, relating to surface-water withdrawals, and has not increased more than 0.100 mgd since November 11, 1995, the effective date of the regulation. The withdrawal from the unnamed tributary feeds by gravity to the storage pond. The project sponsor has withdrawn water from the stream over the life of the project with no passby structure, engineering controls or flow meters in place.

Ground water is withdrawn from two on-site wells and discharged to the storage pond to supplement the surface-water withdrawal and stormwater runoff, as needed. The project sponsor reports that the primary well, located near the fourteenth fairway, has a reported pump capacity of approximately 100 gpm. The primary well predates Commission Regulation §803.43, relating to ground-water withdrawals. The secondary well, in operation since 1989, located near the eighth tee, has a reported pump capacity of 275 gpm. The project's ground-water withdrawal currently is not metered.

### **Findings**

The project's irrigation water use is subject to the Commission's consumptive water use approval and reporting requirements, as per Commission Regulation §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 pumped to the irrigation system. The storage pond predates the Commission's consumptive use regulation and, therefore, the project sponsor is not required to provide compensation for evaporative losses from the pond.

The project sponsor has requested a consumptive water use approval of up to 0.315 mgd. Based on an analysis of irrigation records supplied by the project sponsor, Commission staff is recommending approval of the requested amount, which represents an increase of approximately 10 percent above the current peak-day use of 0.286 mgd. This will allow for an anticipated increase in water usage over the 25-year duration of this approval. Should the project's future consumptive water use exceed or be expected to exceed 0.315 mgd, the project sponsor must apply for a modification to this docket at that time.

Commission staff has determined that the pre-1971 consumptive water use by the project sponsor is 0.064 mgd and, for purposes of this docket, this quantity of water is considered "grandfathered" and is exempt from water compensation requirements.

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 in-lieu-of providing actual compensation water. The payment will be based on the quantity of

water used for irrigation minus the pre-1971 consumptive use of 0.064 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 existing withdrawal from an unnamed tributary to Sinking Run predates Commission Regulation §803.44, relating to surface-water withdrawals, and has not increased more than 0.100 mgd since November 11, 1995, the effective date of the regulation. Therefore, staff finds that this withdrawal is not subject to review by the Commission.

The project's surface-water withdrawal has been in operation since 1963 with no passby structure or engineering control maintained at the site. The unnamed tributary to Sinking Run is classified as a Class A, cold-water fishery (CWF) (Title 25, Chapter 93, of the Pa. Code). Commission staff has calculated the 7-day 10-year low flow (Q7-10 flow) for the unnamed tributary to be 0.017 cubic feet per second (cfs) or 7.6 gallons per minute (gpm) at the point of withdrawal. The withdrawal is greater than 10 percent of the Q7-10 flow at the point of withdrawal, thereby requiring a passby flow to protect aquatic resources and downstream users.

Based on the project's classification as CWF, its geographic location in the watershed and the anticipated associated fishery of brown trout and combined species of fish, Commission staff used the Instream Flow Incremental Methodology (SRBC Publication No. 191, May 1998) to determine the appropriate passby flow requirement. Commission staff recommends that the project sponsor allow a passby flow of not less than 100 percent of annual average daily flow (ADF), which equals 0.530 cfs (238 gpm), and cease all withdrawals when streamflow immediately downstream of the intake is less than 0.530 cfs.

Staff recommends that the project sponsor modify or replace its intake structure and incorporate a passive passby flow device. The project sponsor should submit its design and a proposed construction schedule for a modified or replacement intake structure within 60 days of the date of this approval for review and approval by Commission staff prior to any construction. During operation of the intake structure, the project sponsor must maintain the passby system, keeping it free of debris and fully functional.

The two on-site wells are used to fill the storage pond and supplement the surface-water withdrawal and stormwater runoff, as needed. The primary well has been in operation since the 1960s and, therefore, predates Commission Regulation §803.43, relating to ground-water withdrawals. The grandfathered ground-water withdrawal from the primary well is estimated to be 64,000 gallons per day (gpd). The second well has been in operation since 1989, and is used to supplement the withdrawal from the primary well, as necessary. Staff finds that the ground-water withdrawal by the project sponsor is not subject to review and approval under Commission Regulation §803.43, unless the project sponsor: (a) increases its combined withdrawal to a 30-day average exceeding 164,000 gpd; (b) increases its withdrawal from the primary well to a 30-day average exceeding 164,000 gpd; or (c) increases its 30-day average withdrawal from the second well to 100,000 gpd or more.

Since the project sponsor currently does not meter the actual quantity of ground water withdrawn, and the wells are capable of producing 540,000 gpd, Commission staff recommends

that the project sponsor install and maintain a meter on each well, accurate to within 5 percent, and keep a daily record of each well's ground-water withdrawal. If the project sponsor should exceed or be expected to exceed the thresholds in Commission Regulation §803.43, the project sponsor must submit the appropriate application for review by the Commission.

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 0.315 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 two 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. The project sponsor shall allow a flow to pass in the unnamed tributary to Sinking Run directly below the intake of not less than 0.530 cfs (238 gpm). When the streamflow below the intake is less than this amount, the withdrawal shall be reduced to maintain 0.530 cfs (238 gpm) in the stream channel below the intake. When the natural flow is equal to or less than 0.530 cfs (238 gpm), no water may be withdrawn, and the entire natural flow shall be allowed to pass the intake to maintain such natural flow in the channel below the intake as may prevail above. The project sponsor shall modify or replace the existing stream intake structure to incorporate a passive passby flow device. The project sponsor shall submit its design and a proposed construction schedule for a modified or replacement intake structure within sixty (60) days from the date of this approval for review and approval by Commission staff prior to any construction. Following approval, the project sponsor shall complete construction in accordance with the approved schedule and shall certify to the Commission that construction has been completed in accordance with the approved design. The passby system shall be kept fully functional and free of debris. The Commission reserves the right to inspect the passby flow device and intake structure at any time.

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 64,000 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 64,000 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 (e) 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 noncompliance.

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 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.

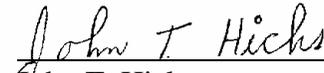
m. This approval is effective until August 15, 2027. The project sponsor shall submit a renewal application by February 15, 2027, and obtain Commission approval prior to continuing operation beyond August 15, 2027.

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: August 15, 2002

  
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John T. Hicks  
Chairman