



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20021019

Approval Date: October 10, 2002

VALLEY GREEN GOLF COURSE

Consumptive Water Use of Up to 0.350 mgd, for Golf Course Irrigation,
Newberry 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 August 23, 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 02050305, Fishing Creek Watershed, Newberry Township, York County, Pennsylvania.

Project Features. The project sponsor has requested approval for the consumptive use of water of up to 0.350 million gallons per day (mgd). The project sponsor calculates the project's maximum average 30-day consumptive water use to be 0.133 mgd and current peak-day consumptive water use to be 0.330 mgd.

The primary source of water is an existing withdrawal from Fishing Creek that predates Commission Regulation §803.44, relating to surface-water withdrawals. The project sponsor has not increased its withdrawal by more than 0.100 mgd since November 11, 1995, the effective date of the regulation, and therefore, is not subject to the regulation.

The project was constructed as an 18-hole golf course in 1960, and has been in continuous operation since that time. The irrigation system for greens and tees was installed in 1967 and expanded to include fairways in 1969. According to the project sponsor, the irrigation system has remained relatively unchanged since 1969, and plans on beginning installation of a new system in 2003.

Water for the irrigation system currently is withdrawn from Fishing Creek and stored in a pond, then pumped to the golf course's irrigation system, which is equipped with a totalizing meter.

According to the project sponsor, the storage pond was constructed prior to 1971 and has a maximum depth of 7 feet. Commission staff has calculated that the storage pond has a surface area of 0.26 acres and, based on an average depth of approximately 4 feet, the storage pond has a maximum storage capacity of approximately 0.339 million gallons. This is sufficient storage for approximately 2 days of irrigation, based on the maximum average 30-day use of 0.133 mgd.

Findings

The project is subject to Commission 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 withdrawn from the pond and used for irrigation. Since the storage pond predates the Commission's consumptive water use regulation, 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 0.350 mgd. Based on an analysis of irrigation records supplied by the project sponsor, Commission staff is recommending approval of the requested quantity, which represents an increase of approximately 7 percent above the current peak-day use of 0.330 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 0.350 mgd, the project sponsor must apply for a modification to this docket at that time.

The project sponsor has agreed to Commission staff's calculated pre-1971 consumptive water use of 0.050 mgd 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 sponsor operates a surface-water intake on Fishing Creek without engineering controls in place to ensure a passby flow is maintained at the site. Fishing Creek is classified as a trout-stocked fishery (TSF) (25 Pa. Code Chapter 93). Commission staff has calculated the 7-day 10-year low flow (Q7-10) for Fishing Creek to be 0.100 cubic feet per second (cfs) (45 gallons per minute (gpm)) at the point of withdrawal. In order to achieve the maximum average 30-day average consumptive use of 0.133 mgd, the project sponsor would need to, at a minimum, maintain a constant 24-hour surface-water withdrawal rate of 84.5 gallons per minute. This rate of withdrawal is greater than 10 percent of the Q7-10 for Fishing Creek (4.5 gpm) at the point of withdrawal, thereby requiring a passby flow to protect aquatic resources and downstream users.

Commission staff recommends that the project sponsor maintain a passby flow of not less than 20 percent of annual average daily flow (ADF), which equals 2.20 cfs (987 gpm), and to

cease all withdrawals when streamflow is less than 2.20 cfs. According to staff's analysis, approximately 64 percent of the time streamflow will not be sufficient to maintain the recommended passby flow rate and meet the golf course irrigation needs. Based on this finding, Commission staff recommends that the project sponsor initiate a study to identify other sources of water to address this deficiency.

Commission staff recommends, as an interim protective measure, that the project sponsor modify its withdrawal from Fishing Creek to allow a minimum stream passby flow equal to the calculated Q7-10 flow of 0.100 cfs (45 gpm) and to cease all withdrawals when streamflow is less than the Q7-10 flow of 0.100 cfs (45 gpm). Staff recommends that the project sponsor modify its intake structure and incorporate a passive passby flow device. Further, Commission staff recommends that the project sponsor install and maintain metering on its withdrawal from Fishing Creek. This interim protective measure should expire four years from the date of this approval.

The project sponsor should submit its intake structure design and a proposed construction schedule within 60 days following Commission action for review and approval by Commission staff prior to any construction.

Further, Commission staff recommends that the project sponsor investigate alternative water supply options for the site to allow for a passby of at least 20 percent of ADF (equivalent to 2.20 cfs or 987 gpm). In this regard, the project sponsor should prepare a plan to develop alternate sources of water supply and/or develop an adequate amount of storage to meet the irrigation demands at the site. The plan should be submitted to the Commission for staff's review and approval within two years.

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 daily quantity of water used for irrigation, minus the pre-1971 consumptive use of 0.050 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.

Decision

The project's consumptive use of water of up to 0.350 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 surface-water withdrawal, accurate to within five (5) percent, and keep daily records of the project's surface-water withdrawal. The project sponsor 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. The Commission reserves the right to inspect all measurement equipment and audit all measurement records.

d. The project sponsor shall, as an interim protective measure, cease all withdrawals when streamflow is below the 7-day 10-year low flow (Q7-10) of 0.100 cfs (45 gpm). The project sponsor shall replace its intake structure and incorporate a passive passby flow device. The project sponsor shall submit its design and a proposed construction schedule 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. The project sponsor may propose an alternative to a passive passby flow device to the Commission for staff review and approval. This interim protective measure shall expire four (4) years from the date of this approval.

e. The project sponsor shall investigate alternative water supply options for the site to allow for a passby flow of not less than 2.20 cfs (987 gpm). In this regard, the project sponsor shall prepare a plan to develop alternate sources of water supply and/or develop an adequate

amount of storage to meet the irrigation demands at the site. The plan shall be submitted to the Commission within two (2) years for staff's review and approval.

f. Upon termination of the interim protective measure described in condition (d), the project sponsor shall allow a flow of not less than 2.20 cfs (987 gpm) to pass in Fishing Creek directly below the intake. The project sponsor shall reduce its withdrawals, as necessary, to allow this amount of flow to pass unless natural streamflow is equal to or less than this amount, at which times the project sponsor shall cease all withdrawals. The project sponsor shall replace its intake structure and incorporate a passive passby flow device. The project sponsor shall submit its design and a proposed construction schedule one hundred eighty (180) days before the termination of the interim protective measures 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. The project sponsor may propose an alternative to a passive passby flow device to the Commission for staff review and approval.

g. 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 0.050 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. 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.

h. The project sponsor shall comply with the water conservation requirements contained in Commission Regulation §804.20(c).

i. 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 0.050 mgd 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 (g) above.

j. 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.

k. 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.

l. 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.

m. 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.

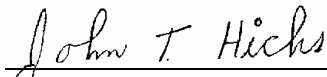
n. Commission approval confers no property rights upon the project sponsor. The securing of all rights necessary and incident to the project sponsor's development and operation of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.

o. This approval is effective until October 10, 2027. The project sponsor shall submit a renewal application by April 10, 2027, and obtain Commission approval prior to continuing operation beyond October 10, 2027.

p. 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: October 10, 2002



John T. Hicks, Chairman
New York Commissioner