



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20020806

Approval Date: August 15, 2002

WHITE DEER GOLF COURSES – LYCOMING COUNTY RECREATION AUTHORITY

Consumptive Water Use of Up to 0.475 mgd, for Golf Course Irrigation,
Brady Township, Lycoming 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 December 26, 1999.

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 45-hole golf course.

Location. The project is located in the West Branch Susquehanna Subbasin, HUC 02050206, Black Hole Creek Watershed, Brandy Township, Lycoming County, Pennsylvania.

Project Features. The project sponsor has requested approval for the consumptive use of water of up to 0.475 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 0.288 mgd, and current peak-day consumptive water use to be 0.426 mgd.

The project was constructed as a 27-hole golf course in 1964, and has been in continuous operation since that time. The original irrigation system, installed in 1964, watered the tees and greens of the 27-hole course. The golf course was expanded to 45 holes in 1989-90. At that time, a new irrigation system was installed to allow for full irrigation of all 45 holes, and the irrigation pond was deepened, and its surface area increased by 1 acre.

The primary source of water is an existing spring-fed pond. Water also can be withdrawn from an unnamed tributary to Black Hole Creek and from an on-site well. Both withdrawals predate Commission Regulations §803.44 and §803.43, relating to surface-water and ground-water withdrawals, respectively.

The metered irrigation system pumps water directly from the spring-fed storage pond to irrigate greens, tees, and fairways. Surface water is gravity-fed from an unnamed tributary to Black Hole Creek to the pond at a maximum rate of 0.1 cubic feet per second (cfs) in accordance with the Pa. Department of Environmental Protection's National Pollutant Discharge Elimination System Permit No. 0114120. Ground water also can be transferred to the pond from the original irrigation well on an emergency basis.

According to the project sponsor, the storage pond was constructed in 1964 and expanded in 1989. The project sponsor has calculated the total a surface area to be 11.5 acres, and the average depth to be approximately 6 feet. Commission staff has calculated a maximum storage capacity for the storage pond to be approximately 22 million gallons, which is sufficient storage for approximately 78 days of irrigation, based on the maximum average 30-day use of 0.288 mgd.

Findings

The project's irrigation water use and evaporative losses are subject to the Commission's consumptive water use approval and reporting requirements, as per Commission Regulation §803.42.

All water used for golf course irrigation, as well as water evaporated from the 1-acre storage pond expansion, is considered to be used consumptively. Evaporation from the storage pond will be calculated by the project sponsor, employing a methodology acceptable to the Commission. 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 0.432 mgd and increased its request after discussions with Commission staff. Based on an analysis of 2001 irrigation records supplied by the project sponsor, Commission staff is recommending approval of 0.475 mgd, which represents an increase of approximately 12 percent above the 2001 peak-day use of 0.423 mgd. This will allow for fluctuations in climatic conditions over the 25-year duration of this approval. Should the project's future consumptive water use exceed or be expected to exceed 0.475 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 0.070 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'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 evaporated from the 1-acre expansion of the storage pond, plus the quantity used for irrigation, minus the pre-1971 consumptive use of 0.070 mgd. If the daily grandfathered

quantity exceeds the project's calculated daily consumptive water use, that day's consumptive water use is considered to be zero.

The project sponsor operates a surface-water intake on an unnamed tributary to Black Hole Creek. Black Hole Creek is classified as a cold-water fishery (CWF) (Title 25, Chapter 93, Pa. Code). Commission staff has calculated the 7-day 10-year low flow (Q7-10 flow) for this stream to be 0.381 cfs (171 gallons per minute (gpm)) at the point of withdrawal. The project sponsor's current withdrawal of 0.1 cfs is greater than 10 percent of the Q7-10 flow at the point of taking, and a passby flow is required to protect aquatic resources and downstream users. Staff recommends that the project sponsor adjust the existing passive passby device to allow a passby flow of not less than 20 percent of annual average daily flow (ADF), which equals 1.01 cfs (454 gpm), and to cease all withdrawals when natural streamflow is less than 1.01cfs.

The project's ground-water withdrawal has been in operation since 1964, but is not metered. The on-site well can be used to fill the storage pond, if needed. The project sponsor has reported that the well is utilized at less than 100,000 gallons in excess of the grandfathered amount of 70,000 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 well that could be used to estimate the withdrawal from the well, staff recommends that the project sponsor install appropriate metering and provide to the Commission documentation of the well's usage.

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 0.475 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 of evaporative loss from the 1-acre expansion of the storage pond, plus the quantity pumped to the irrigation system. The project sponsor shall maintain metering on the irrigation system, accurate to within five (5) percent. Commission staff shall review and approve the method of calculation of evaporative loss from the pond.

c. Within sixty (60) days from the date of this approval, the project sponsor shall install and maintain metering on the on-site well, 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 Black Hole Creek directly below the intake of not less than 1.01 cfs (454 gpm). When the streamflow below the intake is less than this amount, the withdrawal shall be reduced to maintain 1.01 cfs (454 gpm) in the stream channel below the intake. When the natural flow is equal to or less than 1.01 (454 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 passive passby flow device. The project sponsor shall submit its design and a proposed construction schedule for a modified or replacement passive passby flow device 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 of evaporative loss from the one (1)-acre expansion of the storage pond, plus 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 70,000 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 70,000 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.

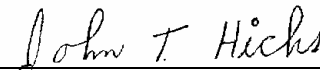
l. Commission approval confers no property rights upon the project sponsor. The securing of all rights necessary and incident to the project sponsor's development and operation of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.

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



John T. Hicks
Chairman



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20020806-1

Approval Date: August 15, 2002

Modification Date: May 29, 2020

LYCOMING COUNTY RECREATION AUTHORITY FACILITY: WHITE DEER GOLF COURSES

**Consumptive Use (Peak Day) of up to 0.475 mgd;
Brady Township, Lycoming County, Pennsylvania**

Susquehanna River Basin Commission (Commission) Docket No. 20020806 authorized the above-referenced project, subject to conditions including consumptive use mitigation requirements for evaporative losses.

On March 13, 2020, the Commission adopted Resolution No. 2020-02 (Resolution) and companion Policy No. 2020-01 (Policy), which clarified the interpretation of consumptive use mitigation rules as applied to certain water impoundment evaporation (ponds, tanks, etc.).

Pursuant to, and consistent with, the Resolution and Policy, the Executive Director hereby modifies this facility's approval to clarify that the evaporative losses from the defined structures are not subject to consumptive use mitigation, in accordance with the conditions set forth below.

Conditions

1. Effective April 1, 2020, consistent with the Resolution and Policy, evaporative losses for this facility's impoundments are not subject to consumptive use mitigation and shall be excluded from reported daily consumptive use quantities.

2. All other limitations and conditions in Commission Docket No. 20020806 not inconsistent herewith shall remain effective.

This modified approval is issued by the Executive Director pursuant to the authority set forth in Commission Resolution No. 2020-02.

Dated: May 29, 2020

Andrew D. Dehoff, Executive Director