

# Susquehanna River Basin Commission

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*a water management agency serving the Susquehanna River Watershed*



July 24, 2007

TO ALL CONCERNED:

At the June 13, 2007 meeting, the draft minutes of the March 14, 2007 Commission meeting were approved as written. Please attach this notice to your copy of the March 14, 2007 minutes.

- DRAFT -

SUSQUEHANNA RIVER BASIN COMMISSION  
1721 N. FRONT ST.  
HARRISBURG, PA 17102

**MINUTES OF THE  
SUSQUEHANNA RIVER BASIN COMMISSION  
June 13, 2007  
#2007-02**

The meeting was held at Cecil Community College Conference Center, 1 Seahawk Drive, North East, Maryland.

**ROLL CALL**

**Commissioners Present**

*Mr. Kenneth P. Lynch*, Director, Region 7, N.Y.  
Dept. of Environmental Conservation (NYDEC)  
*Ms. Cathleen C. Myers*, Dep. Sec. for Water  
Management, Pa. Department of Environmental  
Protection (PADEP)  
*Dr. Robert M. Summers*, Deputy Secretary, Md.  
Department. of the Environment (MDE)  
*Brig. Gen. Todd T. Semonite*, Commander,  
USACE, North Atlantic Division

**Alternate Commissioners  
and Advisors Present**

*Mr. William A. Gast*, Chief, Div. of Water Use  
Planning, PADEP  
*Col. Peter W. Mueller*, District Engineer, USACE,  
Baltimore District

**Staff Present**

*Mr. Paul O. Swartz*, Executive Director  
*Mr. Thomas W. Beauduy*, Deputy Director  
*Mr. Michael G. Brownell*, Chief, Water Resources  
Management Division  
*Ms. Susan S. Obleski*, Director of Communications  
*Mr. David W. Heicher*, Chief, Watershed  
Assessment & Protection Division  
*Mr. Duane A. Friends*, Chief Admin. Officer  
*Mr. Richard A. Cairo*, General Counsel  
*Ms. Deborah J. Dickey*, Secretary to the Comm.

**Also Attending**

*Ms. Amy M. Guise*, Chief, Civil Project  
Development Branch, USACE, Baltimore District

## INTRODUCTION/WELCOME

Maryland Delegate David Rudolph welcomed the Commission to Cecil County, Maryland. After promoting some of the attractions of the area such as the Port Deposit Jetty Project, he added that the people of Cecil County value the river management work performed by the Commission.

Chairman Lynch introduced himself as New York Governor Elliot Spitzer's representative to the Commission and welcomed the audience to the Commission meeting. He commented on the fact that New York State had just introduced its own Chesapeake Bay Strategy and added that the Commission's visit to the Donaldson Brown Riverfront Conference Center, with its commanding view of the Lower Susquehanna River and Chesapeake Bay, reinforced the importance of properly managing the entire river basin.

Commissioner Summers noted Maryland's appreciation for the upstream efforts made by the Commission that result in the protection of the lower Susquehanna River and the Chesapeake Bay, which receives half of its fresh water from the Susquehanna.

Commissioner Myers introduced herself as Pennsylvania Governor Rendell's and PADEP Secretary McGinty's representative to the Commission. She mentioned Pennsylvania's Tributary Strategies Program that is now up and running. The impact of this effort is already being felt in such places as the Susquehanna Flats at the head of the Chesapeake Bay. Pennsylvania is also launching a storm water management program that, in addition to minimizing the volume and velocity of storm water, will also emphasize the quality of storm water. Finally, she noted the renewed efforts being made in water conservation that will look at current practices and encourage the efficient use of water.

Commissioner Semonite noted his recent appointment as the U.S. member of the Commission. One of his major objectives will be to get federal agencies to speak with one voice in the support of the Commission's mission. He went on to mention several projects of particular importance to the river basin's management, including the Whitney Point Lake Section 1135 Project Modification that will help protect the environment and augment flows during periods of drought and low flow.

The Executive Director pointed out that Maryland was the first state to pass enabling legislation for the Susquehanna River Basin Compact, though New York's Governor actually signed the state's compact enabling act first. A key player in securing Maryland passage of the Compact was Sen. William James of Bel Air, Harford County, Maryland.

He went on to refer to the upstream efforts that have beneficial impacts on Maryland as mentioned by Commissioner Summers. Water quality monitoring is showing decreasing trends in nitrogen, phosphorous and suspended sediments. Also, there has been a marked improvement in the growth of submerged aquatic vegetation in the upper bay.

## **1. Minutes of the March 14, 2007 Commission Meeting**

On a motion by Commissioner Summers, seconded by Commissioner Myers, the minutes of the regular business meeting of March 14, 2007 were unanimously adopted as written.

## **2. Hydrologic Conditions Report**

Water Management Division Chief Michael Brownell presented information on current hydrologic conditions in the basin. To assess these conditions, the Commission monitors precipitation, stream flows and groundwater levels.

From a fairly wet beginning to 2007, the basin had moved into a very dry month of May, resulting in rapidly falling stream flows and groundwater levels. Despite this depletion of stream flows and groundwater levels, they remain in the normal range for this time of year and no water suppliers have reported any problems. SRBC will continue to closely monitor the situation and, if dry conditions persist, will convene the Interagency Drought Coordinating Committee.

## **PRESENTATIONS**

### **3. Maryland Informational Presentations**

#### **a. Migratory Fish Runs**

Mr. Larry Miller of the U.S. Fish & Wildlife Service reported on the 2007 migratory fish runs through the fish passage facilities located at the lower Susquehanna River hydroelectric projects. The numbers of American shad migrating through the fish passage facilities on the lower Susquehanna River are down for 2007. This follows a trend of declining numbers in recent years. Several factors appear to be at work in the falloff, including an unknown mortality factor that is affecting fish at sea, adverse river conditions such as rapidly warming water temperatures that reduce the already short migration window, and problems with the fish passage facilities at Holtwood and York Haven.

With respect to the fish passage facilities, only about 31% of the shad passing through the Conowingo fish lift are subsequently passing through the Holtwood facility. Safe Harbor appears to be passing fish well, but further problems are then encountered at the York Haven facility. What all of this means is that many of the spawning shad are not reaching the free flowing waters of the river above York Haven where spawning conditions are favorable. Poor spawning runs now translate into poor spawning runs in future years, as fewer fish are available to out-migrate to the sea and then return as mature adults.

#### **b. Coastal Plain Aquifer Study**

Mr. Bob Shedlock of the U.S. Geological Survey (USGS) reported on an ongoing study of the coastal plain aquifer being carried out jointly by USGS, the Maryland Geological Survey and the Maryland Dept. of the Environment (MDE). Water levels in the coastal aquifer have been steadily dropping in recent years as pumping has increased. In the past, there were actually

artesian pressures in the aquifer. Pumping now threatens to take the groundwater levels below the state standard of 80% of natural conditions. Some of the cones of depression extend into the other states sharing the Delmarva Peninsula with Maryland, indicating a need for interstate collaboration.

This is likely to be an 8 to 9 years study effort costing between \$10 and \$12 million. In the end, the partners hope to learn enough to enable them to construct a model of the aquifer and enhance monitoring.

c. Exelon Presentation – Pre-application Process

Ms. Colleen Hicks of the Exelon Corporation spoke to the Commission about the 2014 federal relicensing of the Conowingo and Muddy Run Hydroelectric Projects on the lower Susquehanna River. She described the pre-application process that the company is currently conducting, including meetings with stakeholders to review relicensing issues. She thanked the Commission for the cooperation that it had already given. Actions that Exelon is already planning include improvements to recreational facilities on the east side of the dam to allow better access to anglers.

## **ACTION ITEMS**

### **PUBLIC HEARING**

The Commission convened a public hearing covering three topics: 1) action on project applications, 2) an enforcement action regarding South Slope Development Corporation – Song Mountain Ski Resort, and 3) revision of the SRBC Comprehensive Plan to incorporate the Whitney Point Lake Section 1135 Project Modification and the Lancashire No. 15 AMD Treatment Plant. A stenographic transcript was made of this hearing and is part of the Commission’s record.

#### **4. Regulatory Program Actions**

a. Project Applications

Michael Brownell first provided some background information on the Commission’s review authority and its consumptive use and water withdrawal regulations. The main purpose of these regulations is to avoid adverse environmental impacts and conflicts among users, particularly during periods of drought and low flow. Cumulative impacts are also considered. He explained the methods available for compliance with the consumptive use regulation, including discontinuance of use, provision of storage water, and payment into the SRBC Water Management Fund to enable purchase of water storage for release during low flow periods.

Mr. Brownell listed the standard requirements for each project sponsor, including: 1) notice of application, 2) coordination with member jurisdictions, 3) aquifer tests for groundwater withdrawals, 4) metering, monitoring, and reporting of water use, 5) mitigation or

other special conditions where there is a potential for adverse impacts, 6) a right of inspection to ensure compliance, 7) water conservation standards, and 8) docket reopening authority.

The dockets recommended for action included the following projects<sup>1</sup>:

- Town of Conklin - Well 5 (Exhibit A1)
- Far Away Springs – Brandonville (Exhibit A2)
- Glenn O. Hawbaker, Inc.-Pleasant Gap Facility (Exhibit A3)
- New Enterprise Stone & Lime Co., Inc.-Tyrone Quarry (Exhibit A4)
- East Cocalico Township Authority - Wells F & M (Exhibit A5)
- Mount Joy Borough Authority (Exhibit A6)
- Honey Run GIBG LLC (Exhibit A7)
- Town of Erwin - IP Well 2 (Exhibit A8)
- Hughesville Borough Authority (Exhibit A9)
- Dart Container Corp. of Pennsylvania - Well B (Exhibit A10)
- New Enterprise Stone & Lime Co., Inc.-Ashcom Quarry (Exhibit A11)
- Golf Enterprises, Inc., dba Valley Green Golf Course (Exhibit A12)
- Centre Hills Country Club (Exhibit A13)
- AES Ironwood, LLC (Exhibit A14)

Mr. Brownell described the projects and the proposed conditions of approval for each.

Commissioner Myers announced that she was abstaining from the Commission's vote on the AES Ironwood, LLC project application due to a prior relationship with that business when she was a practicing attorney.

With respect to the Far Away Springs Project, she added that the Commonwealth does take very seriously the concerns expressed by local residents regarding the effect of the bottling project on local water supplies and a nearby Class A fishery. It is fortunate that SRBC has the legal ability to assess these concerns and set appropriate conditions for the operation of the project. In this case, the Department is reasonably satisfied that the project's operation under the conditions imposed by the pending SRBC docket approval will not harm the environment or interfere with other users. Further, all SRBC approvals contain a standard provision that allows the Commission to reopen any docket and make additional orders if conditions change or unanticipated problems arise.

There has also been discussion with the project sponsor about making monitoring results available to the public. Direct citizen monitoring is probably not practical in this case.

The Executive Director amplified the points made by Commissioner Myers, adding that the Commission takes compliance with docket approvals very seriously. If a project sponsor fails to comply with docket conditions or any applicable regulation, the Commission will suspend, modify or revoke its approval and, as appropriate, impose civil penalties.

Riverkeeper Michael Helfrich questioned why projects such as Far Away Springs and Honey Run Golf Course need to establish their uses in areas where valuable resources like natural brook trout fisheries exist. He pointed out that Honey Run is only a small stream that a person can leap across. What will be the effect of these withdrawals on such small streams? Mr. Brownell

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<sup>1</sup> Docket decisions are not included with the hard copy of the minutes. However, they are available upon request and at [www.srbc.net](http://www.srbc.net).

noted that a pass-by requirement will be in effect for Honey Run that will effectively prohibit withdrawals from the stream about 30% of the time.

On a motion by Commissioner Summers, seconded by Commissioner Semonoite, the Commission unanimously approved the staff recommendations for the dockets presented, with the exception of the AES Ironwood, LLC project from which Commissioner Myers abstained and which was therefore approved by the three affirmative votes of the remaining members.

b. Enforcement Action – South Slope Development Corporation

At its March 2007 meeting, the Commission agreed to defer until June 2007 a “Show Cause” proceeding for South Slope Development Corporation, owners of the Song Mountain Ski Resort, Town of Preble, Cortland County, New York. (See details and background information in minutes of March 14, 2007 Commission meeting) This proceeding was scheduled because of certain alleged violations of docket conditions included in the company’s docket approval of November 4, 1999.

At the March meeting, the Commission had also rejected a settlement offer and urged that, during the time between the March and June meetings, the project sponsor and SRBC staff resume settlement negotiations and that the project sponsor take steps to submit an application to the Commission to modify their previous approval, thereby avoiding future docket approval violations.

The Deputy Director, who had been appointed as the prosecuting officer for purposes of the “Show Cause” proceeding, presented the enforcement history of the case, including a review of numerous enforcement notices that had been sent to the project sponsor.<sup>2</sup> Since the March meeting, however, the project sponsor had cooperated in moving toward the submission of an application to modify its previous approval and had submitted revised settlement terms that staff finds acceptable. The settlement involves the payment of \$45,000, \$30,000 of which can be waived if the project sponsor achieves full compliance. If any further violations occur, \$1,000 per day stipulated penalties would be imposed.

Commissioner Myers moved to accept the terms of the settlement agreement presented by the Deputy Director, expressing hope that the project sponsor will complete all compliance steps and avoid future violations. This motion was seconded by Commissioner Summers and unanimously adopted by the Commission.

**5. Comprehensive Plan Amendment**

Mr. Cairo presented a proposed resolution (Exhibit B) that would revise the SRBC Comprehensive Plan to include the Whitney Point Lake Section 1135 Modification Project and the Lancashire No. 15 AMD Treatment Plant. If implemented, these projects will release water for environmental improvement and low flow augmentation.

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<sup>2</sup> This enforcement history was made a part of the stenographic record of this hearing.

The Commission has authority to carry out projects for storage and release of water under Section 4.2 of the Susquehanna River Basin Compact. Also, in the early 1980s just prior to the time it acquired storage in the Cowanesque Lake Flood Control Project in Tioga County, Pa., the Commission inserted language in the Comprehensive Plan indicating that it would investigate and, as it deems appropriate, make all necessary commitments to acquire and to manage water supply storage available or to become available in public or private water storage reservoirs in the basin. This language laid the ground work for inclusion of specific projects for storage and release.

The Whitney Point Lake Section 1135 Project Modification is the result of efforts made by the Commission since 1999 to adopt new operations at the Whitney Point Lake Reservoir in Broome County, New York for environmental restoration purposes. This effort has been carried out in close cooperation with the U.S. Army Corps of Engineers and the State of New York. The State of New York appropriated \$2 million to cover the local costs and the Corps of Engineers approved \$4.3 million from its FY 2007 omnibus appropriation, to be dedicated for the completion of this particular project.

Whitney Point Lake is a reservoir constructed on the Otselic River by the Corps of Engineers in 1942 primarily for flood control purposes. The modifications to be made to the Lake will result in the current summer lake level being maintained year round, allowing for downstream releases during low flow periods when aquatic ecosystems are stressed.

The releases during these low flow periods will range from 32.5 to 65 million gallons per day to benefit the aquatic habitat and, as an added benefit, to mitigate the impacts of agricultural consumptive water use in the New York portion of the Susquehanna River Basin.

Among other things these releases are expected to reduce stresses on the ecosystem, protect susceptible aquatic species and increase the population of others, including amphibians and mammals. The streams in downstream order from the Lake that will be receiving the benefits of these releases include the Otselic River, the Tioughnioga River, the Chenango River and the Susquehanna River.

There will be accompanying improvements to the project's recreational facilities as well, including upgraded sewer and water systems; improved beaches, swim areas and boat ramps; widened and paved roads; and constructed fish habitat structures in the Lake.

Regarding the Lancashire Project, SRBC found that 15.7 million gallons of water a day are needed to compensate or "mitigate" agricultural consumptive use in the Pennsylvania portion of the basin. Responding to a request by the Commission, the Pennsylvania legislature appropriated \$6.1 million to be used for the Lancashire Project and similar projects for the treatment and release of acid polluted mine water. The Lancashire Project alone would provide about 10 of the 15.7 mgd needed to mitigate agricultural consumptive use. It would also help restore a 25 mile reach of the West Branch Susquehanna River that is impaired by abandoned mine drainage or AMD.

Prior to commencing a project for storage and release of water, Section 4.4 requires that the Commission engage in a coordination process with its member jurisdictions. This has been accomplished through the SRBC 2007 Annual Water Resources Program adopted by the Commission at its March 2007 meeting. All the member jurisdictions were closely consulted on

the programs and projects to be included in the Water Resources Program, including these projects, both of which are listed in the 2007 Program. The Water Resources Program is based upon the Comprehensive Plan and sets forth a 6-year vision of the projects and facilities that the Commission proposes to be undertaken by the Commission itself and by other authorized governmental and private agencies, organizations and persons.

In connection with prior projects for storage and release of water at Cowanesque and Curwensville Lakes, the Commission staff undertook a careful review of public and private rights in the waters of New York and Pennsylvania. There have been no substantial changes in the law of either state with respect to public and private rights since that time. In addition, these projects do not in any way threaten to diminish or otherwise adversely affect the exercise of public and private water rights in New York and Pennsylvania. If anything, these projects will enhance such rights by providing surface water of good quality that will be available to all downstream users.

No public comments were made following Mr. Cairo's presentation. The Executive Director read the resolves of the proposed resolution and requested its adoption by the Commission. On a motion by Commissioner Myers, seconded by Commissioner Semonite, the Commission unanimously adopted the resolution including the two projects in the Comprehensive Plan. This concluded the public hearing portion of the meeting.

## **6. FY-09 Budget**

The Chief Administrative Officer presented a proposed FY-09 Budget in the amount of \$4,850,000 covering the period July 1, 2008 to June 30, 2009. Revenue sources are based on member contributions totaling \$2,927,000, grants/other income of \$1,923,000, and a transfer from the Water Management Fund of \$200,000. The budget includes an overall increase in expenditures of 5.5%, mainly in the areas of personnel costs and special contractual services. Mr. Friends presented a resolution (Exhibit C) providing for adoption of the budget for FY-09.

Commissioner Summers moved approval of the proposed FY-09 Budget as presented. This motion was seconded by Commissioner Myers and unanimously adopted by the Commission. The approved budget will now be submitted to the respective budgetary offices of the member jurisdictions.

## **7. Grant/Contract Approvals**

Watershed Assessment and Protection Chief Dave Heicher presented a list of grants for Commission ratification.

### **a. Growing Greener Project – Water Resources Technical Assistance Center Project**

This work is to assist PADEP in implementing Section 3120(a) of Act 220 of 2002, which requests PADEP to establish and maintain the statewide Water Resources Technical Assistance Center. Under this grant, PADEP contributes \$100,000 and SRBC \$20,000. The grant received a 10 out of 10 on the SRBC grant evaluation scale.

b. Update Flood Mapping and Expand/Enhance the Gaging and Forecast Network

This grant will be used to improve flood forecasting and warning by upgrading the existing river gage network and producing flood inundation maps in the vicinity of Binghamton, New York. The State of New York would provide the entire amount of \$500,000 for this effort. The grant received a 9 out of 10 on the SRBC grant evaluation scale.

c. Grant Approval – FY 2007 Section 106 Water Pollution Control

This grant will assist SRBC in establishing and maintaining adequate measures for the prevention and control of surface water pollution and EPA-approved Section 106 program activities. Mr. Heicher went on to describe some of those activities, including large river assessments, coordination of TMDL development, Section 305(b) assessments, migratory fish restoration, GIS/data management, public participation and outreach, and aquatic nuisance species monitoring. The EPA would provide \$557,200, to be matched by \$47,847 from the SRBC. This grant received a 10 out of 10 on the SRBC grant evaluation scale.

d. Contract Approval – USGS Joint Funding Agreement – Act 220 Program

In order to assist PADEP in updating the Pennsylvania State Water Plan, SRBC, in cooperation with the U.S. Geological Survey (USGS) will perform assessments in the Susquehanna River Basin by using the USGS water availability screening tool and water use analysis tool. The contract is for the portion of work to be performed by USGS. The total amount of the contract is \$179,000.

e. Contract Approval – Contractor Assistance & Materials for the Paxton Creek Stormwater Project

Utilizing funds from a National Fish & Wildlife Foundation Grant, this contract covers the total of all landscaping materials and design for the five sites in the Paxton Creek Stormwater Project. The total amount of the contract is \$277,000.

Commissioner Summers moved ratification of all the grant and contract proposals presented by Mr. Heicher. This motion was seconded by Commissioner Semonite and approved by the affirmative votes of the United States, Maryland and New York. The Executive Director added a word of thanks to the member jurisdictions that sponsor the grant programs which allow the Commission to accomplish so much.

**8. Election of Officers**

On a motion by Commissioner Semonite, seconded by Chairman Lynch, Kathleen A. McGinty of Pennsylvania was unanimously elected Chair of the Commission, and Dr. Robert Summers of Maryland was unanimously elected Vice Chair of the Commission for the fiscal year beginning July 1, 2007 and ending June 30, 2008. By tradition, the Chair and Vice Chair of the Commission rotate among the member jurisdictions.

## **9. Maurice K. Goddard Award**

The Commission presented its Maurice K. Goddard Award for environmental excellence to William A. Gast, Alternate Member of the Commission from Pennsylvania and long time PADEP employee. Mr. Gast has made invaluable contributions to the Commission's work over his many years of service, including his oversight and counsel on SRBC regulatory activities and his service on SRBC's Water Resources Management Advisory Committee (WRMAC). Mr. Gast retired at the end of June 2007 after nearly 40 years of service to the Commonwealth.

Commissioner Myers noted that Mr. Gast has been her right hand on matters relating to watershed management in Pennsylvania. Mr. Gast was involved in the preparation of the Pennsylvania State Water Plan in the 1970s and most recently has worked on the new State Water Plan being developed under Act 220. He was instrumental in helping the state obtain a basic measurement tool that will allow the determination of the amounts of water needed in streams.

He has also been very much involved in the management of the Delaware River Basin, where he learned much about dealing with oversubscription of a basin's water resources. He has been able to apply these lessons elsewhere in Pennsylvania, including the Susquehanna Basin, where increasing demands from users are beginning to be felt.

In addition to his many talents as an engineer and water manager, Mr. Gast is also an excellent writer and communicator. She will greatly miss his services to the Commonwealth.

## **PUBLIC COMMENTS**

Riverkeeper Helfrich raised a concern about the accumulating load of sediment behind Conowingo Dam and the threat it poses to the lower river and bay. He wondered if anything is going to be done to solve this problem and requested that the Commission take a leadership role in moving toward a solution. He went on to address other topics, including declines in the American eel population, the important effects of shade trees on stream metabolism, and the adverse affects of withdrawals from streams.

Mr. Gast pointed out that the Commission is looking much closer at the local impacts of stream withdrawals and is working to develop better instream flow standards for warm water streams. Mr. Heicher added that the information being obtained from the Commission's ongoing subbasin survey work is being incorporated into the instream flow efforts. Commissioner Myers reiterated that, while the basin's water resource managers do have instream flow information for cold water streams, there is a paucity of information on warm water streams. That is why the agencies are now concentrating their instream flow efforts on warm water streams.

Commissioner Summers noted that the same kind of instream flow studies are being carried out by Maryland and Virginia, and Commissioner Myers indicated that such studies are also proceeding in the States of Connecticut and New Jersey. Both agreed that these parties should be brought together in a cooperative effort.

Regarding the problem of sediment behind Conowingo Dam, Commissioner Myers pointed out that the real solution to the problem lies in stopping sediment at its source. This is

what Pennsylvania is now focusing on. Much of the problem with sediments can be traced to so-called “legacy” sediments originating at old mill dam sites on lower Susquehanna tributaries. The streams are essentially perched on these old sediments, facilitating the transport of the tons of sediment that have built up at the old mill dam sites over many years.

Regarding the decline in eel populations, Commissioner Myers said that much of this decline can be attributed to certain wrong assumptions that were made about eel migration when the fish passage facilities were first installed at the lower Susquehanna hydroelectric projects. Future adjustments will correct these mistakes.

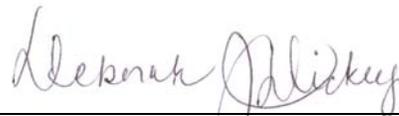
Audience member Jeanette Hillyer commented on what she termed “overdevelopment” and the accompanying loss of wetlands and forests. Commissioner Mueller replied that the U.S. Army Corps of Engineers regulates wetland encroachment under Section 404 of the Clean Water Act. If developers use wetlands, they have to obtain permits from the Corps and from state regulatory agencies that help administer Corps general permits under Section 404. If any developers are not abiding by this requirement, the Corps would certainly be interested in knowing about it.

#### **ADJOURNMENT**

There being no further business before the Commission, the Chairman adjourned the meeting at 12:08 p.m. The next regular meeting of the Commission is scheduled for September 12, 2007 in Binghamton, New York.

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Date Adopted



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Deborah J. Dickey  
Secretary to the Commission



# SUSQUEHANNA RIVER BASIN COMMISSION

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**Docket No. 20070601**

**Approval Date: June 13, 2007**

## TOWN OF CONKLIN

Groundwater Withdrawal (30-Day Average) of 0.350 mgd from Well 5,  
and a Total System Withdrawal Limit (30-Day Average) of 0.500 mgd,  
for Public Water Supply,  
Town of Conklin, Broome County, New York

### Review Authority

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the application on March 26, 2007.

### Description

**Purpose.** The purpose of the application is to request approval for the withdrawal of groundwater for distribution in a public water supply system.

**Location.** The project is located in the Upper Susquehanna Subbasin, HUC 02050101, Susquehanna River Watershed, Town of Conklin, Broome County, New York.

**Project Features.** The project sponsor has requested approval for withdrawal (30-day average) of 0.350 million gallons per day (mgd) from Well 5. Well 5 will be used as a second source of water for the public supply system that currently relies on Well 6. A groundwater withdrawal of 0.350 mgd (30-day average) was previously approved for Well 6 in Commission Docket No. 20031001, dated October 9, 2003. Well 5 will replace Well 1A, which was damaged by flooding in June 2006.

Specific locational information concerning discrete water-related project features has been withheld for security reasons.

In addition to Well 1A, the Town of Conklin has discontinued use of three other wells. Well 3 was abandoned and sealed March 17, 2004; Well 4 was abandoned and sealed July 20, 2004; and Well 2 has been abandoned but not yet sealed. The Commission previously approved a 0.500 mgd withdrawal from Well 4 on September 8, 1988, in Commission Docket No. 19880904.

Well 5 is located 100 feet from Well 6, and both are screened in sand and gravel valley-fill alluvium. Well 5 was constructed with a 10-inch-diameter, steel screen from a depth of 65 feet to 80 feet below ground surface (bgs). The well is cased with 12-inch-diameter, steel casing to a depth of 65 feet.

The public water supply system has an existing average daily demand of 0.224 mgd, and an existing maximum daily demand of 0.590 mgd. The average and maximum daily demands are projected to grow to 1.500 and 2.000 mgd, respectively, by 2022. The project sponsor has requested an instantaneous pumping rate of 750 gallons per minute (gpm) from Well 5. Well 6 pumps at an instantaneous rate of 1,500 gpm, with a 30-day average daily withdrawal of 0.350 mgd. Combined, the wells will yield 2,250 gpm. The project sponsor plans to pump the wells at night during non-peak hours and store the water in storage tanks.

**Aquifer Test.** A 72-hour, constant-rate aquifer test of Wells 5 and 6 was conducted on November 2-5, 1999, with the two wells pumping concurrently throughout the test. Separate stepped-rate pumping tests of Wells 5 and 6 preceded the constant-rate aquifer test. During an 8-hour, stepped-rate pumping test, Well 5 was pumped at rates varying from 278 to 906 gpm.

The testing was not pre-approved by Commission staff. With Wells 5 and 6 pumping at 767 and 1,678 gpm, respectively (2,445 gpm combined rate), 29.65 feet of drawdown occurred at Well 5 and 11.58 feet of drawdown occurred at Well 6 after 72 hours of pumping. Drawdown of 1.9 feet occurred after 72 hours of pumping at an observation well located 100 feet from both Wells 5 and 6.

**Coordination.** The New York State Department of Environmental Conservation (NYSDEC) approved the withdrawals from Wells 5 and 6 on March 27, 2003, and imposed a system limit of 0.500 mgd for all well sources.

## Findings

The project is subject to Commission approval and reporting requirements, as per Commission Regulation §806.4(2).

Commission staff recommends approval of a 30-day average withdrawal of 0.350 mgd from Well 5, and a total system 30-day average withdrawal of 0.500 mgd. Commission staff recommends approval of a peak instantaneous pumping rate of 750 gpm for Well 5.

Commission staff recommends waiving the requirement for prior approval of the aquifer testing.

The high pumping rates of the aquifer testing indicated that the valley-fill aquifer at the site of Wells 5 and 6 likely has a high transmissivity. The project sponsor's consultant provided no interpretation of the pumping test or projection of long-term impacts.

In Commission Docket No. 20031001, Commission staff evaluated potential adverse impacts by determining aquifer transmissivity from published reports and available data (analysis of recovery and the stepped-rate pumping tests). Using this transmissivity and a pumping rate of 0.500 mgd (the 30-day average total system withdrawal limit), Commission staff projected a minimal long-term drawdown (less than 0.6 feet) at distances of more than 100 feet from Wells 5 and 6. Therefore, Commission staff finds that there is likely minimal impact to any existing nearby water users and the aquifer.

Commission staff also evaluated groundwater availability in the vicinity of the wells using a U.S. Geological Survey (USGS) report (WRI 86-4123). The local average annual recharge to the valley-fill aquifer was determined to be more than 7.000 mgd. The total system withdrawal of 0.500 mgd for the Town of Conklin is less than 10 percent of this average annual recharge. Further, the USGS study documented that high capacity pumping wells in this valley-fill aquifer induce large quantities of surface water to infiltrate from the nearby Susquehanna River. In the extreme case, if all of the 0.500 mgd withdrawal of the Town of Conklin was induced from the Susquehanna River, it would constitute only 0.4 percent of the Susquehanna River's Q7-10 low flow (192.4 cubic feet per second [cfs], or 124.000 mgd) in this area.

Pumps for the water system are housed in a treatment building located within the 100-year floodway. The project sponsor has elevated and flood-proofed the building to 4 feet above the 100-year flood elevation, and plans to install a vent to extend 7 feet above the 100-year flood elevation. Water from Well 5 will require treatment for iron and manganese.

The project is subject to the Commission's water conservation requirements, as per Commission Regulation §806.25(a). The water system is 100 percent metered, which is in compliance with this regulation, and the Town of Conklin reports unaccounted for water losses of less than 20 percent, which is in compliance with Commission Regulation §806.25(a)(1).

The project sponsor has paid the appropriate application fee in accordance with Commission Regulation §806.13, and in accordance with Commission Resolution No. 2006-08. The project sponsor has provided all proofs of notification as required by Commission Regulation §806.15.

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.

This project is not required for the optimum planning, development, conservation, utilization, management, and control of the water resources of the basin and will not significantly affect the water resources of the basin.

### **Decision**

1. The project's groundwater withdrawal of 0.350 mgd (30-day average) from Well 5 and a total system withdrawal limit of 0.500 mgd (30-day average) are approved pursuant to Article 3, Section 3.10, of the Compact.

2. The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision.

3. The project sponsor shall comply with all Commission regulations, including groundwater withdrawal monitoring and reporting requirements contained in Commission Regulation §806.30.

4. The project sponsor shall keep daily records of the metered withdrawals in Well 5. The required reporting data shall be submitted to the Commission quarterly, and as otherwise required. Quarterly monitoring reports are due within thirty (30) days after the close of the preceding quarter.

5. Within sixty (60) days from the date of this approval, the project sponsor shall install a meter, accurate to within five (5) percent, on Well 5. The project sponsor shall notify the Commission, in writing, when the meter is installed.

6. The constant-rate pumping test requirement specified in Commission Regulation §806.12 is hereby waived.

7. The maximum instantaneous rate of production from Well 5 shall not exceed 750 gpm.

8. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §806.25(a).

9. Pursuant to Article 12, Section 12.2, of the Compact, this project is hereby included in the Commission's Comprehensive Plan.

10. 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.

11. 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.

12. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the Commission may suspend, modify, or revoke its approval of same, and may impose appropriate 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. 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 penalties, regardless of the period of noncompliance.

13. 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 water resources. The Commission, upon its own motion, may at any time reopen any project approval and make additional corrective modifications that may be necessary.

14. 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.

15. This approval is effective until June 13, 2022. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than December 13, 2021, the existing approval shall be deemed extended until such time as the Commission renders a decision on the application.

16. The project sponsor has a period of three (3) years from the date of this approval to initiate the project or such approval will automatically expire, unless an extension is requested by the project sponsor and approved by the Commission. Likewise, if the project is discontinued for such a time and under such circumstances that an abandonment of the project may be reasonably 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: June 13, 2007

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Kenneth P. Lynch, Chair  
New York Commissioner



# SUSQUEHANNA RIVER BASIN COMMISSION

1721 North Front Street • Harrisburg, Pennsylvania 17102-2391

Phone (717) 238-0423 • Fax (717) 238-2436

Web <http://www.srbc.net>

**Docket No. 20070603**

**Approval Date: June 13, 2007**

## **FAR AWAY SPRINGS – BRANDONVILLE**

Groundwater Withdrawal (30-Day Average) of 0.079 mgd from Spring 1,  
When Available, and the Consumptive Water Use of up to 0.200 mgd,  
for Bulk Hauling and Water Bottling,  
East Union and Mahanoy Townships, Schuylkill County, Pennsylvania

### **Review Authority**

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the application on January 29, 2007, and amendments to the application on March 24, 2007.

### **Description**

**Purpose.** The purpose of the application is to request approval for the withdrawal of groundwater and the consumptive use of that water for bulk hauling and bottling of spring water.

**Location.** The project is located in the Middle Susquehanna Subbasin, HUC 02050107, Catawissa Creek Watershed, East Union and Mahanoy Townships, Schuylkill County, Pennsylvania.

**Project Features.** The project sponsor has requested approval for the withdrawal (30-day average) of 0.200 million gallons per day (mgd) from Spring 1, and the consumptive use of up to 0.200 mgd for bulk hauling and bottling of spring water at a proposed on-site bottling facility.

The spring is located on the northern flank of Locust Mountain, immediately below the ridgeline, on land owned by the Girard Estates. The existing treatment and bulk water hauling facility, and the proposed on-site water bottling facility, are located at the toe of the slope, more than one mile from the spring. The project sponsor has a legal agreement with the Girard Estates to maintain control of the project.

Specific locational information concerning discrete water-related project features has been withheld for security reasons.

Spring 1 is located in the headwaters of an unnamed tributary to Davis Run, which is a tributary to Catawissa Creek. The unnamed tributary is locally called Sandy Creek and flows into the Pumping Station Reservoir. The Pumping Station Reservoir, owned by the Borough of Shenandoah, is a 4-acre reservoir used for recreation, fire and emergency supply, and serves as water supply to the Pumping Station Association cooperative hatchery. Currently, the reservoir has no minimum release requirements.

Prior to encapsulation, the spring naturally spilled at ground surface contributing to the headwaters to Sandy Creek.

The spring encapsulation entailed excavating to a depth of approximately 15 feet below ground surface (bgs), and installing a 12-foot high and 5-foot wide stainless steel tank that is perforated on the bottom and rests on approximately 3 feet of crushed stone. The 3-foot annulus around the tank is filled with #2 crushed stone. A slotted polyvinyl chloride (PVC) bottom drain, located at approximately 14 feet below grade, is installed to rapidly dewater the tank and remove trapped sediment. The tank is capped with a 6-inch clay seal, 6 inches of topsoil, and a concrete pad with a locking access porthole.

Intercepted groundwater is siphoned by gravity to the treatment building using a 4-inch high density polyethylene (HDPE) pipeline. An 8-inch PVC slotted pipe is installed above the siphon line to drain overflow water (manually operated at a valve box). The water is treated and then stored in a 25,000-gallon steel storage tank at the load-out facility. Water will be periodically removed from the storage tank by pumping the stored water directly into tanker trucks. According to the project sponsor, water will also be pumped directly to an on-site bottling facility, when it is constructed.

**Aquifer Testing.** The project sponsor has requested that the aquifer testing requirement be waived for Spring 1. Spring 1 is located in the headwaters of Sandy Run and, due to topographic location and the relatively shallow completion depth (15 feet) of the encapsulation, any pumping-induced drawdown during testing would be of limited aerial extent. There are no groundwater users or wetlands in the immediate area of Spring 1. The project sponsor provided several months of induced flow data in support of its waiver request.

Commission staff recommends that the request to waive the required constant-rate aquifer testing be granted, based on its evaluation of groundwater availability and limited potential from adverse impacts to existing uses.

**Public Comment.** The Commission received numerous letters, telephone inquires, and a petition having more than 350 signatures of concerned citizens regarding the project application. These included contacts from federal, state and local elected officials. In response to the expressed concerns, Commission staff held a public information meeting at the Brandonville Fire Company, located in East Union Township, Pennsylvania, on May 2, 2007. Commission staff

presented its preliminary findings with respect to Far Away Springs' pending application and received comments from residents.

In general, public concern was focused on the impact of the proposed withdrawal on the local groundwater/drinking water supply and high quality surface water resources, particularly during dry weather periods. Specific concerns were expressed with regard to impacts to residential wells, the Pumping Station Reservoir, and the high quality coldwater fishes (HQ-CWF) protected water use designation for the Davis Run Basin. The residents requested that the application be carefully scrutinized and that, if approved, stringent monitoring be established, and that the project be held to strict enforcement of any operating conditions established.

**Coordination.** Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP) Northeast Region Office and conducted two field inspections with the Pennsylvania Fish and Boat Commission (PFBC) during review of the project. PADEP previously issued Permit No. 5406501, and has reviewed this docket for consistency with its requirements.

### **Findings**

The project is subject to Commission review and approval standards, including Commission Regulations §806.21 and §806.23.

All water pumped to tanker trucks at the loading station and to the proposed on-site bottling facility is considered to be consumptively used. Commission staff recommends that the project sponsor install separate meters to measure the daily quantity of water pumped to tanker trucks at the loading station and to the on-site bottling facility. The project sponsor should install appropriate metering on Spring 1, monitor withdrawals daily, and report these data quarterly.

The project sponsor requested approval for a consumptive water use of up to 0.200 mgd. Based on PADEP's prior approval for treatment capacity of 139 gallons per minute (gpm), Commission staff is recommending approval of the requested quantity as a maximum day withdrawal from Spring 1. However, Commission staff recommends approval of a 30-day average withdrawal rate of 0.079 mgd, based on the groundwater availability analysis and information submitted by the project sponsor.

The project's consumptive use of water is subject to mitigation requirements, as specified in Commission Regulation §806.22(b). To satisfy these requirements, the project sponsor proposes to make quarterly payments to the Commission in lieu of providing actual mitigation water. The payment will be based on the daily quantity of water pumped to the tanker trucks and to the bottling plant.

Commission staff has calculated the 7-day, 10-year low flow (Q7-10) for Sandy Run at the well site to be 0.11 cubic feet per second (cfs) (49.37 gpm). The rate of withdrawal (139 gpm) from Spring 1 is greater than 10 percent of the Q7-10 flow, thereby requiring a passby flow to protect aquatic resources and downstream users.

Spring 1 is located in the headwaters area of an unnamed tributary to Davis Run, which is classified as a HQ-CWF (Title 25, Chapter 93, Pennsylvania Code). During site assessments on August 14, 2006 and March 16, 2007, PFBC staff identified a wild brook trout population in the unnamed tributary to Davis Run (Sandy Run). Based on the stream's classification and its geographic location in the watershed, and using the Instream Flow Incremental Methodology, Commission staff is recommending a passby flow of 61 gpm (at the spring vault) at all times when water is being withdrawn from the spring to prevent loss of downstream aquatic and wetland habitats.

The project is subject to water conservation requirements, as per Commission Regulation §806.25(b).

The project sponsor has paid the appropriate application fee pursuant to Commission Regulation §806.13, and in accordance with Commission Resolution No. 2006-08. The project sponsor has provided all proofs of notification as required by Commission Regulation §806.15.

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.

This project is not required for the optimum planning, development, conservation, utilization, management, and control of the water resources of the basin and will not significantly affect the water resources of the basin.

### **Decision**

1. The project's groundwater withdrawal of 0.079 mgd (30-day average) from Spring 1 and the consumptive water use of up to 0.200 mgd (peak day) are approved pursuant to Article 3, Section 3.10, of the Compact.
2. The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision.
3. The project sponsor shall comply with all Commission regulations, including monitoring and reporting requirements contained in Commission Regulation §806.30.
4. The project sponsor shall keep daily records of the metered withdrawals in Spring 1. The required reporting data shall be submitted to the Commission quarterly, and as otherwise required. Quarterly monitoring reports are due within thirty (30) days after the close of the preceding quarter.
5. The constant-rate aquifer test requirement specified in Commission Regulation §806.12 is hereby waived.

6. The maximum instantaneous rate of withdrawal from Spring 1 shall not exceed 139 gpm.

7. Prior to initiation of the project, the project sponsor shall install and then maintain separate meters, accurate to within five (5) percent, to measure the water pumped to tanker trucks at the loading station and all water to be conveyed to the on-site bottling plant. The project sponsor shall notify the Commission, in writing, when the meters are installed.

8. 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. Quarterly monitoring reports are due within thirty (30) days after the close of the preceding quarter. The daily quantity of water consumptively used shall be the quantity pumped to tanker trucks at the loading station and all water conveyed to the on-site bottling plant.

9. The project sponsor shall allow a passby flow of 61 gpm (at the spring vault) at all times when water is being withdrawn from the spring. The project sponsor shall install and maintain a device to regulate the amount of withdrawal from the spring to meet the passby flow requirement. The project sponsor shall keep daily records of the passby flow at all times when water is being withdrawn from the spring, and shall report the data to the Commission quarterly, and as otherwise required.

10. The project sponsor shall submit its design and a proposed construction schedule for the passby flow measurement and control devices for review and approval by Commission staff prior to the initiation of the project. Following approval, the project sponsor shall complete construction/installation in accordance with the approved schedule, and shall certify to the Commission that construction/installation has been completed in accordance with the approved design. The passby system shall be kept fully functional and free of debris.

11. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §806.25(b).

12. To satisfy the Commission's registration requirement, the project sponsor shall register with the PADEP all surface water and groundwater sources described in this docket in accordance with the Pennsylvania Water Resources Planning Act (Pennsylvania Act 220).

13. 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.

14. 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.

15. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the Commission may suspend, modify, or revoke its approval of same, and may impose appropriate 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. 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.

16. 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.

17. 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.

18. This approval is effective until June 13, 2022. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than December 13, 2021, the existing approval shall be deemed extended until such time as the Commission renders decision on the application.

19. 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: June 13, 2007

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Kenneth P. Lynch, Chair  
New York Commissioner



# SUSQUEHANNA RIVER BASIN COMMISSION

1721 North Front Street • Harrisburg, Pennsylvania 17102-2391

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**Docket No. 20050307-1**

**Approval Date: March 29, 2005**

**Modification Date: June 13, 2007**

**GLENN O. HAWBAKER, INC.**

**PLEASANT GAP FACILITY**

**(WHITE ROCK QUARRY, BROOKS QUARRY & ASSOCIATED FACILITIES)**

Consumptive Water Use of up to 0.875 mgd,  
for the Mining and Processing of Limestone,  
Spring Township, Centre County, Pennsylvania

## Review Authority

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the application on April 27, 2007.

## Description

**Purpose.** The Commission originally approved the project on March 29, 2005, as Docket No. 20050307 (Docket). As approved, the Glenn O. Hawbaker, Inc. (Hawbaker) Pleasant Gap facility was authorized to consumptively use water up to 0.375 million gallons per day (mgd), subject to conditions enumerated in the Docket. The purpose of the current application for docket modification is to request approval for an increase in consumptive use of water associated with limestone mining and processing operations. This docket modification approves the request, revises certain project features, and rescinds certain provisions.

**Location.** The project is located in the West Branch Susquehanna Subbasin, HUC 02050204, Bald Eagle Creek Watershed, Spring Township, Centre County, Pennsylvania.

**Project Features.** The project sponsor has requested approval for an increase in consumptive use of water from 0.375 mgd up to 0.875 mgd. The requested quantity of consumptive water use includes evaporative losses from ponds, sumps, or flooded portions of the pits at the facility; evaporated water lost in dust control, both in haul road wetting and at spray nozzles at crushing portions of the processing facility; and water lost in wetted crushed fine and coarse aggregate product.

Specific locational information concerning discrete water-related project features has been withheld for security reasons.

Primarily, the requested increase is related to the water for its aggregate wash plant. Hawbaker manufactures coarse and fine-crushed stone aggregate and asphaltic or “bituminous” concrete. Increases in production at the aggregate wash plant are anticipated by the project sponsor, and to fully utilize this plant, Hawbaker will require additional water for consumptive use. The project’s maximum daily consumptive water use, based on water use records submitted to the Commission for 2006, was approximately 0.369 mgd.

Hawbaker has also increased the number of mine permits that it holds and/or operates in the Pleasant Gap area. The current permits include: White Rock Quarry, Brooks Quarry, and Graymont (PA) Inc.’s Gentzel Quarry, and it is currently permitting White Rock Quarry #2 and Standard Pit Quarry.

Water for production at the facility comes from several sources, the largest of which is White Rock Quarry. At the time of the Docket approval, only the southwestern portion of the quarry was flooded, and the volume for water storage was approximately 228 million gallons. Since that time, the entire quarry has been flooded, and current flooded storage within White Rock Quarry exceeds 300 million gallons of water.

Recent cooperative agreements between Graymont (PA), Inc. and Hawbaker developed an improved water handling system and a cooperative mining arrangement in the Pleasant Gap Mining Complex. The project sponsor submitted maps detailing pipelines and collection channels currently being permitted by both mining companies as part of its modification application. In brief, this system will enable Graymont (PA), Inc. to discharge water from its permitted mines into the large storage system in White Rock Quarry. White Rock Quarry, in turn, will provide water storage to augment low flows in Logan Branch and at the Pennsylvania Fish and Boat Commission’s (PFBC’s) Pleasant Gap Hatchery complex. The cooperative mining arrangement will facilitate the development of a storage reservoir within the Gentzel Quarry.

## **Findings**

The project sponsor has requested an increase in consumptive water use of up to 0.875 mgd. Based on an analysis of water use records supplied by the project sponsor, Commission staff is recommending approval of the requested amount, which represents an increase of 230 percent above the current limit of 0.375 mgd. The increase will allow for the projected increased water for aggregate production, as well as periodic peaks in consumptive water use related to quarrying operations.

As described in the Docket, all water that is retained in aggregate, trucked off-site, used for the control of fugitive emissions, used for road wetting for dust control, used for equipment washing, as well as water evaporating from the sump and flooded portion of the White Rock Quarry, and the treatment ponds or open water tanks is considered to be used consumptively.

The water is metered and/or monitored as described in the Docket and in the approved metering plan, and reported to the Commission on a quarterly basis.

The project sponsor proposes to continue to mitigate its consumptive water use in excess of the grandfathered quantity of 45,700 gallons per day by maintaining a release of stored water to Logan Branch. Commission staff finds the quantity of the current flooded storage within White Rock Quarry (exceeding 300 million gallons of water) is sufficient to provide for these conservation releases.

The project sponsor has paid the appropriate application fee, in accordance with Commission Regulation §806.13, and Commission Resolution No. 2006-08. The project sponsor has provided all proofs of notification, as required by Commission Regulation §806.15.

Commission staff recommends that this approval remain effective until March 29, 2030, the term of the prior Docket approval.

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.

### **Decision**

1. Commission Docket No. 20050307, as approved March 29, 2005, is hereby modified to approve the project's consumptive water use of up to 0.875 mgd, pursuant to Article 3, Section 3.10, of the Compact.

2. The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision.

3. The project sponsor shall comply with all Commission regulations, including monitoring requirements contained in Commission Regulation §806.30.

4. As previously approved, 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. Quarterly monitoring reports are due within thirty (30) days after the close of the preceding quarter. The daily quantity of water consumptively used shall be the quantity of water retained in aggregate, trucked off-site, used for the control of fugitive emissions, used for road wetting for dust control, used for equipment washing, and evaporation from the sump and flooded portion of the White Rock Quarry and the treatment ponds or open water tanks, as calculated in accordance with the approved plan.

5. As previously approved, to satisfy the Commission's current mitigation requirements for consumptive water use set forth in Commission Regulation §806.22, or upon notice from the Commission during periods of low flow, the project sponsor shall release water at the rate determined in accordance with conditions stated in the docket. The project sponsor shall make the release at all times when a flow equal to, or less than, the 41 percent average daily flow of

8.24 cubic feet per second (cfs) or 3,700 gallons per minute (gpm) is recorded at the stream gage located on Logan Branch downstream from the PFBC fish hatchery. The project sponsor shall monitor this stream gage, make the release, as necessary, and report these data to the Commission quarterly, and as otherwise required.

6. Condition “14” is hereby rescinded and replaced by the following condition “7.”

7. The project sponsor shall maintain sufficient storage to make the required releases and to meet consumptive water use needs at the site. The project sponsor shall submit an operations plan that accounts for sources, storage volume, water handling for releases and refilling of storage, and other factors. The plan shall be submitted to the Commission within three (3) years for staff’s review and approval, and 30 days prior to any proposed changes in operations. The project sponsor shall provide the Commission with documentation every five (5) years certifying that sufficient water storage exists in the flooded part of the White Rock Quarry used for storage. Within sixty (60) days from the date of this approval, the project sponsor shall provide to the Commission an interim plan that identifies the source(s) that shall be used to make the required release and other appropriate factors.

8. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §806.25(b).

9. To satisfy the Commission’s registration requirement, the docket holder shall register with the Pennsylvania Department of Environmental Protection all surface water and groundwater sources described in this docket in accordance with the Pennsylvania Water Resources Planning Act (Pennsylvania Act 220).

10. 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.

11. 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.

12. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the Commission may suspend, modify, or revoke its approval of same, and may impose appropriate 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. 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.

13. 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.

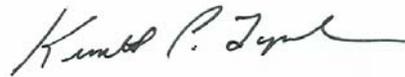
14. Commission approval confers no property rights upon the project sponsor. The securing of all rights necessary and incident to the project sponsor's development and operation of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.

15. All other conditions in Commission Docket No. 20050307 not inconsistent herewith shall remain effective.

16. This approval is effective until March 29, 2030, the term of the prior Docket approval. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than September 29, 2029, the existing approval shall be deemed extended until such time as the Commission renders decision on the application.

17. 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: June 13, 2007

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Kenneth P. Lynch, Chair  
New York Commissioner



# SUSQUEHANNA RIVER BASIN COMMISSION

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**Docket No. 20031205-1**

**Approval Date: December 11, 2003**

**Modification Date: June 13, 2007**

## **NEW ENTERPRISE STONE & LIME CO., INC. TYRONE QUARRY**

Consumptive Water Use of up to 0.294 mgd,  
Groundwater Withdrawal from Well 4 of 0.010 mgd (30-Day Average),  
Surface Water Withdrawal from the Little Juniata River of up to 0.216 mgd (Peak Day),  
for Processing of Aggregate and Production of Concrete,  
Warriors Mark Township, Huntingdon County,  
and Snyder 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 (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the application on November 28, 2006, and a revised application on April 23, 2007.

### **Description**

**Purpose.** The Commission originally approved the project on December 11, 2003, as Commission Docket No. 20031205 (Docket). The purpose of the current application for docket modification is to request approval for an increase in consumptive use of water associated with aggregate processing and concrete production, and to add two water sources (Well 4 and a withdrawal from the Little Juniata River). This docket modification approves these requests, revises certain project features, and rescinds certain provisions.

**Location.** The project is located in the Juniata Subbasin, HUC 02050302, Little Juniata River Watershed, Warriors Mark Township, Huntingdon County, and Snyder Township, Blair County, Pennsylvania.

**Project Features.** The project sponsor has requested approval for an increase in consumptive use of water from 0.235 million gallons per day (mgd) up to 0.294 mgd. The project's maximum daily consumptive water use, based on water use records submitted to the Commission for 2006, was approximately 0.235 mgd. The project sponsor also is requesting

approval for withdrawals from two new sources: a withdrawal (30-day average) from Well 4 of 0.010 mgd and a withdrawal (peak day) from the Little Juniata River of up to 0.216 mgd. The groundwater withdrawal will be used for washing truck beds. The surface water withdrawal will be used for dust control at Crushing Plants 4 and 5, and to fill the water truck that sprays water to suppress dust along the haul roads and on the quarry floor.

Specific locational information concerning discrete water-related project features has been withheld for security reasons.

The quarry consists of an open pit located along bedrock strike (northeast-southwest) of calcium carbonates of Middle Ordovician Age (Coburn and Loysburg Formations). Bedding dips northwest from approximately 80 degrees to almost vertical. The quarry contains both limestone and dolomite, but is being mined for dolomite.

The Docket approved consumptive use in the project's Redi-mix concrete plant, at five crushing plants for stone washing and dust suppression, and in water trucks for dust suppression along quarry roads. Water for the quarry's operation is supplied by three wells (Wells 1, 2, and 3) within the quarry, and one withdrawal from Logan Spring Run (intake LS2). Wells 1 and 2, and intake LS2 have been in operation since the late 1950s, and Well 3 has been in operation since 1992, and previously did not require approval under Commission regulations.

In response to Docket decision item "g," the project sponsor installed engineering controls on the pump to limit the instantaneous withdrawal rate from Logan Spring Run to 150 gallons per minute (gpm). This limited withdrawal rate ensures that withdrawal from Logan Spring Run is less than 10 percent of the Q7-10 flow (196 gpm). Intake LS2 is the only withdrawal from Logan Spring Run by the project sponsor. The project sponsor reports that the former intake at Logan Spring Run (LS1) was discontinued and dismantled in 2003 when the wash plant was converted to a dry screening plant and the water supply was no longer needed.

The Little Juniata River intake (LJ1) is located upstream of the confluence of the river and Logan Spring Run. This reach of the Little Juniata River is designated as a trout stocked fishery (25 Pa. Code Chapter 93) at intake LJ1. The project sponsor has indicated that a pump with a capacity of approximately 150 gpm will be used at this location. The maximum withdrawal rate from LJ1 will be equal to that from LS2, and the two intakes will be used interchangeably for dust control at Crushing Plants 4 and 5, and for the water truck.

Well 4 is located east of Logan Spring Run near the northern boundary of the quarry floor, along an apparent cross-strike fracture trace trending to the northwest-southeast. The well was drilled in August 2006 as an open-rock, six-inch-diameter well to a depth of 75 feet below ground surface (bgs), with steel casing extending from the ground surface to 18 feet bgs.

**Aquifer Test.** A 72-hour, constant-rate aquifer test at Well 4 was conducted from October 31, 2006 to November 3, 2006, without prior Commission review and approval. Well 4 was pumped at a constant rate of 80 gpm. Groundwater levels were monitored in Well 4 and in four additional monitoring wells. Logan Spring Run was monitored at two weir locations, and springs contributing flow to Logan Spring Run were monitored at four locations.

Results of the testing showed a groundwater drawdown response in the aquifer preferentially extending along geologic strike (northeast-southwest). Maximum drawdown (approximately 3.2 feet) was observed in a monitoring well located 380 feet northeast of Well 4, along strike. No impact from pumping at Well 4 was observed at the Logan Spring Run monitoring locations, or at two of the monitored spring locations. However, a reduction in flow rate occurred at the other two upstream spring locations. Although less than a total of 10 gpm, this flow reduction was approximately 50 percent of the flow of the spring located 850 feet away.

Aquifer testing indicated that Well 4 has a sustainable groundwater yield of 57 gpm; the project sponsor has proposed a pump capacity of 50 gpm for Well 4.

### **Findings**

The project sponsor has requested an increase in consumptive water use of up to 0.294 mgd. Based on an analysis of water use records supplied by the project sponsor, Commission staff is recommending approval of the requested amount, which represents an increase of 25 percent above the current limit of 0.235 mgd. The increase will allow for periodic peaks in consumptive water use related to quarrying operations.

As described in the Docket, all water retained in the aggregate, used for the manufacture of concrete, used for equipment washing, trucked off-site, evaporated from the settling ponds, and used for dust control is considered to be used consumptively. The water is metered and/or monitored as described in the Docket, and reported to the Commission on a quarterly basis.

The project sponsor proposes to continue to make quarterly payments to the Commission in lieu of providing actual compensation water to mitigate its consumptive water use in excess of the grandfathered quantity of 32,000 gallons per day (gpd).

Water withdrawn at the Tyrone Quarry is as follows:

- Well 1 – 95,000 gpd; maximum instantaneous rate of 100 gpm;
- Well 2 – 6,000 gpd; maximum instantaneous rate of 30 gpm;
- Well 3 – 32,000 gpd; maximum instantaneous rate of 40 gpm;
- Well 4 (proposed) – 10,000 gpd; maximum instantaneous rate of 50 gpm;
- LS2 – 200,000 gpd; maximum instantaneous rate of 150 gpm; and
- LJ1 (proposed) – 216,000 gpd; maximum instantaneous rate of 150 gpm.

Commission staff recommends approval of a peak day withdrawal from LJ1 of 0.216 mgd, with a maximum instantaneous withdrawal rate of 150 gpm. Commission staff also recommends that the withdrawal at LS2 be approved at the current peak day rate of 0.200 mgd, with a maximum instantaneous rate of 150 gpm.

Commission staff recommends waiving the requirement for the aquifer testing (including pre-approval by Commission staff) contained in Commission Regulation §806.12 for Well 4.

The results of the aquifer test at Well 4, conducted from October 31, 2006 to November 3, 2006, were used to evaluate the application to use the well as a water supply source and assess potential impacts to Logan Spring Run. Based on these data, Commission staff finds that there is likely minimal impact related to pumping Well 4 at the requested rate. Commission staff recommends approval of a peak instantaneous pumping rate of 50 gpm and a 30-day average withdrawal of 0.010 mgd from Well 4.

Commission staff identified that the existing withdrawals from Wells 1, 2, and 3 are subject to review and approval under Commission Regulations §806.4(a)(2)(ii) and §806.4(a)(2)(iv). Commission staff recommends that the project sponsor submit applications for these wells within 180 days.

The project sponsor has paid the appropriate application fee, in accordance with Commission Regulation §806.13, and Commission Resolution No. 2006-08. The project sponsor has provided all proofs of notification, as required by Commission Regulation §806.15.

Commission staff recommends that this approval remain effective until December 11, 2028, the term of the prior Docket approval.

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.

### **Decision**

1. Commission Docket No. 20031205, as approved December 11, 2003, is hereby modified to approve the project's consumptive water use of up to 0.294 mgd, a groundwater withdrawal (30-day average) from Well 4 of 0.010 mgd, and a peak day surface water withdrawal from the Little Juniata River of up to 0.216 mgd, pursuant to Article 3, Section 3.10, of the Compact.

2. The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision.

3. The project sponsor shall comply with all Commission regulations, including monitoring requirements contained in Commission Regulation §806.30.

4. As previously approved, the project sponsor shall keep daily records of the project's consumptive water use, and groundwater and surface water withdrawals, and shall report the data to the Commission quarterly, and as otherwise required. Quarterly monitoring reports are due within thirty (30) days after the close of the preceding quarter. The daily quantity of water consumptively used shall be the water retained in the aggregate, used for the manufacture of concrete, used for equipment washing, trucked off-site, evaporated from the ponds, and used for dust control. The project sponsor shall maintain metering on the wells and surface water intakes, accurate to within five (5) percent.

5. To satisfy the Commission's current compensation requirements for consumptive water use set forth in Commission Regulation §806.22(b), the project sponsor shall continue to 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 retained in the aggregate, used for the manufacture of concrete, used for equipment washing, trucked off-site, evaporated from the ponds, and used for dust control. 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 0.032 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.

6. Condition "d" is hereby rescinded and replaced by the following condition "7."

7. The maximum instantaneous rate of production from intake LS2 shall not exceed 150 gpm.

8. The maximum instantaneous rate of production from intake LJ1 shall not exceed 150 gpm.

9. The project sponsor shall keep daily records of the metered withdrawals from Well 4. The required reporting data shall be submitted to the Commission quarterly, and as otherwise required. Quarterly monitoring reports are due within thirty (30) days after the close of the preceding quarter.

10. Within sixty (60) days from the date of this approval, the project sponsor shall install a totalizing flow meter, accurate to within five (5) percent, on Well 4. The project sponsor shall notify the Commission, in writing, within thirty (30) days of when the meter is installed.

11. The constant-rate pumping test requirement specified in Commission Regulation §806.12 is hereby waived.

12. The maximum instantaneous rate of production from Well 4 shall not exceed 50 gpm.

13. The project sponsor shall submit groundwater withdrawal applications for Wells 1, 2, and 3 for review and approval by the Commission within one hundred eighty (180) days of the date of this approval.

14. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §806.25(b).

15. If the Commission determines that the operation of the project's groundwater withdrawal adversely affects any existing groundwater or surface water withdrawal, the project

sponsor shall be required to provide, at its expense, an alternate water supply or other mitigating measure.

16. All other conditions in Commission Docket No. 20031205 not inconsistent herewith shall remain effective.

17. To satisfy the Commission's registration requirement, the project sponsor shall register with the PADEP all surface water and groundwater sources described in this docket in accordance with the Pennsylvania Water Resources Planning Act (Pennsylvania Act 220).

18. 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.

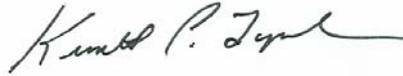
19. The Commission reserves the right to inspect or investigate the project facility, and the project sponsor shall allow authorized employees or agents of the Commission, without advance notice or a search warrant, at any reasonable time and upon presentation of appropriate credentials, and without 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 rule, regulation, or order of the Commission.

20. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the Commission may suspend, modify, or revoke its approval of same, and may impose appropriate 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. 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.

21. 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.

22. This approval is effective until December 11, 2028, in accordance with the term of the prior Docket approval. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than June 11, 2028, the existing approval shall be deemed extended until such time as the Commission renders decision on the application.

By the Commission:



Dated: June 13, 2007

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Kenneth P. Lynch, Chair  
New York Commissioner



# SUSQUEHANNA RIVER BASIN COMMISSION

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**Docket No. 20070606**

**Approval Date: June 13, 2007**

## **EAST COCALICO TOWNSHIP AUTHORITY**

Groundwater Withdrawals (30-Day Averages) of 1.150 mgd from Well F and 1.395 mgd from Well M, and a Total System Withdrawal Limit (30-Day Average) of 1.395 mgd, for Public Water Supply, East Cocalico Township, Lancaster County, Pennsylvania

### **Review Authority**

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the applications on May 6, 2005.

### **Description**

**Purpose.** The purpose of the application is to request approval for the withdrawal of groundwater for distribution in a public water supply system.

**Location.** The project is located in the Lower Susquehanna Subbasin, HUC 02050306, Cocalico Creek Watershed, East Cocalico (Well F) and Cocalico (Well M) Townships, Lancaster County, Pennsylvania.

**Project Features.** The project sponsor has requested approval for the withdrawals (30-day average) of 1.150 million gallons per day (mgd) from Well F and 1.580 mgd from Well M. East Cocalico Township Authority (ECTA) will use the wells as sources for the public water supply system that currently relies on twelve wells.

The Commission has previously approved Wells 2A, 7, 8A, 9, 10, 11, 12 and 14, and a total system withdrawal limit of 0.741 mgd. Wells 3, 4, 5, and 6 were in use prior to 1978 and did not previously require Commission approval. ECTA also has approval to purchase an average (30-day maximum) of 0.200 mgd from the Ephrata Area Joint Authority (EAJA).

Wells F and M are new wells located outside of the existing ECTA well field basin. Initially, ECTA intends to use Wells F and M as backup supply wells but, based on projected needs, will eventually use the wells as primary water sources for the system.

Wells F and M are located within the Cocalico Creek basin, which lies in the Conestoga Valley Section of the Piedmont Physiographic Province. Specific locational information concerning discrete water-related project features has been withheld for security reasons. The site is underlain by the Millbach Formation near the contact with the Richland Formation. The Millbach Formation is a pinkish-gray and medium gray, laminated limestone with interbeds of light to medium gray dolomite. The Richland Formation is a gray, finely crystalline dolomite, interbedded with oolitic limestone, chert, calcarenite, and conglomerate. Bedrock in the area strikes approximately north 75 degrees east. The contact between the two formations is mapped as a fault contact on the Ephrata quadrangle.

Well F is constructed with 121 feet of 12-inch casing with an open bore diameter of 12 inches to a depth of 180 feet, 8 inches to a depth of 195 feet, and completed at 6 inches to a depth of 195 feet to 440 feet. Well M is constructed with 117 feet of 12-inch casing with an open bore diameter of 12 inches to a depth of 195 feet and completed at 6 inches to a depth of 195 feet to 399 feet.

ECTA supplies East Cocalico Township in Lancaster County. The system has an average daily demand (30-day average) of 0.642 mgd, and a maximum demand (peak day) of 0.807 mgd. The current system capacity is 0.821 mgd. System demand is projected to increase to an average daily demand of 1.395 mgd and maximum daily demand to 1.754 mgd by 2022.

Wastewater is discharged to on-lot septic systems (1.4 percent of the system), or treated at either Ephrata's Wastewater Treatment Plant No. 2 (85.6 percent of the system), or the Adamstown Wastewater Treatment Plant (13 percent of the system). The wastewater treatment plants discharge to Cocalico Creek and Little Muddy Creek, respectfully.

**Aquifer Tests.** A stepped-drawdown test of Well F was completed on November 12, 2004. A total of five 90-minute steps were planned, but only four were completed. The actual pumping rates for the step test were: 593 gallons per minute (gpm), 815 gpm, 1,007 gpm, and 1,033 gpm. A 48-hour, constant-rate pumping test of Well F was conducted with prior Commission approval on November 16-18, 2004, at an average rate of 797 gpm. Discharge water was conveyed through piping and into an existing storm sewer to a storm water basin where it was discharged. The static water level at the beginning of the test was 51.59 feet from the top of casing. The water level at the end of the test was 77.60 feet from the top of casing, or total drawdown of 26.01 feet.

In addition to Well F, sixteen observation wells were monitored for the duration of the aquifer testing. Six of the sixteen observation wells demonstrated a strong connection from the pumping of Well F; ten of the sixteen wells showed little or no discernable impact by pumping at Well F.

A stepped-drawdown test of Well M was completed on November 24, 2004. The test consisted of a total of four 90-minute steps. The actual pumping rates for the step test were: 823 gpm, 1,123 gpm, 1,303 gpm, and 1,606 gpm. A 48-hour, constant-rate pumping test of Well M was conducted with prior Commission approval on December 13-16, 2004, at an average

rate of 1,095 gpm. The static water level at the beginning of the test was 16.42 feet from the top of casing. The water level at the end of the test was 37.57 feet from the top of casing, or total drawdown of 21.15 feet.

In addition to Well M, eighteen observation wells were monitored for the duration of the aquifer testing. Thirteen of the eighteen observation wells demonstrated a connection with the pumping of Well M, and five of the wells showed little or no discernable impact by pumping at Well M.

**Coordination.** Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP) Southcentral Region Office during review of the project. PADEP staff has reviewed this docket for consistency with its requirements.

### Findings

The project is subject to Commission review and approval standards, including Commission Regulations §806.21 and §806.23.

Commission staff reviewed the groundwater availability analysis, pumping test results, and supporting information submitted by the project sponsor. Based on this information, Commission staff concludes that Wells F and M draw water from a carbonate aquifer with highly efficient, solution-enlarged fractures.

No boundary conditions (either recharge or confining) were observed during the testing, and drawdown is anticipated to expand in an irregular, radial pattern, strongly controlled by the karst setting. Commission staff finds that at its recommended quantity, withdrawal rate, and other operating conditions, the withdrawals from Wells F and M will not cause needed adverse impacts to existing uses or the water resources of the basin.

Commission staff recommends that the maximum instantaneous rates of production from Wells F and M not exceed 797 gpm and 1,095 gpm, respectively. Likewise, Commission staff recommends approval of 30-day average withdrawal rates of 1.150 mgd for Well F and 1.395 mgd from Well M. The project sponsor should install appropriate metering on Wells F and M, monitor withdrawals daily, and report these data quarterly.

The projected 30-day average daily demand through 2022 is 1.395 mgd. Commission staff recommends approval of a total system withdrawal of 1.395 mgd, which is consistent with the sustainable yields of existing sources and will satisfy the projected system demand through 2022. The recommended system withdrawal limit of 1.395 mgd (30-day average) should reflect the existing system withdrawal limit of 0.741 mgd (30-day average) in the older well field (Wells 2A, 3, 4, 5, 6, 7, 8A, 9, 10, 11, 12, and 14, as in Docket No. 20031007), with the balance being withdrawn from the new well field (Wells F and M).

Commission staff identified that the withdrawals from Wells 3, 4, 5, and 6 are subject to review and approval under Commission Regulations §806.4(a)(2)(i) and §806.4(a)(2)(iv).

Commission staff recommends that the project sponsor submit applications for these wells within 180 days.

The project is subject to the Commission's water conservation requirements, as per Commission Regulation §806.25(a). The water system is 100 percent metered, which is in compliance with this regulation, and ECTA reports unaccounted for water losses of less than 20 percent, which is in compliance with Commission Regulation §806.25(a)(1).

The project sponsor has paid the appropriate application fee pursuant to Commission Regulation §806.13, and in accordance with Commission Resolution No. 2005-03. The project sponsor has provided all proofs of notification as required by Commission Regulation §806.15.

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.

This project is not required for the optimum planning, development, conservation, utilization, management, and control of the water resources of the basin and will not significantly affect the water resources of the basin.

### **Decision**

1. The project's groundwater withdrawals (30-day averages) of 1.150 mgd from Well F, 1.395 mgd from Well M, and a total system withdrawal limit of 1.395 mgd are approved pursuant to Article 3, Section 3.10, of the Compact.

2. The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision.

3. The project sponsor shall comply with all Commission regulations, including groundwater withdrawal monitoring and reporting requirements contained in Commission Regulation §806.30.

4. The project sponsor shall keep daily records of the separately metered withdrawals in Wells F and M. The required reporting data shall be submitted to the Commission quarterly, and as otherwise required. Quarterly monitoring reports are due within thirty (30) days after the close of the preceding quarter.

5. Within sixty (60) days from the date of this approval, the project sponsor shall install separate meters, accurate to within five (5) percent, on Wells F and M. The project sponsor shall notify the Commission, in writing, when the meters are installed.

6. The maximum instantaneous rates of production from Wells F and M shall not exceed 797 gpm and 1,095 gpm, respectively.

7. The project sponsor shall submit applications for Wells 3, 4, 5, and 6 within one hundred eighty (180) days of the date of this approval.

8. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §806.25(a).

9. Pursuant to Article 12, Section 12.2, of the Compact, this project is hereby included in the Commission's Comprehensive Plan.

10. 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.

11. This approval shall not become effective until the project sponsor certifies to the Commission that it has received a permit from PADEP authorizing the construction of the water supply facilities related to this application.

12. To satisfy the Commission's registration requirement, the project sponsor shall register with the PADEP all surface water and groundwater sources described in this docket in accordance with the Pennsylvania Water Resources Planning Act (Pennsylvania Act 220).

13. 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.

14. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the Commission may suspend, modify, or revoke its approval of same, and may impose appropriate 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. 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 penalties, regardless of the period of noncompliance.

15. 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 water resources. The Commission, upon its own motion, may at any time reopen any project approval and make additional corrective modifications that may be necessary.

16. 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.

17. This approval is effective until June 13, 2022. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than December 13, 2021, the existing approval shall be deemed extended until such time as the Commission renders a decision on the application.

18. The project sponsor has a period of three (3) years from the date of this approval to initiate the project or such approval will automatically expire, unless an extension is requested by the project sponsor and approved by the Commission. Likewise, if the project is discontinued for such a time and under such circumstances that an abandonment of the project may be reasonably 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: June 13, 2007

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Kenneth P. Lynch, Chair  
New York Commissioner



# SUSQUEHANNA RIVER BASIN COMMISSION

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**Docket No. 20070607**

**Approval Date: June 13, 2007**

## **MOUNT JOY BOROUGH AUTHORITY**

Groundwater Withdrawal (30-Day Average) of 1.020 mgd from Well 3,  
and a Total System Withdrawal Limit (Peak Day) of 2.600 mgd,  
for Public Water Supply,  
Mount Joy Borough, Lancaster County, Pennsylvania

### **Review Authority**

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the application on June 6, 2005, with supporting materials on November 3, 2005.

### **Description**

**Purpose.** The purpose of the application is to request approval for the withdrawal of groundwater for distribution in a public water supply system.

**Location.** The project is located in the Lower Susquehanna River Basin, HUC 02050306, Chickies Creek Watershed, Mount Joy Borough, Lancaster County, Pennsylvania.

**Project Features.** The project sponsor has requested approval for the withdrawal (30-day average) of 1.020 million gallons per day (mgd) from Well 3. Mount Joy Borough Authority (MJBA) will use the well as a source for the public water supply system that currently relies on Wells 1 and 2. The use of Wells 1 and 2, predates July 13, 1978, and did not previously require approval by the Commission.

Wells 1 and 2 have reported production capacities of 1.944 mgd and 1.584 mgd, respectively, and impact nearby springs, in particular, a spring known as Charles Spring. Historically, MJBA also withdrew surface water from Charles Spring (0.500 mgd) and from Chickies Creek (0.800 mgd). However, neither of these sources is currently permitted for use by the Commission. (The Pennsylvania Department of Environmental Protection [PADEP]

allocation for the Chickies Creek withdrawal still exists, but PADEP has determined that the surface water treatment system is outdated and insufficient.)

Specific locational information concerning discrete water-related project features has been withheld for security reasons. Wells 1 and 2 are located within 1,000 feet of one another, and several miles to the west of Well 3. Like Well 3, Wells 1 and 2 were also sited within the karst-prone limestone of the Epler Formation.

The table, below, identifies the three MJBA wells, the date of their initial service, their pump capacities, their open borehole intervals, and their reported average daily withdrawals.

<b>Well Identification</b>	<b>Date of Initial Service</b>	<b>Pump Capacity (gpm)</b>	<b>Open Borehole Interval (feet bgs)</b>	<b>Reported Average Daily Withdrawal 2000 to 2004 (mgd)</b>
Well 1	1973	1,350	73.5 to 163	0.809
Well 2	1973	1,100	63 to 300	0.398
Well 3	TBD	TBD	119 to 470	Requesting 1.020
gpm – gallons per minute bgs – below ground surface TBD – To Be Determined				

Well 3 was drilled within the Epler Formation to a total depth of 470 feet bgs, and was constructed as a 12-inch-diameter open bedrock well with steel casing set to 119 feet bgs. Groundwater within the Epler Formation occurs almost entirely within secondary structures (faults, joints, solution openings, etc.) and little groundwater is likely present within the primary bedding features or the bedrock itself. The well is within a carbonate valley setting, and its proximity to laterally continuous fracture traces and faults that extend beyond the topographic basin increase the recharge potential to the well.

MJBA provides water service to the Borough of Mount Joy and certain contiguous portions of Rapho, East Donegal and Mount Joy Townships, and has plans for several expansions and interconnections in the future. The current average daily demand of the MJBA system is approximately 1.210 mgd and, due to the growth in the region, the projected average daily demand (30 days) through 2010 is 1.680 mgd, with a projected peak day need of 2.600 mgd. The current system capacity is 3.240 mgd.

Approximately 90 percent of the wastewater is treated at Mount Joy's wastewater treatment plant and discharged to Little Chickies Creek south of and downgradient from Well 3.

**Aquifer Test.** A 72-hour, constant-rate pumping test of Well 3 was conducted with prior Commission approval on January 21-24, 2005, at an average rate of 1,403 gpm. In addition to the pumping well, ten observation wells and five surface water points were monitored; including eight residential wells, two water supply wells (a private school and a business), two monitoring

points along Chickies Creek, a flume on an unnamed tributary to Chickies Creek approximately 700 feet northeast of Well 3, and two wetland points.

Flows in the creek were greater than 175 percent of average daily flow, potentially masking minor impacts during the time of the aquifer test. Nevertheless, results of the testing indicate the strike-preferential drawdown, with limited impacts from the operation of Well 3 on local groundwater users, and the potential for an impact to the north of the well (as indicated at wetland point 2 and the flume). Commission staff finds that impacts to the surrounding groundwater supply wells, due to the use of Well 3, are negligible. Water levels within the wetland piezometer declined approximately 4.25 feet during the testing and the onset of drawdown was immediate, indicating a direct hydraulic connection from the wetland to the well.

**Coordination.** Commission staff has coordinated with the PADEP Southcentral Region Office during review of the project. PADEP staff has reviewed this docket for consistency with its requirements.

### Findings

The project is subject to Commission review and approval standards, including Commission Regulations §806.21 and §806.23.

Commission staff reviewed the groundwater availability analysis and aquifer test results. Based on this information, Commission staff concludes that Well 3 is hydraulically connected to the Chickies Creek. The minimal drawdown and the drawdown curve type observed in the Well 3 data indicates a near-direct connection to a significant recharge boundary, and hydrographs from Well 3 and the stream indicate that the water level in Well 3 is very closely related to the water elevation of the creek. However, the high flows within Chickies Creek at the time of testing (180 to 210 percent of the average daily flow), make the projection of the drawdown within Well 3 problematic. During periods of average or below average streamflows, the well/stream connection will be more apparent.

Although the effects of operating Well 3 on Chickies Creek are not directly observable with the data collected from the creek during the test, the recharge boundary condition was observed early during the testing. Commission staff finds that impacts to Chickies Creek are inevitable, based on the hydrogeologic setting, well construction, and the water level data collected during the testing.

Commission staff has calculated the 7-day, 10-year low flow (Q7-10) for Chickies Creek, adjacent to the well site, to be 1.036 cubic feet per second (cfs) (465 gpm), and the average daily flow was calculated to be 19,688 gpm. The proposed rate of withdrawal (1,403 gpm) from Well 3 is greater than 10 percent of the Q7-10 flow for Chickies Creek (46.5 gpm), thereby requiring a passby flow to protect aquatic resources and downstream users.

Chickies Creek is classified as trout-stocked fishery (TSF) (Title 25, Chapter 93, Pennsylvania Code). Based on the stream's classification, its geographic location in the watershed, and the anticipated associated fishery of trout and combined species of fish,

Commission staff has determined a minimum flow of 25 percent of the annual average daily flow, or 4,922 gpm (10.96 cfs), is required at the point of impact to prevent loss of aquatic habitat and adverse impact to downstream water users. Commission staff recommends that the project sponsor install a passive system that will allow a minimum passby flow of 4,922 gpm (10.96 cfs) at all times during active pumping.

In addition, based on its review of flow data collected at the flume, Commission staff finds that the unnamed tributary will be impacted by the use of Well 3. Approximately 20 gpm of flow was intercepted by the use of Well 3, most likely the result of the reduction of flow at the springhead that daylight immediately upstream of the flume. Commission staff has determined that the passby flow requirement for Chickies Creek should provide adequate protection to the unnamed tributary.

The project sponsor should submit its plan to satisfy the passby flow requirement (design and proposed construction schedule for the passby flow device, if applicable) within 60 days following Commission action for review and approval by Commission staff.

Commission staff finds that at its recommended quantity, withdrawal rate, and other operating conditions, the withdrawal from Well 3 will not cause significant adverse impacts to neighboring water users or to the water resources of the basin.

Commission staff recommends that the maximum instantaneous rate of production from Well 3 not exceed 1,403 gpm, the rate at which the test was performed. This will allow MJBA to meet its daily demand by operating the well on a 12-hour on, 12-hour off schedule. Likewise, Commission staff recommends approval of a 30-day average withdrawal rate of 1.020 mgd, the requested quantity.

The project is subject to Commission monitoring and reporting requirements, as per Commission Regulation §806.30. The project sponsor should install appropriate metering on Well 3 to monitor withdrawals daily. The project sponsor should report these data to the Commission quarterly unless otherwise required.

The projected average daily demand through 2010 is 1.680 mgd, with a projected peak day need of 2.600 mgd. Commission staff recommends approval of a total system withdrawal of 2.600 mgd, which is consistent with the sustainable yields of existing sources and will satisfy the projected system demand through 2010.

Commission staff identified that the withdrawals from Wells 1 and 2 are subject to review and approval under Commission Regulations §806.4(a)(2)(i) and §806.4(a)(2)(iv). Commission staff recommends that the project sponsor submit applications for these wells within 180 days.

The project is subject to the Commission's water conservation requirements, as per Commission Regulation §806.25(a). The water system is 100 percent metered, which is in compliance with this regulation, and MJBA reports unaccounted for water losses of less than 20 percent, which is in compliance with Commission Regulation §806.25(a)(1).

The project sponsor has paid the appropriate application fee pursuant to Commission Regulation §806.13, and in accordance with Commission Resolution No. 2005-03. The project sponsor has provided all proofs of notification as required by Commission Regulation §806.15.

In accordance with the Memorandum of Understanding with PADEP, Commission staff recommends that this approval not become effective until such time as the project sponsor can certify to the Commission that it has received an approval from PADEP for the construction of the water supply facilities related to this application.

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.

This project is not required for the optimum planning, development, conservation, utilization, management, and control of the water resources of the basin and will not significantly affect the water resources of the basin.

### **Decision**

1. The project's groundwater withdrawal (30-day average) of 1.020 mgd from Well 3, and a total system withdrawal limit from all sources of 2.600 mgd (peak day), are approved pursuant to Article 3, Section 3.10, of the Compact.
2. The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision.
3. The project sponsor shall comply with all Commission regulations, including withdrawal monitoring requirements contained in Commission Regulation §806.30.
4. The project sponsor shall keep daily records of the metered withdrawals from Well 3 and the total system withdrawal. The required reporting data shall be submitted to the Commission quarterly, and as otherwise required. Quarterly monitoring reports are due within thirty (30) days after the close of the preceding quarter.
5. Within sixty (60) days from the date of this approval, the project sponsor shall install a totalizing flow meter, accurate to within five (5) percent, on Well 3. The project sponsor shall notify the Commission, in writing, within thirty (30) days of when the meter is installed.
6. The maximum instantaneous rates of production from Well 3 shall not exceed 1,403 gpm.
7. The project sponsor shall allow a flow to pass in Chickies Creek directly below the point of impact from Well 3 of not less than 4,922 gpm (10.96 cfs). When the streamflow below the point of withdrawal is less than this amount, the withdrawal shall be reduced to maintain 4,922 gpm (10.96 cfs) in the stream channel below the well. When the natural flow is equal to or

less than 4,922 gpm (10.96 cfs), no water may be withdrawn and the entire natural flow shall be allowed to pass the point of withdrawal to maintain such natural flow in the channel below the point of withdrawal as may prevail above. The project sponsor may propose alternative monitoring to the Commission for staff review and approval.

8. The project sponsor shall submit its design and a proposed construction schedule for the passby flow measurement device within sixty (60) days of 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 project sponsor may propose an alternative plan to meet its passby flow requirement.

9. Within one hundred eighty (180) days from the date of this approval, the project sponsor shall submit applications for Wells 1 and 2.

10. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §806.25(a).

11. If the Commission determines that the operation of the project's groundwater withdrawals adversely affect any existing groundwater or surface water withdrawal, the project sponsor shall be required to provide, at its expense, an alternate water supply or other mitigating measure.

12. Pursuant to Article 12, Section 12.2, of the Compact, this project is hereby included in the Commission's Comprehensive Plan.

13. 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.

14. This approval shall not become effective until the project sponsor certifies to the Commission that it has received a permit from PADEP authorizing the construction of the water supply facilities related to this application.

15. To satisfy the Commission's registration requirement, the project sponsor shall register with the PADEP all surface water and groundwater sources described in this docket in accordance with the Pennsylvania Water Resources Planning Act (Pennsylvania Act 220).

16. 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.

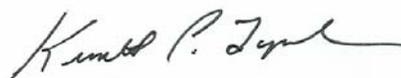
17. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the Commission may suspend, modify, or revoke its approval of same, and may impose appropriate penalties. Upon written notice by the Commission, the project sponsor shall have thirty (30) days to correct such noncompliance, unless an alternate period is specified in the notice. 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 penalties, regardless of the period of noncompliance.

18. 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 water resources. The Commission, upon its own motion, may at any time reopen any project approval and make additional corrective modifications that may be necessary.

19. 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.

20. This approval is effective until June 13, 2022. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than December 13, 2021, the existing approval shall be deemed extended until such time as the Commission renders a decision on the application.

By the Commission:



Dated: June 13, 2007

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Kenneth P. Lynch, Chair  
New York Commissioner



# SUSQUEHANNA RIVER BASIN COMMISSION

1721 North Front Street • Harrisburg, Pennsylvania 17102-2391

Phone (717) 238-0423 • Fax (717) 238-2436

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**Docket No. 20020827-1**

**Approval Date: August 15, 2002**

**Modification Date: June 13, 2007**

## **HONEY RUN GIBG LLC; HONEY RUN GOLF CLUB**

Surface Water Withdrawal of up to 0.382 mgd, When Available, from Honey Run  
and Consumptive Water Use of up to 0.382 mgd, for Golf Course Irrigation,  
Dover 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 (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the application on March 23, 2007.

### **Description**

**Purpose.** The Commission originally approved the project on April 11, 2002, as Docket No. 20020827 (Docket). As approved, the Honey Run Golf Club was authorized to withdraw up to 0.382 million gallons per day (mgd), when available, from Honey Run, and the consumptive use of water of up to 0.382 mgd for the irrigation of greens, tees, and fairways at the 18-hole golf course, subject to conditions enumerated in the Docket. This docket modification rescinds certain provisions and establishes new conditions for the passby flow requirement.

**Location.** The project is located in the Lower Susquehanna Subbasin, HUC 02050306, Little Conewago Creek Watershed, Dover Township, York County, Pennsylvania.

### **Findings**

The passby flow provision contained in the Docket as condition “f” was intended to provide protection to aquatic resources in Honey Run, a trout-stocked, coldwater fishery. Commission staff had calculated average daily flow (ADF) to be 4.51 cubic feet per second (cfs) or 2,023 gallons per minute (gpm), and recommends that the project sponsor allow a passby flow of not less than 20 percent ADF. However, in the prior approval, the condition under which such withdrawals were authorized incorrectly utilized the ADF value rather than the recommended 20 percent ADF value. Therefore, Commission staff recommends that the Docket be modified to incorporate the recommended value.

This modification will not negate the need for the project sponsor to seek additional water sources (either as increased storage or additional withdrawals), although it provides substantial relief during average operating conditions. Therefore, Commission staff finds that the interim protective measure should not be extended.

Commission staff recommends that this approval remain effective until August 15, 2027, the term of the prior Docket approval.

### **Decision**

1. Commission Docket No. 20020827, as approved August 15, 2002, is hereby amended pursuant to Article 3, Section 3.10, of the Compact.

2. Condition “f” is hereby rescinded and replaced by the following condition “3.”

3. Upon termination of the interim protective measure described in condition “d,” the project sponsor shall allow a flow to pass in Honey Run directly below the intake of not less than 0.899 cfs (404 gpm). When the streamflow below the intake is less than this amount, the withdrawal shall be reduced to allow 0.899 cfs (404 gpm) in the stream channel below the intake. When the natural flow is equal to or less than 0.899 cfs (404 gpm), no water may be withdrawn, and the entire natural flow shall be allowed to pass the intake to allow such natural flow in the channel below the intake as may prevail above. The project sponsor shall modify its passive passby flow device accordingly. 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.

4. The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision.

5. The project sponsor shall comply with all Commission regulations, including groundwater withdrawal monitoring and reporting requirements contained in Commission Regulation §806.30.

6. All other conditions in Commission Docket No. 20020827 not inconsistent herewith shall remain effective.

7. 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.

8. 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.

9. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the Commission may suspend, modify, or revoke its approval of same, and may impose appropriate 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. 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.

10. 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.

11. 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.

12. All other conditions in Commission Docket No. 20020827 not inconsistent herewith shall remain effective.

13. 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.

14. This approval is effective until August 15, 2027. The term of this docket modification is in accordance with the term of the prior Docket approval. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than February 15, 2027, the existing approval shall be deemed extended until such time as the Commission renders a decision on the application.

By the Commission:



Dated: June 13, 2007

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Kenneth P. Lynch, Chair  
New York Commissioner



# SUSQUEHANNA RIVER BASIN COMMISSION

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**Docket No. 20070602**

**Approval Date: June 13, 2007**

## TOWN OF ERWIN

Groundwater Withdrawals (30-Day Averages) of 0.504 mgd from ID Well 2, 0.350 mgd from Well 2, 0.325 mgd from Well 3, and 0.125 mgd from ID Well 1, and a Total System Withdrawal Limit (30-Day Average) of 2.510 mgd, for Public Water Supply, Town of Erwin, Steuben County, New York

### Review Authority

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the application on January 30, 2007.

### Description

**Purpose.** The purpose of the application is to request approval for the withdrawal of groundwater for distribution in a public water supply system.

**Location.** The project is located in the Chemung River Subbasin, HUC 02050104, Canisteo River Watershed, Town of Erwin, Steuben County, New York.

**Project Features.** The project sponsor has requested approval for withdrawal (30-day average) of 0.504 million gallons per day (mgd) from Industrial Park Well 2 (ID Well 2). ID Well 2 will be used as an additional source of water for the public supply system in the Village of Erwins/Industrial Park area. The Commission previously approved a groundwater withdrawal of 1.150 mgd (30-day average) for Well 4 and a total system withdrawal limit (30-day average) of 2.510 mgd in Commission Docket No. 19990503-1, modified on December 14, 2005.

Well 4 is the primary water source for the municipal system that supplies water to Painted Post and Village of Erwins, New York. In addition to Well 4, the system is served by three wells: Wells 2, 3, and Industrial Park Well 1. Wells 2, 3, and Industrial Park Well 1 were placed into service in 1968, 1971, and 1974, respectively, and previously did not require approval under the Commission's groundwater withdrawal regulation.

Specific locational information concerning discrete water-related project features has been withheld for security reasons. The following table identifies each well used by the Town of Erwin for public water supply.

<b>Well Identification</b>	<b>Date of Initial Service</b>	<b>Reported Average Pump Capacity (gpm)</b>	<b>Daily Withdrawal (mgd)</b>
Well 2	1968	400	0.350
Well 3	1971	400	0.325
Well 4	1999	806	1.150
ID Well 1	1974	302	0.125
gpm – gallons per minute			

Wells 2, 3, and 4 are located in Painted Post, New York, and ID Wells 1 and 2 are located near the Village of Erwins. Due to water quality differences between the two Industrial Park wells and the three wells in Painted Post, ID Wells 1 and 2 will be used as the primary water source for the industrial park and the Corning Inc.-Diesel Ceramic facility located there.

ID Well 2 (formerly referred to as Well 5) is located north of the Canisteo River, approximately 1.5 miles upstream of the Tioga River. ID Wells 1 and 2 are located 1,900 feet apart. ID Well 2 is completed in glacial outwash and alluvial sand and gravel to a depth of 85 feet. A dry clay layer was encountered during drilling from 25 to 31 feet below ground surface (bgs). The project sponsor reported that when groundwater was encountered beneath the clay, the water level rose in the well to within 15 feet bgs, indicating a semi-confined aquifer in the area of ID Well 2. Groundwater flow in the semi-confined aquifer appears to be toward the east-southeast.

Well ID 2 was constructed with a 10-inch-diameter, steel screen from a depth of 65 feet to 85 feet bgs. The well is cased with 12-inch-diameter, steel casing to a depth of 65 feet.

The public water supply system has an existing average daily demand of 0.559 mgd, and an existing maximum daily demand of 0.970 mgd. The average and maximum daily demands are projected to grow to 1.500 and 2.000 mgd, respectively, by 2022. The project sponsor has not requested an increase in the total system withdrawal limit of 2.510 mgd, as approved in Commission Docket No. 19990503-1.

**Aquifer Test.** A 48-hour, constant-rate aquifer test of ID Well 2 was conducted on July 17-20, 2006. The testing plan was not reviewed by Commission staff. During the testing, ID Well 2 was pumped at a rate of 440 gpm, and water levels were monitored in the test well, three observation wells, and ID Well 1. U.S. Geological Survey stream gage data were observed in the Tioga River near Erwin, and in the Canisteo River at West Cameron, New York. Water levels were not measured in a 20-foot deep residential well located approximately 550 feet north of ID Well 2 during the aquifer test due to inaccessibility. The project sponsor indicated that a

drainage swale, located 300 feet northeast of ID Well 2, was dry during the aquifer test and not monitored.

Results of the aquifer test indicated no impact on shallow groundwater monitored in an unused, 30-foot deep well located 740 feet north of ID Well 2. Test data indicates the area of influence in the aquifer extends 3,500 feet to the east and west of ID Well 2, and most likely extends to the Canisteo River to the south.

Pumping at ID Wells 1 and 2 will impact each other. Background monitoring showed that at a pumping rate of 275 gpm, ID Well 1 drew down the groundwater level in ID Well 2 by approximately 0.5 feet. At the conclusion of the aquifer test at ID Well 2, the drawdown in ID Well 1 was 0.95 feet.

**Coordination.** In order to satisfy funding requirements, the project sponsor intends to submit applications to the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH) for groundwater withdrawal from ID Well 2 to coincide with the state's grant approval process. Commission staff recommends that this docket approval does not become effective until the project sponsor certifies to the Commission that it has received permits from NYSDEC and NYSDOH for use of ID Well 2.

## Findings

The project is subject to Commission approval and reporting requirements, as per Commission Regulation §806.4(2).

Commission staff recommends approval of a 30-day average withdrawal of 0.504 mgd from ID Well 2. Commission staff recommends approval of a peak instantaneous pumping rate of 350 gpm for ID Well 2.

Commission staff recommends waiving the requirement for the aquifer testing, as per Commission Regulation §806.12. Commission staff reviewed the results of the aquifer test at ID Well 2, conducted from July 17-20, 2006, to evaluate the application.

Commission staff finds that there is likely minimal impact to any existing nearby water users and the aquifer. Commission staff also evaluated groundwater availability in the vicinity of the wells. The requested withdrawal of 0.504 mgd from ID Well 2 represents approximately 0.38 percent of the average daily recharge (133 mgd) of the Canisteo River Basin during a 1-in-10-year drought. The combined withdrawal from ID Wells 1 and 2 represents 0.68 percent of that daily recharge to the basin.

Commission staff recommends that the withdrawals from Wells 2, 3, and ID Well 1 be maintained at their current rates of 0.350 mgd, 0.325 mgd, and 0.125 mgd, respectively, as part of this docket. The maximum instantaneous withdrawal rates at the wells should be limited to the current pump capacities of 400 gpm, 400 gpm, and 302 gpm, respectively.

The project is subject to the Commission's water conservation requirements, as per Commission Regulation §806.25(a). The water system is 100 percent metered, which is in compliance with this regulation, and the Town of Erwin reports unaccounted for water losses of less than 20 percent, which is in compliance with Commission Regulation §806.25(a)(1).

The project sponsor has paid the appropriate application fee in accordance with Commission Regulation §806.13, and in accordance with Commission Resolution No. 2006-08. The project sponsor has provided all proofs of notification as required by Commission Regulation §806.15.

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.

This project is not required for the optimum planning, development, conservation, utilization, management, and control of the water resources of the basin and will not significantly affect the water resources of the basin.

### **Decision**

1. The project's groundwater withdrawals (30-day averages) of 0.504 mgd from ID Well 2, 0.350 mgd from Well 2, 0.325 mgd from Well 3, and 0.125 mgd from ID Well 1, and a total system withdrawal limit of 2.510 mgd (30-day average) are approved pursuant to Article 3, Section 3.10, of the Compact.

2. The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision.

3. The project sponsor shall comply with all Commission regulations, including groundwater withdrawal monitoring and reporting requirements contained in Commission Regulation §806.30.

4. The project sponsor shall keep daily records of the metered withdrawals in ID Well 2. The required reporting data shall be submitted to the Commission quarterly, and as otherwise required. Quarterly monitoring reports are due within thirty (30) days after the close of the preceding quarter.

5. Within sixty (60) days from the date of this approval, the project sponsor shall install a meter, accurate to within five (5) percent, on ID Well 2. The project sponsor shall notify the Commission, in writing, when the meter is installed.

6. The constant-rate pumping test requirement specified in Commission Regulation §806.12 is hereby waived for ID Well 1, ID Well 2, Well 2, and Well 3.

7. The maximum instantaneous rate of production from ID Well 2 shall not exceed 350 gpm.

8. The instantaneous withdrawal rates for Wells 2, 3, and ID Well 1 shall not exceed 400 gpm, 400 gpm, and 302 gpm, respectively.

9. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §806.25(a).

10. Pursuant to Article 12, Section 12.2, of the Compact, this project is hereby included in the Commission's Comprehensive Plan.

11. This approval does not become effective until the project sponsor certifies to the Commission that it has received permits from NYSDEC and NYSDOH for use of ID Well 2.

12. 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.

13. 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.

14. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the Commission may suspend, modify, or revoke its approval of same, and may impose appropriate 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. 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 penalties, regardless of the period of noncompliance.

15. 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 water resources. The Commission, upon its own motion, may at any time reopen any project approval and make additional corrective modifications that may be necessary.

16. 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.

17. This approval is effective until June 13, 2022. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than December 13, 2021, the existing approval shall be deemed extended until such time as the Commission renders a decision on the application.

18. The project sponsor has a period of three (3) years from the date of this approval to initiate the project or such approval will automatically expire, unless an extension is requested by the project sponsor and approved by the Commission. Likewise, if the project is discontinued for such a time and under such circumstances that an abandonment of the project may be reasonably 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: June 13, 2007

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Kenneth P. Lynch, Chair  
New York Commissioner



# SUSQUEHANNA RIVER BASIN COMMISSION

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**Docket No. 20070604**

**Approval Date: June 13, 2007**

## **HUGHESVILLE BOROUGH AUTHORITY**

Groundwater Withdrawal (30-Day Average) of 0.260 mgd from Well 1,  
0.260 mgd from Well 2, and 1.440 mgd from Well 3,  
and a Total System Withdrawal Limit (Peak Day) of 2.500 mgd,  
for Public Water Supply,  
Wolf 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 (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received an initial application on January 11, 2006, a revised application on November 2, 2006, and supplemental information on May 4, 2007.

### **Description**

**Purpose.** The purpose of the application is to request approval for the withdrawal of groundwater for distribution in a public water supply system.

**Location.** The project is located in the West Branch Susquehanna Subbasin, HUC 02050206, Muncy Creek Watershed, Wolf Township, Lycoming County, Pennsylvania.

**Project Features.** The project sponsor has requested approval for the withdrawal (30-day average) of 1.440 million gallons per day (mgd) from Well 3. Hughesville Borough Authority (HBA) will use the well as a source for the public water supply system that currently relies on Wells 1 and 2. The use of Wells 1 and 2 predate July 13, 1978, and did not previously require approval by the Commission.

Specific locational information concerning discrete water-related project features has been withheld for security reasons.

Well 3 is located southwest of the Borough of Hughesville and is completed in the unconsolidated alluvial deposits that fill the broad Muncy Creek valley. These deposits, composed mostly of cobbles, fine to coarse gravel, and coarse sand, are reported to range in thickness from 20 to 50 feet thick. Well 3 was completed as a screened well, constructed with

16-inch-diameter steel casing set to 41 feet below ground surface (bgs) and 0.080-inch slot stainless steel, wire-wrapped screen from 42.5 to 51 feet bgs that was filter-packed with #4 high silica sand. Wells 1 and 2 also tap the unconsolidated alluvial deposits along the Muncy Creek valley.

The table, below, identifies the three HBA Wells, the date of their initial service, their pump capacities, screened intervals, and their reported average daily withdrawals.

<b>Well Identification</b>	<b>Date of Initial Service</b>	<b>Pump Capacity (gpm)</b>	<b>Depths of Screened Interval (feet bgs)</b>	<b>Reported Average Daily Withdrawal (2000 to 2004) (mgd)</b>
Well 1	Prior to 1970	750	40 to 50	0.239
Well 2	1970	750	39 to 57	0.252
Well 3	TBD	1,000	42.5 to 51	NA
gpm - gallons per minute TBD - To Be Determined NA - Not Applicable				

HBA provides water service to Hughesville Borough and adjacent parts of Wolf Township, and has plans for several expansions and interconnections in the future, including providing service to the Lycoming Mall corridor. The current average daily demand of the HBA system is approximately 0.490 mgd and, due to the growth in the region, the projected average daily demand through 2030 is 1.980 mgd.

Wastewater is treated at the HBA wastewater treatment plant and discharged to Muncy Creek, south of Wells 1, 2, and 3.

**Aquifer Test.** Two separate constant-rate aquifer tests have been performed on Well 3, both with prior Commission approval. The first test was conducted at a constant rate of 800 gpm for 73 hours between June 20 and 23, 2006. Based on the results of this testing and the demand for a reliable, high yielding well, a second test was performed at a constant rate of 1,006 gpm for 72 hours between October 9 and 12, 2006.

In addition to the pumping well, nine observation wells were monitored; including three newly constructed wells (two piezometers constructed with screened intervals that were similar to that of the production well and a test well), three residential wells, two irrigation wells for the local high school, and a water supply well for a local restaurant. No surface water monitoring was performed nor required for either of the aquifer tests.

Drawdown directly proportional in proximity to Well 3 and its rate of withdrawal was observed in all of the monitored wells. However, the maximum observed drawdown was 1 foot or less in the private wells, and local groundwater users are unlikely to experience any

perceptible changes to the availability or quality of the resource as a result of the operation of Well 3 at the requested withdrawal rate.

**Coordination.** Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP) Northcentral Region Office during review of the project. PADEP staff has reviewed this docket for consistency with its requirements. PADEP issued Public Water Supply (Construction) Permit No. 4106503 for Well 103 on February 20, 2007.

### **Findings**

The project is subject to Commission review and approval standards, including Commission Regulations §806.21 and §806.23.

Commission staff reviewed the groundwater availability analysis, aquifer test results, and supporting information submitted by the project sponsor. Based on this information, Commission staff concludes that Well 3 likely draws water from a highly transmissive, laterally expansive and unconsolidated alluvial aquifer with a significant contributing area.

Commission staff recommends that the maximum instantaneous rate of production from Well 3 not exceed 1,000 gpm. Likewise, Commission staff recommends approval of a 30-day average withdrawal rate of 1.440 mgd, the requested quantity.

The project sponsor's withdrawals from Wells 1 and 2 have been in operation since the early 1970s and currently are HBA's only sources of water. The withdrawal is subject to review and approval under Commission Regulation §806.4(a)(2)(iv). The project sponsor reports that over the last 5 years of record, average daily withdrawals from Wells 1 and 2 were 0.238 and 0.252 mgd (30-day averages), respectively. Both wells are equipped with pumps that are capable of producing 500 gpm (0.720 mgd). Currently, there are no known adverse impacts due to the operation of these wells, and Commission staff recommends waiving the aquifer testing requirement based on operational data. Commission staff recommends approval of withdrawals from each well of up to 0.260 mgd (30-day averages), for a combined approval of 0.520 mgd from Wells 1 and 2.

The projected average daily demand through 2031 is 1.870 mgd, and maximum daily demand is 2.240 mgd. Commission staff recommends approval of a total system withdrawal of 2.500 mgd (peak day) from all sources, which is consistent with sound operating practices and the sustainable yields of existing sources, and will satisfy the projected system demand.

The project is subject to Commission monitoring and reporting requirements, as per Commission Regulation §806.30. The project sponsor should install appropriate metering on Well 3 and monitor withdrawals daily. Likewise, the project sponsor should maintain the separate metering on Wells 1 and 2 and monitor these withdrawals daily. The project sponsor should report these data to the Commission quarterly.

The project is subject to the Commission's water conservation requirements, as per Commission Regulation §806.25(a). HBA reports unaccounted for water losses of less than

4 percent, which is in compliance with Commission Regulation §806.25(a)(1). The water system is 92 percent metered but less than half of the 90 commercial customers are currently metered. Commission staff recommends that the project sponsor install meters at all of its commercial customers and achieve 100 percent compliance with the requirements by June 13, 2012. HBA should report to the Commission annually on its progress in meeting this requirement.

The project sponsor has paid the appropriate application fee pursuant to Commission Regulation §806.13, and in accordance with Commission Resolution No. 2005-03. The project sponsor has provided all proofs of notification as required by Commission Regulation §806.15.

In accordance with the Memorandum of Understanding with PADEP, Commission staff recommends that this approval not become effective until such time as the project sponsor can certify to the Commission that it has received an approval from PADEP for the construction of the water supply facilities related to this application.

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.

This project is not required for the optimum planning, development, conservation, utilization, management, and control of the water resources of the basin and will not significantly affect the water resources of the basin.

### **Decision**

1. The project's groundwater withdrawals (30-day averages) of 0.260 mgd from Well 1, 0.260 mgd from Well 2, and 1.440 mgd from Well 3, and a total system withdrawal limit from all sources of 2.500 mgd (peak day), are approved pursuant to Article 3, Section 3.10, of the Compact.

2. The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision.

3. The project sponsor shall comply with all Commission regulations, including withdrawal monitoring requirements contained in Commission Regulation §806.30.

4. The project sponsor shall keep daily records of the metered withdrawals from Wells 1, 2, and 3. The required reporting data shall be submitted to the Commission quarterly, and as otherwise required. Quarterly monitoring reports are due within thirty (30) days after the close of the preceding quarter.

5. Within sixty (60) days from the date of this approval, the project sponsor shall install totalizing flow meters, accurate to within five (5) percent, on Wells 1, 2, and 3. The project sponsor shall notify the Commission, in writing, within thirty (30) days of when the meters are installed. The project sponsor may propose alternate monitoring to the Commission for Wells 1 and 2 for staff review and approval.

6. The constant-rate aquifer test requirement specified in Commission Regulation §806.12 is hereby waived.

7. The maximum instantaneous rates of production from Wells 1, 2, and 3 shall not exceed 500 gpm, 500 gpm, and 1,000 gpm, respectively.

8. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §806.25(a). The project sponsor shall have completed its meter installation program for commercial customers and achieved 100 percent compliance with the requirements by June 13, 2012. The project sponsor shall report to the Commission annually on the progress made pursuant to these requirements. The project sponsor must petition the Commission for an extension should unforeseen events occur that preclude compliance with the June 13, 2012, deadline.

9. If the Commission determines that the operation of the project's groundwater withdrawals adversely affect any existing groundwater or surface water withdrawal, the project sponsor shall be required to provide, at its expense, an alternate water supply or other mitigating measure.

10. Pursuant to Article 12, Section 12.2, of the Compact, this project is hereby included in the Commission's Comprehensive Plan.

11. 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.

12. This approval shall not become effective until the project sponsor certifies to the Commission that it has received a permit from PADEP authorizing the operation of the water supply facilities related to this application.

13. To satisfy the Commission's registration requirement, the project sponsor shall register with the PADEP all surface water and groundwater sources described in this docket in accordance with the Pennsylvania Water Resources Planning Act (Pennsylvania Act 220).

14. 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.

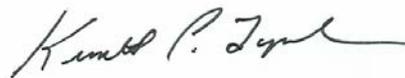
15. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the Commission may suspend, modify, or revoke its approval of same, and may impose appropriate penalties. Upon written notice by the Commission, the project sponsor shall have thirty (30) days to correct such noncompliance, unless an alternate period is specified in the notice. 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 penalties, regardless of the period of noncompliance.

16. 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 water resources. The Commission, upon its own motion, may at any time reopen any project approval and make additional corrective modifications that may be necessary.

17. 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.

18. This approval is effective until June 13, 2022. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than December 13, 2021, the existing approval shall be deemed extended until such time as the Commission renders a decision on the application.

By the Commission:



Dated: June 13, 2007

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Kenneth P. Lynch, Chair  
New York Commissioner



# SUSQUEHANNA RIVER BASIN COMMISSION

1721 North Front Street • Harrisburg, Pennsylvania 17102-2391

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**Docket No. 20070608**

**Approval Date: June 13, 2007**

## **DART CONTAINER CORPORATION OF PENNSYLVANIA**

Groundwater Withdrawal (30-Day Average) of 0.122 mgd from Well B,  
and a Total Groundwater Withdrawal of 0.367 mgd,  
for Manufacturing of Food Service Products,  
Upper Leacock Township, Lancaster County, Pennsylvania

### **Review Authority**

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the application on March 21, 2007, and additional supporting materials on April 16, 2007.

### **Description**

**Purpose.** The purpose of the application is to request approval for the groundwater withdrawal associated with the manufacture of food service products.

**Location.** The project is located in the Lower Susquehanna Subbasin, HUC 02050306, Conestoga River Watershed, Upper Leacock Township, Lancaster County, Pennsylvania.

**Project Features.** The project sponsor has requested approval for the withdrawal (30-day average) of 0.122 million gallons per day (mgd) of water from Well B for manufacturing water supply. Well B is part of a larger groundwater withdrawal system including Wells 4, 5, 9, 11, 12, 13, 14, and 15 that are approved in Commission Docket Nos. 20040910 and 20040911.

The Commission approved consumptive water use of up to 0.330 mgd (peak day) and groundwater withdrawals from Wells 4, 5, 9, 11, 12, 13, and 14 of 0.367 mgd (combined 30-day average) on September 8, 2004, as Commission Docket No. 20040910. Also on September 8, 2004, the Commission approved a withdrawal from Well 15 (Commission Docket No. 20040911). An increase in peak day consumptive water use from 0.330 mgd to 0.418 mgd was approved as Commission Docket No. 20040910-1 on June 14, 2006.

Well B was drilled in 1993 and has remained unused since its construction. Recently, in an effort to balance withdrawals for the Dart Container Corporation of Pennsylvania well field, Well B was investigated to determine the feasibility of using it as a water supply well.

Specific locational information concerning discrete water-related project features has been withheld for security reasons. Well B is constructed in the Cambrian-Age Zooks Corner Formation to a total depth of 500 feet, and has a casing length of 50 feet. Two major water-bearing zones were encountered at 290 and 370 feet below ground surface (bgs). The submersible pump in Well B has a capacity of 85 gallons per minute (gpm) and a pump intake setting of 391 feet bgs. The well currently is not metered separately.

**Aquifer Testing.** A 48-hour, constant-rate aquifer test of Well B was conducted with prior Commission approval on March 26-28, 2007, at an average rate of 85 gpm. Three on-site wells (Wells 9, 12, and 13), one off-site public water supply well (Upper Leacock Township Well 12) located along strike and to the west of Well B, and one residential well located to the southwest of Well B, were monitored during the testing. The residential well is the only off-site well that was influenced by the project's well field (having a maximum drawdown of less than 3 feet) during a yearlong monitoring program in 2005. In addition, one weir, located to the south-southwest and downgradient of Well B on an unnamed tributary to Mill Creek, was monitored.

Total drawdown within the production well after 48 hours was approximately 190 feet. Drawdown stabilized at approximately 180 feet bgs (after 160 feet of drawdown) after approximately 70 minutes of pumping. No drawdown was observed in any of the off-site monitoring points.

## Findings

The project is subject to Commission review and approval standards, including Commission Regulations §806.21 and §806.23.

Commission staff reviewed the groundwater availability analysis, aquifer testing results, and supporting information submitted by the project sponsor. Based on this information, Commission staff concludes that Well B draws water from both an unconfined water table aquifer in the karst-prone, vertically bedded, and pinnacled carbonate of the Zooks Corner Formation, and the deeper aquifer of the Ledger Formation that is under semi-confined conditions.

Commission staff recommends that the maximum instantaneous rate of production from Well B not exceed 85 gpm, the tested rate. Commission staff recommends approval of a 30-day average withdrawal rate from Well B of 0.122 mgd, the requested quantity.

The water withdrawal from Well B should be metered separately, as currently required at each of the other wells by the dockets.

The project sponsor's consultant has calculated the 1-in-10 drought year groundwater availability to be 0.372 mgd, and Commission staff concurs. Currently, the project sponsor is approved to withdraw a total of 0.367 mgd from eight wells (Wells 4, 5, 9, 11, 12, 13, 14, and 15) for its manufacturing operations. The project sponsor recognizes that it already has approval to withdraw the sustainable yield of the aquifer and has not requested an increase in the total groundwater withdrawals from the site.

According to metered data collected during the yearlong "groundwater availability monitoring program" in 2005 and during production in 2006, the project sponsor has a current maximum daily demand of 0.420 mgd and an average daily demand (30 days) of 0.292 mgd. Water use is expected to increase to 0.525 mgd for a peak day and 0.367 mgd on the average over the next 20 years. The project sponsor is reviewing various options for supporting future increases in demand at the site.

Commission staff recommends that the current limit on the total system withdrawal of 0.367 mgd (30-day average) remain.

The project sponsor has not requested any modification of its consumptive water use approval. The current limit on peak day consumptive use of 0.418 mgd, and current monitoring and reporting, will continue unchanged.

The project is subject to water conservation requirements as per Commission Regulation §806.25(a).

The project sponsor has paid the appropriate application fee pursuant to Commission Regulation §806.13, and in accordance with Commission Resolution No. 2006-08. The project sponsor has provided all proofs of notification as required by Commission Regulation §806.15.

The other docket approvals are effective until September 8, 2029, a duration of 22 years. Commission staff recommends the duration of the docket approved be consistent with the prior docket approval.

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.

### **Decision**

1. The project's groundwater withdrawals (30-day averages) of 0.122 mgd from Well B, and a total system withdrawal limit from all sources of 0.367 mgd, are approved pursuant to Article 3, Section 3.10, of the Compact.

2. The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision.

3. The project sponsor shall comply with all Commission regulations, including withdrawal monitoring requirements contained in Commission Regulation §806.30.

4. The project sponsor shall keep daily records of the metered withdrawals from Well B. The required reporting data shall be submitted to the Commission quarterly, and as otherwise required. Quarterly monitoring reports are due within thirty (30) days after the close of the preceding quarter.

5. Within sixty (60) days from the date of this approval, the project sponsor shall install a totalizing flow meter, accurate to within five (5) percent, on Well B. The project sponsor shall notify the Commission, in writing, within thirty (30) days of when the meter is installed.

6. The maximum instantaneous rate of production from Well B shall not exceed 85 gpm.

7. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §806.25(b).

8. If the Commission determines that the operation of the project's groundwater withdrawal adversely affects any existing groundwater or surface water withdrawal, the project sponsor shall be required to provide, at its expense, an alternate water supply or other mitigating measure.

9. 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.

10. 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.

11. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the Commission may suspend, modify, or revoke its approval of same, and may impose appropriate 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. 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 penalties, regardless of the period of noncompliance.

12. 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 water resources. The Commission, upon its own motion, may at any time reopen any project approval and make additional corrective modifications that may be necessary.

13. 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.

14. This approval is effective until September 8, 2029. The duration of this docket is in accordance with the term of the other docket approvals. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than March 8, 2029, the existing approval shall be deemed extended until such time as the Commission renders a decision on the application.

By the Commission:



Dated: June 13, 2007

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Kenneth P. Lynch, Chair  
New York Commissioner



# SUSQUEHANNA RIVER BASIN COMMISSION

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**Docket No. 20031204-1**

**Approval Date: December 11, 2003**

**Modification Date: June 13, 2007**

## **NEW ENTERPRISE STONE & LIME CO., INC. ASHCOM QUARRY**

Consumptive Water Use of up to 0.235 mgd,  
Groundwater Withdrawals from Wells 1, 2, and 3 of 0.010 mgd,  
0.025 mgd, and 0.065 mgd (30-Day Averages), Respectively, and  
Surface Water Withdrawal from Cove Creek of up to 254 gpm (Peak Day),  
for Processing of Aggregate and Production of Concrete,  
Snake Spring Valley Township, Bedford County, Pennsylvania

### **Review Authority**

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the application on November 28, 2006, and a modified application on March 30, 2007. Additional information was received April 9, 2007.

### **Description**

**Purpose.** The Commission originally approved the project on December 11, 2003, as Commission Docket No. 20031204 (Docket). This current docket modification adds a groundwater withdrawal as a water source. The project sponsor is not requesting any modification to the approved maximum daily consumptive water use for the project.

**Location.** The project is located in the Juniata Subbasin, HUC 02050303, Cove Creek Watershed, Snake Spring Valley Township, Bedford County, Pennsylvania.

**Project Features.** The project sponsor has requested approval for the withdrawal of 0.065 million gallons per day (mgd) (30-day average) from Well 3 for Redi-mix concrete manufacturing at the Ashcom Quarry. This new withdrawal is intended to supplement an existing surface water withdrawal at Cove Creek 1 (CC1) due to the variable nature of water quality from CC1. The project sponsor intends to use water from CC1 or Well 3.

Specific locational information concerning discrete water-related project features has been withheld for security reasons.

The Docket approved peak day withdrawals from Cove Creek of 0.082 mgd from CC1 and 0.060 mgd from Cove Creek 2 (CC2). The maximum pumping capacities of intakes CC1 and CC2 are 200 gallons per minute (gpm) and 160 gpm, respectively. The project sponsor adjusted its pumping rates so that its maximum instantaneous withdrawal rate from Cove Creek is less than 10 percent of the Q7-10 flow of Cove Creek.

Existing Well 1 withdraws up to 0.010 mgd (maximum 30-day average) and existing Well 2 withdraws up to 0.025 mgd (maximum 30-day average).

### **Findings**

The project is approved for a maximum day consumptive water use of up to 0.235 mgd in Commission Docket No. 20031204. The requested new withdrawal from Well 3 will not increase the consumptive water use of the project. Water from Well 3 will be used in place of surface water from intake CC1.

Water withdrawal at the Ashcom Quarry is as follows:

- Well 1 – 10,000 gallons per day (gpd); maximum instantaneous rate of 30 gpm;
- Well 2 – 25,000 gpd; maximum instantaneous rate of 13 gpm;
- Well 3 (proposed) – 65,000 gpd; maximum instantaneous rate of 66 gpm;
- CC1 – 82,000 gpd; maximum instantaneous rate of 200 gpm; and
- CC2 – 60,000 gpd; maximum instantaneous rate of 160 gpm.

The project sponsor has requested a waiver from the Commission's required aquifer testing for Well 3. Commission staff recommends approval of the waiver because the proposed withdrawal rate from Well 3 is relatively low and any potential surface water impacts will be minimal as the proposed pump capacity of Well 3, 66 gpm, is less than the surface water withdrawal limit of 254 gpm from Cove Creek. Pumping at Well 3 is not expected to cause any adverse impacts to other groundwater users; the closest well is located more than 3,000 feet away from Well 3.

Commission staff recommends approval of a 30-day average withdrawal of 0.065 mgd from Well 3. Commission staff recommends approval of peak instantaneous pumping rate of 66 gpm for Well 3.

The project is subject to Commission monitoring and reporting requirements, as per Commission Regulation §806.30. The project sponsor should install appropriate metering on Well 3 and monitor withdrawals daily. The project sponsor should report these data to the Commission quarterly.

The use of Wells 1 and 2 predates July 13, 1978, and did not previously require approval by the Commission. Commission staff recommends approval of these withdrawals, maintained at current rates for Wells 1 and 2. Impacts related to the surface water intakes CC1 and CC2

were reviewed as part of the consumptive water use approval, and Commission staff recommends approval in this modification.

The project sponsor has paid the appropriate application fee, in accordance with Commission Regulation §806.13 and Commission Resolution No. 2006-08.

Commission staff recommends that this approval remain effective until December 11, 2028, the term of the prior Docket approval.

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.

### **Decision**

1. Commission Docket No. 20031204, as approved December 11, 2003, is hereby modified to approve the addition of Wells 1, 2, and 3 as groundwater supply sources with a withdrawal (30-day averages) of up to 0.010 mgd, 0.025 mgd, and 0.065 mgd pursuant to Article 3, Section 3.10, of the Compact.

2. Commission Docket No. 20031204, decision item "h," approved an instantaneous surface water withdrawal rate limit of 254 gpm from Cove Creek.

3. Consumptive water use approval, specified in Commission Docket No. 20031204, will continue at a rate of up to 0.235 mgd.

4. The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision.

5. All other conditions in Commission Docket No. 20031204 not inconsistent herewith shall remain effective.

6. Pursuant to Article 12, Section 12.2, of the Compact, this project is hereby included in the Commission's Comprehensive Plan.

7. 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.

8. 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 rule, regulation, or order of the Commission.

9. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the Commission may suspend, modify, or revoke its approval of same, and may impose appropriate 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. 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.

10. 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.

11. This approval is effective until December 11, 2028, in accordance with the term of the prior Docket approval. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than June 11, 2028, the existing approval shall be deemed extended until such time as the Commission renders decision on the application.

By the Commission:



Dated: June 13, 2007

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Kenneth P. Lynch, Chair  
New York Commissioner



# SUSQUEHANNA RIVER BASIN COMMISSION

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**Docket No. 20021019-1**

**Approval Date: October 10, 2002**

**Modification Date: June 13, 2007**

## **GOLF ENTERPRISES, INC. d.b.a. VALLEY GREEN GOLF COURSE**

Surface Water Withdrawal of up to 0.350 mgd, When Available, from Fishing Creek,  
and Consumptive Water Use of up to 0.440 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 (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received an application requesting a modification to the project's existing approval for consumptive water use on March 20, 2007.

### **Description**

**Purpose.** The Commission originally approved this project on October 10, 2002 as Docket No. 20021019 (Docket). As approved, the Valley Green Golf Course (Valley Green) was authorized to withdraw up to 0.350 million gallons per day (mgd), when available, from Fishing Creek, and the consumptive use of water of up to 0.350 mgd for the irrigation of greens, tees, and fairways at the 18-hole golf course, subject to conditions enumerated in the Docket. This docket modification approves an increase in consumptive water use, the addition of two new storage ponds, and rescinds certain provisions and establishes new conditions.

**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 an increase in consumptive use of water from 0.350 million gallons per day (mgd) up to 0.440 mgd for irrigation of greens, tees, and fairways. The project sponsor is proposing to install a new irrigation system, which will increase irrigation needs by an additional 0.090 mgd on a peak day. The project's maximum daily consumptive water use, based on water use records submitted to the Commission for 2006, was approximately 0.330 mgd. The project sponsor also is requesting approval for two new storage ponds.

Specific locational information concerning discrete water-related project features has been withheld for security reasons.

The primary source of water is an existing withdrawal from Fishing Creek that previously did not require approval under the Commission's surface water withdrawal regulation.

Water is withdrawn through a metered intake, then discharged into Pond 1, which has surface area of 0.26 acres, providing a total storage capacity of 0.339 million gallons (mg) and a useable storage capacity of approximately 0.270 mg. Currently, water from Pond 1 is pumped directly into the golf course's irrigation system, which is equipped with a totalizing meter.

The project sponsor is proposing to add two ponds to create additional storage, and relocate the irrigation system's pump house as part of the new irrigation system. The existing ornamental pond near the 18<sup>th</sup> green (Upper 18<sup>th</sup> Pond) will be reconstructed to increase its total capacity up to 1.302 mg, with a useable storage of approximately 0.975 mg. A new storage pond (Lower 18<sup>th</sup> Pond) will be constructed immediately downgradient of the Upper 18<sup>th</sup> Pond to have a useable storage capacity of approximately 1.250 mg.

After pond construction is complete, a new irrigation system will be installed. The system's pumps will be relocated to be adjacent to the new storage ponds (Upper and Lower 18<sup>th</sup> Ponds). Water withdrawn from Fishing Creek will continue to be discharged into Pond 1. From Pond 1, water will be directed into the Upper and Lower 18<sup>th</sup> Ponds. Water for the irrigation system will be withdrawn from either the Upper or Lower 18<sup>th</sup> Ponds, as needed.

With the addition of the two proposed storage ponds, Valley Green will have a useable storage capacity of 2.500 mg that equates to 5.5 days of irrigation water at the requested "peak day" usage rate of 0.440 mgd and 19 days at the 30-day average usage rate of 0.133 mgd. The project sponsor intends to develop additional water sources to supply irrigation water.

### **Findings**

The project sponsor has requested an increase in consumptive water use of up to 0.440 mgd. Based on an analysis of water use records and projected needs supplied by the project sponsor, Commission staff is recommending approval of the requested amount, which represents an increase of approximately 25 percent above the current limit of 0.350 mgd. The increase will allow for greater operational flexibility and periodic peaks in consumptive water use related to the new irrigation system.

As described in the Docket, all water withdrawn from the storage ponds (both existing and proposed) and used for golf course irrigation, plus evaporation from the Upper 18<sup>th</sup> Pond and the Lower 18<sup>th</sup> Pond, is considered to be used consumptively. Evaporative losses will be calculated using a method acceptable to the Commission. The irrigation water is metered and/or monitored as described in the Docket, and reported to the Commission on a quarterly basis.

The project sponsor proposes to continue to make quarterly payments to the Commission in lieu of providing actual compensation water to mitigate its consumptive water use in excess of the grandfathered quantity of 50,000 gallons per day (gpd).

The project sponsor operates a surface water intake on Fishing Creek that, according to the Docket, is limited by a passby flow equal to 20 percent of the average daily flow of Fishing Creek (2.20 cubic feet per second [cfs] or 987 gallons per minute [gpm]). Commission staff previously found that streamflow will not be sufficient to maintain the recommended passby flow rate and meet the golf course's irrigation needs approximately 64 percent of the time. Even with the additional storage, the project sponsor will need to explore alternative water supply sources and is currently testing a newly installed well.

The project is subject to water conservation requirements, as per Commission Regulation §806.25(a).

The project sponsor has paid the appropriate application fee, in accordance with Commission Regulation §806.13, and in accordance with Commission Resolution No. 2006-08. The project sponsor has provided all proofs of notification, as required by Commission Regulation §806.15.

Commission staff recommends that this approval remain effective until October 10, 2027, the term of the prior Docket approval.

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.

### **Decision**

1. Commission Docket No. 20021019, as approved October 10, 2002, is hereby modified to approve the project's surface water withdrawal of up to 0.350 mgd, when available, from Fishing Creek, and consumptive water use of up to 0.440 mgd, and the addition of two storage ponds, pursuant to Article 3, Section 3.10, of the Compact.

2. The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision.

3. The project sponsor shall comply with all Commission regulations, including consumptive water use reporting requirements, as per Commission Regulation §806.30.

4. 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 calculated evaporative losses from the Upper and Lower 18<sup>th</sup> Ponds, and the quantity of water pumped through the irrigation system. The project sponsor shall maintain metering on the irrigation system, accurate to within five (5) percent.

5. To satisfy the Commission's current compensation requirements for consumptive water use set forth in Commission Regulation §806.30, 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, plus evaporative losses from the Upper and Lower 18<sup>th</sup> Ponds. 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.

6. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §806.25(c).

7. All other conditions in Commission Docket No. 20021019 not inconsistent herewith shall remain effective.

8. 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.

9. 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.

10. 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.

11. 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.

12. 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.

13. 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.

14. 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: June 13, 2007

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Kenneth P. Lynch, Chair  
New York Commissioner



# SUSQUEHANNA RIVER BASIN COMMISSION

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**Docket No. 20070605**

**Approval Date: June 13, 2007**

## **CENTRE HILLS COUNTRY CLUB**

Groundwater Withdrawals (30-Day Averages) of 0.316 mgd from the Hole #8 Well and 0.316 mgd from the Driving Range Well, for Golf Course Irrigation, College Township, Centre County, Pennsylvania

### **Review Authority**

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the application on July 3, 2003, and additional supporting materials on February 27, 2007.

### **Description**

**Purpose.** The purpose of the application is to request approval for the groundwater withdrawal for the irrigation of greens, tees, and fairways at an existing 27-hole golf course.

**Location.** The project is located in the West Branch Susquehanna Subbasin, HUC 02050204, Slab Cabin Run Watershed, College Township, Centre County, Pennsylvania.

**Project Features.** The project sponsor has requested approval for the withdrawal (30-day averages) of 0.316 million gallons per day (mgd) of water from the Hole #8 Well and 0.316 mgd from the Driving Range Well for golf course irrigation.

Specific locational information concerning discrete water-related project features has been withheld for security reasons.

The Commission approved consumptive water use of up to 0.632 mgd (peak day) for Centre Hills Country Club (CHCC) on August 14, 2003, as Commission Docket No. 20030808 (docket). The docket described water sources for the golf course irrigation as two existing wells that were being collectively utilized at less than 0.100 mgd on a 30-day average, a storage pond, and a temporary hookup to the State College Borough Water Authority (SCBWA), which had agreed to provide up to 200,000 gallons per day (gpd) for use as irrigation water by the project sponsor. The project sponsor indicated that the public water supply would act as a temporary water source until the project sponsor came into compliance with Commission regulations.

As described in the docket, water withdrawn from the wells can be pumped to a 1.12-acre storage pond on-site. Water can be pumped to the irrigation system from the storage pond at a rate of 200 gallons per minute (gpm). When the drawdown in the pond reaches a certain level, the pond withdrawal shuts down and water withdrawn from the wells is pumped directly to the irrigation system. The public water supply could also refill the pond or directly feed the irrigation system.

The project sponsor intends to use treated wastewater from the Beneficial Reuse Project of the University Area Joint Authority (UAJA) as its primary source of irrigation water as soon as it becomes available. CHCC has established a 99-year lease/agreement between itself and UAJA. As part of the agreement, UAJA is constructing a booster pump station on CHCC property and will connect the station to its existing irrigation system. The agreement stipulates that UAJA will provide CHCC up to 725,000 gpd via two 12-inch-diameter supply lines at a maximum receiving pressure of 140 pounds per square inch (psi) as measured on the receiving end of the booster pump station. The current scheduled project completion date is July 2007. Although the wells will become supplemental and emergency supplies at that time, the project sponsor wishes to use the wells to meet irrigation system demands until the UAJA project is completed.

The Driving Range Well was drilled in 1989 by SCBWA as part of a source exploration effort and transferred to CHCC ownership and use in 1990. The well is constructed in the Ordovician–Age Bellefonte Formation with 182.5 feet of casing to a total depth of 507 feet below ground surface (bgs). The well is equipped with a Myers 60-horsepower pump with 12 stages, capable of producing 550 to 600 gpm at 175 feet of head. The pump is set at 170 feet below the top of casing.

The Hole #8 Well was drilled in 2000 to augment the irrigation supply. The 12-inch-diameter well is constructed in the Ordovician–Age Bellefonte Formation with 34 feet of casing to a total depth of 185 feet bgs. The well is equipped with a Pleuger 100-horsepower pump, capable of producing 900 to 1,000 gpm at 100 feet of head. The pump is set at 161 feet below the top of casing.

The Bellefonte Formation is described in the literature as a light gray, fine-grained dolomite with some chert and shale, and the drilling log for the Driving Range Well reports blue dolomite with some interbeds of silty shale and some siltstone, shale, and “vuggy” sandstone with chert at depth. The two CHCC wells are located near the axis of the Nittany Mountain Syncline. The dominant type of permeability is solution channeling concentrated along zones of fracture concentration, joints, and bedding planes that intersect the conduits.

**Aquifer Testing.** Commission staff approved a plan for long-term operational testing of the two production wells at typical production rates from 2005 through 2006 to fully evaluate the possible impacts in the Slab Cabin Run subbasin. Three on-site wells (Hole #8, Driving Range, and Hole #10 Wells) and stream stage/flow rate in Slab Cabin Run were monitored during the testing of the Driving Range Well. For testing of the Hole #8 Well, three on-site wells (Driving

Range, Hole #8, and Hole #10 Wells) and stream stage/flow rate in Slab Cabin Run were monitored.

Pumping for CHCC typically occurs during late evening and morning hours, and these cycles are readily observed in the production wells. Non-pumping data were also collected for comparisons with streamflow.

Streamflow in Slab Cabin Run is highly variable and ranges from no flow to several thousand gallons per minute in relatively short time periods (hours to days), and fluctuations on the order of 50 to 100 gpm appear to occur on a daily cycle peaking around 10:00 a.m. and declining until approximately 10:00 p.m. However, the streamflow cycle does not appear to coincide with pumping cycles of either of the production wells. The daily cycle of Slab Cabin Run continues during non-irrigating time periods, which suggests other influences impacting flow.

Both the Hole #8 Well and the Driving Range Well have been operated for an extended duration without any reported well interference or excessive drawdown issues identified by SCBWA or individual domestic well owners.

### **Findings**

The project is subject to Commission review and approval standards, including Commission Regulations §806.21 and §806.23.

Commission staff reviewed the groundwater availability analysis, aquifer testing results, and supporting information submitted by the project sponsor. Based on this information, Commission staff concludes that the Hole #8 Well and the Driving Range Well draw water from a highly productive carbonate aquifer of the Bellefonte Formation in the Slab Cabin Run subbasin. SCBWA also operates high capacity production wells in the subbasin.

Commission staff finds that there appears to be no immediate or direct impact of pumping the CHCC irrigation wells on the flow of Slab Cabin Run. Although streamflow is highly variable ranging from dry to bankfull, operational testing confirms these fluctuations in streamflow in Slab Cabin Run appear to occur on a daily cycle unrelated to either pumping or non-pumping conditions at CHCC.

Commission staff recommends that the maximum instantaneous rates of production from the Hole #8 Well and the Driving Range Well not exceed 500 gpm and 500 gpm, respectively, the tested rates. Commission staff recommends approval of 30-day average withdrawal rates from the Hole #8 Well of 0.316 mgd and the Driving Range Well of 0.316 mgd, the requested quantities.

The project sponsor has agreed to use reclaimed wastewater from UAJA, when it becomes available, as its primary source and reserve the irrigation wells as supplemental sources only to be used under specific circumstances as described below. Commission staff agrees that

this is prudent, considering the other withdrawals for the public water supplier within the Slab Cabin Run subbasin.

CHCC proposes the following conditions pertaining to its use of its two irrigation wells:

1. CHCC may operate its wells if UAJA cannot or will not provide water at a pressure equal to or exceeding 106 psi from the booster pump station, which is the pressure ensuring the proper operation of the CHCC irrigation system;
2. CHCC may operate its wells if UAJA cannot or will not provide water at a rate of 632,000 gpd, which is equivalent to CHCC's Commission-approved consumptive use; and
3. CHCC may operate its wells if UAJA cannot provide water of sufficient quality to meet the turf irrigation requirements of CHCC.

These conditions would become effective after an 8-hour lapse in service by UAJA to CHCC.

In addition, while UAJA provides beneficial reuse water to CHCC, CHCC may intermittently operate the two wells at a rate less than 100,000 gpd to meet golf course demands and irrigation equipment maintenance needs, which include:

1. Freshwater flushing of greens, which will occur on an as-needed basis; and
2. Routine operational testing and maintenance of submersible pumps, piping, pressure switches and gauges, valving, and any other in-line control, distribution, or monitoring equipment.

Commission staff concurs with these protective operating conditions for use of the wells. In the future, the project sponsor may propose alternative operating conditions and procedures to the Commission for Commission staff review and approval.

Commission staff finds that at its recommended quantity, withdrawal rate, and other operating conditions, the withdrawal from CHCC will not cause significant adverse impacts to neighboring water users or to the water resources of the basin.

The water withdrawal from the Hole #8 Well and the Driving Range Well should be metered separately.

The project sponsor has not requested any modification of its consumptive water use approval. The current limit on peak day consumptive use of 0.632 mgd and monitoring, reporting, and mitigation will continue unchanged.

The project is subject to water conservation requirements as per Commission Regulation §806.25(c).

The project sponsor has paid the appropriate application fees pursuant to Commission Regulation §806.13, and in accordance with Commission Resolution No. 2005-03. The project sponsor has provided all proofs of notification as required by Commission Regulation §806.15.

The other docket approval is effective until August 14, 2028, a duration of 21 years. Commission staff recommends the duration of the docket approved be consistent with the prior docket approval.

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.

### **Decision**

1. The project's groundwater withdrawals (30-day averages) of 0.316 mgd from the Hole #8 Well and 0.316 mgd from the Driving Range Well are approved pursuant to Article 3, Section 3.10, of the Compact.

2. The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision.

3. The project sponsor shall comply with all Commission regulations, including withdrawal monitoring requirements contained in Commission Regulation §806.30.

4. The project sponsor shall keep daily records of the metered withdrawals from the Hole #8 Well and the Driving Range Well. The required reporting data shall be submitted to the Commission quarterly, and as otherwise required. Quarterly monitoring reports are due within thirty (30) days after the close of the preceding quarter.

5. Within sixty (60) days from the date of this approval, the project sponsor shall install separate totalizing flow meters, accurate to within five (5) percent, on the Hole #8 Well and the Driving Range Well. The project sponsor shall notify the Commission, in writing, within thirty (30) days of when the meters are installed.

6. The maximum instantaneous rates of production from the Hole #8 Well and the Driving Range Well shall not exceed 500 gpm and 500 gpm, respectively.

7. The project sponsor shall comply with the protective operating conditions pertaining to its use of its two irrigation wells specified in the findings. The project sponsor may propose alternative operating conditions and procedures to the Commission for Commission staff review and approval.

8. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §806.25(c).

9. If the Commission determines that the operation of the project's groundwater withdrawal adversely affects any existing groundwater or surface water withdrawal, the project sponsor shall be required to provide, at its expense, an alternate water supply or other mitigating measure.

10. 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.

11. 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.

12. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the Commission may suspend, modify, or revoke its approval of same, and may impose appropriate 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. 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 penalties, regardless of the period of noncompliance.

13. 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 water resources. The Commission, upon its own motion, may at any time reopen any project approval and make additional corrective modifications that may be necessary.

14. 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.

15. This approval is effective until August 14, 2028. The duration of this docket is in accordance with the term of the other docket approval for the facility. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than February 14, 2028, the existing approval shall be deemed extended until such time as the Commission renders a decision on the application.

By the Commission:



Dated: June 13, 2007

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Kenneth P. Lynch, Chair  
New York Commissioner



# SUSQUEHANNA RIVER BASIN COMMISSION

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**Docket No. 19980502-1**

**Approval Date: May 21, 1998**

**Modification Date: June 13, 2007**

## **AES IRONWOOD, LLC**

Out-of-Basin Diversion of up to 4.500 mgd, for Power Plant Operations,  
South Lebanon Township, Lebanon County, Pennsylvania

### **Review Authority**

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the application on April 2, 2007.

### **Description**

**Purpose.** The Commission approved the project on May 21, 1998, as Commission Docket No. 19980502 (Docket). As approved, the AES Ironwood, LLC (AES Ironwood) facility was authorized to withdraw and consumptively use water (as an out-of-basin diversion) up to 4.320 million gallons per day (mgd), subject to conditions enumerated in the Docket. The purpose of the current application for docket modification is to request approval for an increase in withdrawal and consumptive use to meet peak generation needs at the existing 700-megawatt power plant. This docket modification approves the request, revises certain project features, and rescinds certain provisions.

**Location.** The electric-generating project is located about one and one-third miles east of the Susquehanna River Basin boundary within the Delaware River Basin, Tulpehocken Creek Watershed, South Lebanon Township, Lebanon County, Pennsylvania.

**Project Features.** The project sponsor has requested approval for an increase in its withdrawal and consumptive use of water from 4.320 mgd up to 4.500 mgd from its two existing water sources: the City of Lebanon Wastewater Treatment Plant located along the Quittapahilla Creek in the Township of North Cornwall and Pennsy Supply Company's Calcite Quarry, located within the Delaware River Basin in South Lebanon Township. The project's maximum daily consumptive water use, based on water use records submitted to the Commission for 2006, was approximately 4.120 mgd. The diversion of water will be used for cooling tower makeup, boiler makeup, and routine plant maintenance.

Existing pumping locations and capacities will not change under the requested modification. Installed pumping capacities for each water source are listed in the table, below.

<b>Location</b>	<b>Purpose</b>	<b>Rated Capacity</b>
Quarry Pond SG-2	AES Ironwood Withdrawal	2 x 1,500 gpm Pumps
Quarry Pond SG-2	Dewatering Discharge to Tulpehocken Creek	1 x 6,000 gpm Pump 1 x 6,500 gpm Pump 1 x 5,000 gpm VFD Pump
Active Quarry	Dewatering Discharge to Tulpehocken Creek	1 x 4,000 gpm Pump 1 x 4,200 gpm Pump 1 x 3,500 gpm Pump*
City of Lebanon Wastewater Treatment Plant	AES Ironwood Withdrawal	2 x 1,500 gpm Pump 1 x 3,000 gpm Pump
gpm – gallons per minute VFD – variable frequency drive *Intermittently used for backup pump capacity.		

AES Ironwood is currently authorized to withdraw and consumptively use water through docketts issued by the Delaware River Basin Commission (DRBC) and the Commission. According to conditions within the Docket, AES Ironwood is approved to consumptively use up to 4.320 mgd when the facility uses oil as the fuel source and up to 3.600 mgd when the facility uses natural gas as the fuel source. Under condition “c,” the diversion is subject to the following conditions:

1. When the generating facility is using natural gas as a fuel, 1.440 mgd of water may be diverted from the City of Lebanon Wastewater Treatment Plant, with the remaining 2.160 mgd coming from the quarry (e.g., a total of 3.600 mgd), except as outlined in “c.4.”
2. When the generating facility is using fuel oil as a fuel, 2.160 mgd of water may be diverted from the City of Lebanon Wastewater Treatment Plant, with the remaining 2.160 mgd coming from the quarry (e.g., a total of 4.320 mgd), except as outlined in “c.4.”
3. In the event lesser quantities of water than described in items 1 and 2, above, are needed for the generation project, water shall be taken from both the City of Lebanon Wastewater Treatment Plant and the quarry on an equal basis (50 percent/50 percent), except as outlined in “c.4.”
4. During times of emergency or required maintenance, either the City of Lebanon Wastewater Treatment Plant or the quarry may be used exclusively as the project’s source of water for a period not to exceed 24 hours, provided the Commission is notified within twelve (12) hours if the exclusive use occurs on a business day or on

the next business day if the use occurs on a non-business day. If the exclusive use is needed during a weekend, holiday, or other time when the next business day is more than 24 hours in the future, up to 4.320 mgd may be used from an exclusive source for the initial 24-hour period, and a maximum rate of 2.160 mgd shall be used after 24 hours until a written approval for a greater amount is obtained from the Commission.

The Docket requires different withdrawal and use limits based on fuel type because the project sponsor projected extra water to operate the scrubbers needed to meet air quality standards when using the proposed reserve fuel oil supply for nitrogen oxides (NO<sub>x</sub>) emission control purposes. However, AES Ironwood is not currently permitted to use oil as a fuel source.

The original application and approval was predicated on best engineering judgment and design criteria developed prior to construction. Following actual operation of the AES Ironwood facility during the summer of 2006, it was apparent that the original engineering estimates of water demands were not sufficiently conservative to allow for full operation of the power plant.

Treated effluent that is not diverted to AES Ironwood from the City of Lebanon Wastewater Treatment Plant discharges to Quittapahilla Creek; dewatering water from the quarry that is not diverted to AES Ironwood discharges to Tulpehocken Creek in the Delaware River Basin.

### **Findings**

The project sponsor has requested an increase in its withdrawal and consumptive water use (as an out-of-basin diversion) of up to 4.500 mgd from the two existing sources. Based on an analysis of water use records supplied by the project sponsor, Commission staff is recommending approval of the requested amount, which represents an increase of 25 percent above the current limit of 3.600 mgd when the facility is using natural gas as the fuel source. The increase will allow for the projected increases in water for periodic peaks in consumptive water use related to power generation.

As described in the Docket, all water that is diverted out of the basin is considered to be used consumptively. All of the treated effluent from the City of Lebanon Wastewater Treatment Plant pumped to the generating facility is a diversion; published reports indicate that 62 percent of the water extracted from the quarry dewatering process originates in the Susquehanna River Basin and is a diversion. The water is metered and/or monitored by source, as described in the Docket, and reported to the Commission on a quarterly basis.

During review of the original application, the Pennsylvania Fish and Boat Commission (PFBC) studied both the Quittapahilla Creek, downstream from the treatment plant in the Susquehanna River Basin, and the Tulpehocken Creek, downstream from the quarry dewatering outfall in the Delaware River Basin, to determine if either of these streams would be significantly harmed by the diversion. The analysis was based upon a concept to enhance overall habitat conditions for the coldwater fishery by damping out significant diurnal variations in quarry discharge and stabilizing flows in Tulpehocken Creek above a minimum discharge of 3,000 gpm

(6.65 cubic feet per second [cfs] or 4.320 mgd). Based on PFBC's recommendations, the Docket approved a preferential withdrawal from the quarry dewatering discharge when water demands at AES Ironwood were high over the reuse of treated effluent from the wastewater treatment plant.

Commission staff recommends that the water continue to be diverted to the project in accordance with these recommendations. In accordance with conditions outlined in the DRBC's approval for the facility, AES Ironwood is required to maintain a minimum discharge to Tulpehocken Creek of 3,000 gpm or 4.320 mgd under all operation scenarios. Other than for the emergency repair of sinkholes, the dewatering discharge to Tulpehocken Creek has remained above this threshold. This requirement will remain in effect under the modified docket.

Further, the project sponsor has proposed, and Commission staff concurs, that the maximum allowable rate of water use from the City of Lebanon Wastewater Treatment Plant be consistent with that in the existing Docket (up to 2.160 mgd), except under emergency conditions.

When water use at the facility averages less than 3.600 mgd, Commission staff recommends that water use from each source remain essentially unchanged from the Docket.

The project sponsor has requested that the Docket provision that water be taken equally from the City of Lebanon Wastewater Treatment Plant and the quarry dewatering operations when water demands are low be removed. Water use from the City of Lebanon Wastewater Treatment Plant is currently capped at 1.440 mgd when the facility's demands are 3.600 mgd or less. Further, operational history has demonstrated the commitment toward reasonably balancing water withdrawals from each source. Commission staff agrees that this condition is no longer necessary and should be rescinded.

A discussion of out-of-basin-diversion considerations is contained in the Docket, and these factors have not changed. Although the proposed modification in water use from the City of Lebanon Wastewater Treatment Plant is expected to marginally increase the total annual water withdrawal, the maximum daily withdrawal remains capped at the current maximum level so potential impacts to aquatic habitat in Quittapahilla Creek will be the same as previously assessed by the Commission and PFBC.

Commission staff has coordinated with DRBC during review of the project. DRBC staff has reviewed this docket for consistency with its requirements.

The project sponsor has paid the appropriate application fee, in accordance with Commission Regulation §806.13, and Commission Resolution No. 2006-08. The project sponsor has provided all proofs of notification, as required by Commission Regulation §806.15.

Commission staff recommends that this approval remain effective until May 21, 2023, the term of the prior Docket approval.

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.

### **Decision**

1. Commission Docket No. 19980502, as approved May 21, 1998, is hereby modified to approve the project's combined diversion from the City of Lebanon Wastewater Treatment Plant and the Pennsy Supply Company's Calcite Quarry of up to 4.500 mgd, pursuant to Article 3, Section 3.10, of the Compact.

2. The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision.

3. The project sponsor shall comply with all Commission regulations, including monitoring requirements contained in Commission Regulation §806.30.

4. As previously approved, the project sponsor shall keep daily records of the project's consumptive water use by source and shall report the data to the Commission quarterly, and as otherwise required. Quarterly monitoring reports are due within thirty (30) days after the close of the preceding quarter. The daily quantity of water consumptively used shall be the quantity of water diverted from the Susquehanna River Basin.

5. As previously approved, to satisfy the Commission's current mitigation requirements for consumptive water use set forth in Commission Regulation §806.22, the project sponsor shall make payments in lieu of providing actual makeup water in accordance with conditions stated in the Docket.

6. Condition "c" is hereby rescinded and replaced by the following condition "7."

7. Water may be diverted to the project as follows:

- a. When the generating facility water demands are 3.600 mgd or less, no more than 1.440 mgd of water may be diverted from the City of Lebanon Wastewater Treatment Plant, with the remaining 2.160 mgd coming from the quarry, except as outlined in item c.
- b. When the generating facility water demands are greater than 3.600 mgd, up to 2.160 mgd of water may be diverted from the City of Lebanon Wastewater Treatment Plant, with the remaining 2.340 mgd coming from the quarry, except as outlined in item c.
- c. During times of emergency or required maintenance, either the City of Lebanon Wastewater Treatment Plant or the quarry may be used exclusively as the project's source of water for a period not to exceed 24 hours, provided the Commission is notified within twelve (12) hours if the exclusive use occurs on a

business day or on the next business day if the use occurs on a non-business day. If the exclusive use is needed during a weekend, holiday, or other time when the next business day is more than 24 hours in the future, up to 4.500 mgd may be used from an exclusive source for the initial 24-hour period, and the maximum rates of 2.160 mgd from the City of Lebanon Wastewater Treatment Plant and 2.340 mgd from the quarry shall be used after 24 hours until a written approval for a greater amount is obtained from the Commission.

8. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §806.25(b).

9. To satisfy the Commission's registration requirement, the project sponsor shall register with the Pennsylvania Department of Environmental Protection all surface water and groundwater sources described in this docket in accordance with the Pennsylvania Water Resources Planning Act (Pennsylvania Act 220).

10. 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.

11. 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.

12. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the Commission may suspend, modify, or revoke its approval of same, and may impose appropriate 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. 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.

13. 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.

14. 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.

15. All other conditions in Commission Docket No. 19980502 not inconsistent herewith shall remain effective.

16. This approval is effective until May 21, 2023, the term of the prior Docket approval. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than November 21, 2022, the existing approval shall be deemed extended until such time as the Commission renders decision on the application.

17. 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: June 13, 2007

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Kenneth P. Lynch, Chair  
New York Commissioner

RESOLUTION NO. 2007-03

A RESOLUTION of the Susquehanna River Basin Commission revising its Comprehensive Plan to include the Whitney Point Lake Section 1135 Project Modification and the Lancashire No. 15 AMD Treatment Plant.

WHEREAS, Article 4, Section 4.2 of the Susquehanna River Basin Compact, Pub. L. 91-575; 84 Stat. 1509 et seq. (the “Compact”) authorizes the Susquehanna River Basin Commission (the “Commission”) to undertake projects for storage and release of water; and

WHEREAS, the Commission’s Comprehensive Plan for Management and Development of the Water Resources of the Susquehanna River Basin (the “Comprehensive Plan”), Objectives and Goals – Water Supply, Goal g. states that, “The Commission, pursuant to its authority under the Compact, acting for and in behalf of the signatory parties, will investigate and, as it deems appropriate, make all necessary commitments to acquire and to manage water supply storage available or to become available in public or private water storage reservoirs in the Susquehanna Basin;” and

WHEREAS, the Comprehensive Plan, Guidelines and Criteria, Guideline 17, further states that, “Compensation (i.e. mitigation) shall be required for consumptive uses in accordance with SRBC policies and regulations;” and

WHEREAS, the Whitney Point Lake Section 1135 Project Modification, Broome County, New York, to be constructed by the U.S. Army Corps of Engineers, and the Lancashire No. 15 AMD Treatment Plant, Cambria County, Pennsylvania, to be constructed by the Commonwealth of Pennsylvania (collectively “the projects”) have the potential capacity to provide significant amounts of storage and release water for environmental improvement, low flow augmentation, and mitigation of consumptive use in the Susquehanna Basin; and

WHEREAS, the member jurisdictions have provided financing for the implementation of the said projects to advance such purposes; and

WHEREAS, the projects have been included in the Commission’s 2007 Annual Water Resources Program, and the coordination process required under Section 4.4 of the Compact has been completed with the member jurisdictions through the Water Resources Program process; and

WHEREAS, in further compliance with Section 4.4 of the Compact, a public hearing upon due notice has been held on the projects in conjunction with this action; and

WHEREAS, Article 12, Sections 12.1 and 12.2 of the Compact requires that, “For the purpose of avoiding conflicts of jurisdiction and of giving full effect to the Commission as a regional agency of the signatory parties, no expenditure or commitment shall be made for or on account of the construction, acquisition, or operation of any [federal or state] project or facility, nor shall it be deemed authorized, unless it shall have first been included by the Commission in the comprehensive plan.”

NOW THEREFORE BE IT RESOLVED THAT:

1. The Comprehensive Plan is hereby revised by including the Whitney Point Lake Section 1135 Project Modification, Broome County, New York, and the Lancashire No. 15 AMD Treatment Plant, Cambria County, Pennsylvania.

2. In accordance with previously granted authority and in consultation with legal counsel, the Executive Director and Chief Administrative Officer are directed to execute whatever agreements or contracts as may be necessary to implement the projects.

3. This Resolution shall be effective immediately.

Date: June 13, 2007



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Kenneth P. Lynch, Chairman

RESOLUTION NO. 2007-04

A RESOLUTION by the Susquehanna River Basin Commission to adopt a proposed Current Expense Budget for the fiscal year beginning July 1, 2008, and ending June 30, 2009, and to apportion among the Commission's member jurisdictions a proposed amount required for the support of the budget.

NOW THEREFORE BE IT RESOLVED THAT:

1. A proposed Current Expense Budget for the fiscal year beginning July 1, 2008, in the amount of \$4,850,000 is hereby approved and adopted for submission to the member jurisdictions for their review and approval.

2. Pursuant to Section 14.3 of the Compact, there is hereby requested from each member jurisdiction the following apportioned amounts that are required, together with other funds as may be available to the Commission, for the support of the budget, as proposed, for the fiscal year beginning July 1, 2008.

<u>Member Jurisdictions</u>	<u>Apportionment</u>
New York	\$388,000
Pennsylvania	\$1,232,000
Maryland	\$307,000
United States	\$1,000,000

3. The Commission hereby expressly declares that the apportioned amounts requested in Paragraph 2 hereof represent the anticipated amounts anticipated to be appropriated by the respective member jurisdictions for fiscal year beginning July 1, 2008 in direct support of the Current Expense Budget, as proposed.

4. The Executive Director is authorized and directed to transmit certified copies of the proposed budget to the principal budget officers of the respective member jurisdictions together with a certified statement of the amount hereby apportioned to each member jurisdiction in accordance with the requirement of the Compact.

5. This Resolution shall take effect immediately.

Date: June 13, 2007



Kenneth P. Lynch, Chairman