

Susquehanna River Basin Commission

a water management agency serving the Susquehanna River Watershed



October 11, 2005

TO ALL CONCERNED:

At the September 14, 2005 meeting, the draft minutes of the June 8, 2005 Commission meeting were approved as written. Please attach this notice to your copy of the June 8, 2005 minutes.

- DRAFT -

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

**MINUTES OF THE
SUSQUEHANNA RIVER BASIN COMMISSION
September 14, 2005
#2005-03**

The meeting was held at the Otesaga Hotel, 60 Lake St., Cooperstown, N.Y. Chairman Kosich called the meeting to order at 8:02 a.m.

ROLL CALL

Commissioners Present

Col. Francis X. Kosich, District Engineer, U.S. Army Corps of Engineers (USACE), Baltimore District

Mr. Kenneth P. Lynch, Director, Region 7, N.Y. Dept. of Environmental Conservation (NYDEC)

Mr. William A. Gast, Chief, Division of Water Use Planning, Pa. Department of Environmental Protection (PADEP)

Mr. Kendl P. Philbrick, Secretary, Md. Dept. of the Environment (MDE)

**Alternate Commissioners
and Advisors Present**

Mr. Daniel M. Bierly, USACE, Baltimore District

Mr. Scott J. Foti, Regional Solid and Hazardous Materials Engineer, NYSDEC, Region 8

Ms. Pamela Bishop, Office of Regulatory Counsel, PADEP

Dr. Robert M. Summers, Dir., Water Management Administration, MDE

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. Duane A. Friends, Chief Admin. Officer

Mr. Richard A. Cairo, Counsel/Secretary

Ms. Deborah J. Dickey, Executive Administrator

INTRODUCTION/WELCOME

Chairman Kosich introduced the members of the Commission and the Executive Director.

Commissioner Lynch introduced New York State Senator James Seward of Otsego County who welcomed the Commission to the Central Leatherstocking Region of New York. He highlighted the many historical, scenic and recreational attractions of the Cooperstown area and noted the prominence of Otsego Lake as the source of the Susquehanna River. He went on to comment on the importance of the water resources management work of the Commission, particularly its outreach and education efforts.

PRESENTATIONS

1. Dr. Willard Harman, Professor and Director, SUNY Oneonta Biological Field Station

Dr. Willard Harman, Professor and Director of the State University of New York (SUNY) Oneonta Biological Field Station, made a presentation on the educational and research services his organization provides to the communities surrounding Otsego Lake. The work done by the field station has led to improved management of the lake and the aquatic creatures that inhabit it. Some of the lake-related programs the field station has worked on include nutrient and sediment control, obtaining matching funds for NRCS conservation grants to local farmers, inspection of septic systems, and management of fish species in the lake.

2. Hydrologic Conditions Report

The Commission heard a hydrologic conditions report from Water Resources Management Chief Michael Brownell. Due to developing drought conditions in some parts of the river basin, the Commission activated the Interagency Drought Coordination Committee. So far, the remnants of tropical storms passing through the basin have forestalled any immediate drought declaration by the states; however, unlike September 2004 when Tropical Storm Ivan brought a significant rainfall surplus to the basin, September 2005 has brought no appreciable precipitation.

A net precipitation deficit of 2.7 inches has now accumulated since October 1, 2004. While groundwater levels vary greatly from north to south, flows on most streams in the basin have fallen below normal for this time of year. If dry conditions persist, drought declarations could be made within the next few weeks. The Committee will continue to closely monitor the situation.

ACTION ITEMS

1. Minutes of the June 8, 2005 Commission Meeting

On a motion by Commissioner Lynch, seconded by Commissioner Philbrick, the minutes of the regular business meeting of June 8, 2005 were unanimously adopted as written.

2. Agricultural Consumptive Use Study

Mr. Brownell presented the findings and recommendations of the Agricultural Consumptive Use Study, a three-year study conducted by staff to develop a basinwide solution to offset the consumptive use of water by Pennsylvania agricultural operations. The application of the SRBC consumptive use regulation to agricultural water uses has been suspended since 1995. The Commission, in close consultation with its own Agricultural Water Use Advisory Committee, has been evaluating various mitigation options ever since.

There were seven major areas of investigation undertaken by the study including water needs, water recycling, water conservation, wetland potential, regulatory incentives, alternative reservoir facilities, and aquifer storage and recovery.

“Water needs” was simply a determination of water consumption by agriculture. Agricultural operations constitute some 17 percent of all consumptive use in the basin. About 13 percent of this amount is subject to regulation by the Commission.

The remaining area of investigation focused on possible alternative methods of addressing agricultural consumptive use in Pennsylvania. The study found that each of the alternatives investigated yield potential benefits in water resources management. For example, wetlands sites do offer some potential for aquifer recharge and improvement of baseflows. Water recycling and water conservation methods used by agriculture in crop irrigation and animal operations can certainly reduce the amount of water used at any given time.

Nevertheless, only certain select alternatives have the ability to provide the amount of water necessary to offset agricultural consumptive water use in the Pennsylvania portion of the basin, a prime objective of the study. These include the use of alternative reservoir facilities, such as existing federal, state, municipal and privately-owned reservoirs and existing unused water bodies, such as strip mines, quarries and tailings ponds. Underground mine pools also have the potential to provide substantial amounts of water.

Based on these findings, the study recommends that the Commission, in cooperation with the Commonwealth of Pennsylvania, take the following steps:¹

1. Implement projects to provide the 15.7 mgd of water necessary to offset agricultural consumptive water use in the Susquehanna River Basin in Pennsylvania;

¹ A more detailed version of these recommendations is contained in the Executive Summary accompanying the Agricultural Consumptive Use Study.

2. Perform technical investigations of underground mine pool sites that have the greatest potential for flow augmentation;
3. Perform technical investigations of flooded surface mine sites that have the greatest potential for flow augmentation;
4. Perform technical investigations of state-owned water impoundments that have the greatest potential for flow augmentation;
5. Work cooperatively with the Commission's Agricultural Water Use Advisory Committee to implement the recommendations; and
6. Consider appropriate changes to the consumptive water use regulation, as it applies to agricultural operations.

Mr. Brownell presented a proposed resolution (Exhibit A) providing for acceptance of the study and its recommendations. Commissioner Gast moved adoption of the resolution, adding that it should be clearly understood that the type of projects recommended by the study would not provide water directly to agricultural operations. Instead, the water would be released at various locations to mitigate flow losses associated with agricultural consumptive use throughout the Pennsylvania portion of the basin and help alleviate problems during periods of low flow.

Commissioner Gast thanked the SRBC Agricultural Water Use Advisory Committee for its assistance and positive attitude. He also thanked the SRBC staff for picking up the pieces after the initial investigations of the George B. Stevenson Flood Control Project as a source of mitigation did not produce positive results. The Commonwealth looks forward to working with SRBC to implement the recommendations of the study.

The motion was seconded by Commissioner Philbrick and unanimously adopted by the Commission.

3. Grant Approvals

The Executive Director presented the following grant approval requests to the Commission:

- a. FY-2005 Water Pollution Control Program, Section 106

Under this grant from USEPA, in the amount of \$567,300, the Commission will perform a variety of water quality related tasks including subbasin surveys, interstate stream monitoring, water quality coordination, public information and education, large river assessments and source water protection. A portion of the grant, \$50,000, will be used to evaluate the operation of sewage treatment plants in the New York portion of the basin to identify ways in which nutrients in effluents can be reduced.

b. TMDL Development for Selected Susquehanna Basin Watersheds

This is a grant from PADEP in the amount of \$205,500 for Total Maximum Daily Loads (TMDL) preparation. So far, the Commission has developed about 60 TMDLs in coordination with PADEP. This next group of TMDLs will include the Conestoga River and the entire West Branch. In addition to preparing the TMDLs, SRBC staff will support PADEP on coordination, site selection, implementation plan development, selection of analysis methodologies, public participation, and submittal to USEPA.

c. Susquehanna University Science in Motion

This is a joint SRBC-Susquehanna University program funded by the University in the amount of \$29,400 which supports its Science in Motion Program to train and engage secondary education science teachers and their students in data collection and reporting on the water quality of nearby Susquehanna River tributaries. It stresses the importance of education as an element of effective water resources management.

The Director noted that the first two grant proposals scored 10 out of 10 on SRBC's grant rating scale, while the third proposal scored 8 out of 10. On a motion by Commissioner Lynch, seconded by Commissioner Philbrick, the Commission unanimously approved/ratified the three grant proposals presented by the Executive Director.

4. Deer Creek RFP – Authorization to Execute Contract

The Director reminded the Commission that the application of the City of Aberdeen, Maryland, to divert water from Deer Creek for use in its municipal water supply system has been surrounded by controversy. Therefore, it would be desirable for the Commission to acquire as much data as it can on the possible impacts of any diversion so that the final decision on the application will be grounded in sound science.

Under a civil penalty settlement agreement made in June 2005, the City agreed to finance the preparation of a water availability study on the Deer Creek Watershed. The Commission published a "Request for Proposals" (RFP) and received ten professional services proposals to complete a water availability study of the Deer Creek Watershed in Harford County, Maryland, and York County, Pennsylvania. The Director requested authority to execute a professional services contract for preparation of this study in an amount not to exceed \$200,000. On a motion by Commissioner Philbrick, seconded by Commissioner Lynch, the Commission unanimously granted authorization to the Executive Director as requested.

5. Project Review–Public Hearing

a. Project Applications

The Commission convened a public hearing on project applications before the Commission for review and approval.

Mr. 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) water conservation; and 7) docket reopening authority.

The dockets recommended for action included the following 10 projects²:

- Village of Sherburne (Exhibit B1)
- OSG Norwich Pharmaceuticals, Inc. (Exhibit B2)
- Fox Ledge—Orson Property (Exhibit B3)
- Glenn O. Hawbaker, Inc.—Hostetler (Exhibit B4)
- Weis Markets, Inc. (Exhibit B5)
- WMPI PTY, L.L.C. (Exhibit B6)
- BC Natural Chicken (Exhibit B7)
- Pfizer, Inc. (Exhibit B8)
- Community Refuse Services, Inc. dba Cumberland County Landfill (Exhibit B9)
- West Manchester Township Authority (Exhibit B10)

Mr. Brownell went on to describe the projects and the proposed conditions of approval for each.

Commissioner Lynch explained that it was necessary for him to abstain on the application of the Village of Sherburne due to the fact that some of the applicant’s wells are located on state property, thus presenting a possible conflict of interest. On a motion by Commissioner Gast, seconded by Commissioner Philbrick, the Commission unanimously approved the staff recommendations for all the dockets presented, with the noted abstention by Commissioner Lynch with respect to the Village of Sherburne application.

² Docket decisions are not included with the hard copy of the minutes. However, they are available upon request and at www.srbc.net.

b. Application Review Termination Action – Reliant Energy Shawville

Mr. Brownell told the Commission that there was no need for action on termination of the application of Reliant Energy Shawville because it had already notified the Commission that it is withdrawing its application.

c. Lucas-Beierschmitt Partnership, dba Windsor Heights Golf Course, Docket No. 20040604 – Settlement Agreement

Mr. Brownell informed the Commission that the Lucas-Beierschmitt Partnership, dba Windsor Heights Golf Course, had offered a settlement to the Commission in the amount of \$43,200 for certain docket condition violations. Not only the partnership, but the individual partners, had agreed to be bound by the terms of the settlement agreement. Commission staff recommended acceptance of the settlement agreement as proposed. Counsel for the partnership asked that the Commission accept the settlement agreement as a final resolution of the matter.

Commissioner Gast made the following motion: In accordance with the Commission’s Policy on Settlements in-Lieu-of Civil Penalties, and upon the personal guarantees of its individual partners, I hereby move that the Commission accept the settlement agreement offered by the Lucas-Beierschmitt Partnership, and its individual partners, dba Windsor Heights Golf Course, in the amount of \$43,200. The motion was seconded by Commissioner Lynch and unanimously adopted by the Commission.

6. Northern Lancaster County Groundwater Study

Mr. Brownell presented a report on the just completed “Northern Lancaster County Groundwater Study: A Resource Evaluation of the Manheim-Lititz and Ephrata Area Groundwater Basins,” which assesses groundwater availability in a rapidly developing area of northern Lancaster County, Pennsylvania. The study covers a 50-square-mile isolated carbonate aquifer with a surrounding siliciclastic contributing area of 20 square miles.

The study focused on two groundwater basins in the study area—the Manheim-Lititz groundwater basin and the Ephrata area groundwater basin. Annual recharge rates were calculated, and existing withdrawals and currently allocated unused quantities were measured. Areas contributing unusually high amounts of recharge, termed “Critical Aquifer Recharge Areas” (CARAs), were also identified.

Recommendations of the study, which are directed at the SRBC and state and local governments include:

1. Maintain the unique hydraulic characteristics of CARAs to maximize the amount of groundwater available.
2. Reduce the effects of impervious cover by implementing technologies that increase the infiltration capability of that cover.

3. Restore streams and re-establish floodplains that were once natural recharge areas but have now been filled with impermeable sediment.
4. Complete stormwater management plans and implement PADEP stormwater policy promoting the use of distributed infiltration best management practices (BMPs) to increase groundwater recharge.
5. Consider distribution of stormwater runoff to regional stormwater management facilities in restored flood plains and CARAs.
6. Continue to require and review groundwater availability analyses for new water withdrawal projects and detailed water budgets in potentially stressed areas.
7. Use groundwater models in localized areas to evaluate the withdrawal impacts and address sustainability.
8. Use public outreach and education to explain the finite limits of the area's water resources and encourage wise use of those resources.
9. Identify opportunities for reclamation, recycling and reuse of water.
10. Use the authority contained in the Pennsylvania Municipalities Planning Code to develop comprehensive land management ordinances that address groundwater protection. Local governments should also participate in regional water resources planning efforts.

Commissioner Gast thanked the Commission staff on the delivery of a good product. Pennsylvania is engaged in the update of its State Water Plan, part of which is the identification of critical water planning areas. The information developed by SRBC will be very helpful to Pennsylvania in its water management efforts. He further observed that the water availability study on Deer Creek mentioned earlier will be the same kind of study as the one conducted in northern Lancaster County.

The Executive Director noted that this study is the first of its kind done by SRBC and that the staff therefore took great pains to do a thorough job. The Commission has now identified nine potentially stressed areas in the basin where there is a need for similar studies. The Director also mentioned the success of this study in maintaining a dialogue with local officials and interested parties in the area. This is critical to the ultimate success of any such technical study where the information developed has to be understood and acted upon by local officials who control planning and land use. The Commission is now undertaking this local consultation process in the State College region, another potentially stressed area of the basin.

7. Miscellaneous Administrative Items

a. WMPI Project

The Executive Director mentioned the importance of the WMPI project just approved under the project review portion of the meeting agenda. This project, which will perform gasification and liquefaction of coal waste, will serve two very useful purposes: 1) the elimination of unsightly and environmentally damaging coal waste piles; and 2) a contribution to the nation’s energy supply at this critical juncture when supplies are down and prices are high. It is the kind of project that the Commission would certainly want to encourage from an economic development and environmental viewpoint.

b. 2006 Meeting Dates

The Executive Director presented a set of proposed quarterly meeting dates and locations for 2006. These include March 15 in Williamsport, Pennsylvania, June 14 in the Elmira/Corning, New York area, September 13 in Annapolis, Maryland, December 13 in the Harrisburg, Pennsylvania area.

PUBLIC COMMENTS

There were no public comments.

ADJOURNMENT

Commissioner Philbrick concluded the meeting with a compliment to SRBC staff for their hard work in preparing for and carrying out a well organized Commission meeting. There being no further business before the Commission, Chairman Kosich adjourned the meeting at approximately 10:17 a.m.

NEXT MEETING

The next regular meeting of the Commission is tentatively scheduled for December 14, 2005 in Baltimore, Maryland.

Date Adopted



Richard A. Cairo
General Counsel/Secretary to the Commission

RESOLUTION NO. 2005-07

A RESOLUTION of the Susquehanna River Basin Commission (“Commission”) relating to the Agricultural Consumptive Water Use Study prepared by staff and directing certain follow-up steps to be taken by staff.

WHEREAS, because of the unique nature of agriculture, the conventional alternatives available for compliance under the Commission’s consumptive use regulation (18 CFR §803.42) are not viable for use by agricultural consumptive water users; and

WHEREAS, in recognition of the foregoing, the Commission suspended the application of 18 CFR §803.42 to agricultural consumptive water users in 1995 pending the identification of suitable compliance options, which suspension remain in effect; and

WHEREAS, under contract with the Commonwealth of Pennsylvania, Department of Environmental Protection, the Commission has completed a three year study on the feasibility of various options for securing the compliance of agricultural consumptive users with 18 CFR §803.42; and

WHEREAS, the study evaluated the quantity of water used consumptively by Pennsylvania agriculture, and the portion of such use that is subject to its consumptive use makeup regulation, taking into consideration that use which is exempt from the Commission’s regulation due to grandfathering, and that use which is less than the regulatory threshold of 20,000 gallons per day (gpd); and

WHEREAS, the study not only apportioned the quantity of consumptive use subject to the Commission’s consumptive use makeup regulation, but also evaluated the timing of such use by various types of agricultural operations as it relates to periods of low flow in the basin; and

WHEREAS, in consideration of the monthly distribution of agricultural consumptive water use, the amount thereof subject to regulation, and the expected timing of the need for makeup, the study concludes that a net volume of 4,900 acre feet of water is needed, provided at a maximum rate of approximately 15 million gallons per day, to appropriately offset such use; and

WHEREAS, the study also evaluated a series of alternatives for providing such makeup, including the use of existing surface water storage sites, the use of aquifer storage and recovery (ASR) methods, wetlands, water conservation and recycling, and regulatory incentives; and

WHEREAS, the study concludes that using a combination of pumping from underground mine pool storage during summer months and the use of storage at publicly and privately-owned surface water impoundments during the fall represents the preferred alternative method for providing the quantities of water necessary to offset agricultural consumptive water use in Pennsylvania; and

WHEREAS, the study recommends that the Commonwealth of Pennsylvania support implementation of the recommendations contained in the study on behalf of agricultural consumptive water users in the Susquehanna River Basin.

NOW THEREFORE BE IT RESOLVED THAT:

1. The Commission hereby concurs with and accepts the findings and recommendations contained in the Agricultural Consumptive Water Use Study.

2. The Executive Director shall forward the study and its recommendations to the appropriate officials of the Commonwealth of Pennsylvania for their consideration.

3. The Commission pledges its support and cooperation to the Commonwealth in the effort to locate the necessary financial and technical resources to implement the recommendations set forth in the study.

Date: September 14, 2005



Col. Francis X. Kosich, Chairman



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. 20050901

Approval Date: September 14, 2005

VILLAGE OF SHERBURNE

Groundwater Withdrawal (30-Day Average) of 0.386 mgd from Wells 5 and 6,
and a Total System Withdrawal Limit (30-Day Average) of 0.386 mgd,
for Public Water Supply,
Village of Sherburne, Chenango 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) Regulations §803.4, relating to projects requiring review and approval, and §803.43, relating to groundwater withdrawals. The Commission received the application on May 5, 2005, and supplementary information on August 26, 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 Upper Susquehanna Subbasin, HUC 02050102, Chenango River Watershed, Village of Sherburne, Chenango County, New York.

Project Features. The project sponsor has requested approval for the withdrawal (30-day average) of 0.386 million gallons per day (mgd) from Wells 5 and 6. Well 5 will be used as the primary source for the public water supply system and Well 6 will be used as a backup supply well. Wells 5 and 6 will not be pumped simultaneously.

Currently, the Village of Sherburne is supplied with groundwater from Wells 2 and 4, located in the New York State Route 12B Well Field, located 3,600 feet northeast of the new wells. Well 2 is used as an emergency backup supply well (due to turbidity) and Well 4 is the primary source of groundwater supplying the village. Well 2 was reportedly placed in-service in 1972. Well 4 was drilled and began operation in 1983, but has not been approved by the Commission. The project sponsor has submitted an application for Well 4 that is currently under review by Commission staff and will be scheduled for action as a separate docket.

Wells 5 and 6 were drilled in February 2005. The wells are located at the Rogers Environmental Center, which is 3,600 feet to the northwest of the center of Sherburne and 600 feet to the west of the Chenango River. Wells 5 and 6 are 7.5 feet apart. Both wells are screened from 91 to 111 feet below ground surface (bgs) in glacial outwash. The stratigraphic sequence in Wells 5 and 6 is as follows (from the ground surface down): alluvial deposits, lacustrine sediments, and glacial outwash (the screened interval). Geologic logs at several nearby test wells show that additional lacustrine deposits, more glacial outwash and the interbedded shale, siltstone, and sandstone bedrock underlie the glacial outwash.

The public water supply system has an existing average daily demand of 0.256 mgd, and an existing maximum daily demand of 0.372 mgd. The average and maximum daily demands are projected to grow to 0.386 and 0.720 mgd, respectively, by 2030.

Pumping Test. A 72-hour constant-rate pumping test of Well 5 was conducted on April 18, 2005, with prior Commission approval. The well was pumped at a rate of 500 gallons per minute (gpm). During this testing, water levels were measured in four nearby test wells, two production wells at the Rogers State Environmental Center, three public water supply wells (Wells 2, 3, and 4), three monitoring points at a wetland, and the Chenango River.

Some rainfall occurred near the end of the constant-rate pumping test and during the recovery monitoring period.

The project sponsor requested that the pumping test requirement be waived for Well 6.

Coordination. Commission staff has coordinated with the New York State Department of Environmental Conservation (NYSDEC) Region 7 Office during review of the project. NYSDEC issued a public water supply permit for the project on August 11, 2005.

Findings

The project is subject to Commission approval and reporting requirements, as per Commission Regulation §803.43.

Commission staff finds that the precipitation near the end of the pumping test conducted for Well 5 did not significantly affect the results. The testing meets the Commission requirement. Further, Commission staff recommends waiving the required pumping test for Well 6 due to its proximity to Well 5 and the nature of the hydrogeologic setting.

Commission staff recommends approval of a maximum instantaneous pumping rate of 500 gpm for Wells 5 and 6, the rate at which Well 5 was tested.

Pumping test results indicate that Wells 5 and 6 draw water from a transmissive glacial outwash deposit that lies within a valley-fill aquifer. Commission staff reviewed the groundwater availability analysis and supporting information submitted by the project sponsor. Commission staff has concluded that the groundwater withdrawal will not have a significant impact on private water supply wells in the area, or water resources in the area.

Commission staff recommends approval of a 30-day average withdrawal of 0.386 mgd from Wells 5 or 6, with the recommendation that the wells should not be operated simultaneously.

Commission staff recommends that the project sponsor install appropriate metering on Wells 5 and 6, accurate to within five (5) percent. Daily flow meter readings of the supply wells should be collected and reported to the Commission annually.

Commission staff recommends approval of a total system withdrawal limit of a 30-day average of 0.386 mgd. The project sponsor concurs that this average withdrawal rate from all sources will be adequate to supply the Village of Sherburne with its projected future needs.

The project is subject to the Commission's water conservation requirements, as per Commission Regulation §804.20(a). The water system is 100 percent metered, which is in compliance with this regulation, and the system had an unaccounted-for water loss of 3.8 percent in 2002, which is less than the 20 percent maximum set forth in Commission Regulation §804.20(a)(1).

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

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

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 0.386 mgd (30-day average) from Wells 5 and 6, and a total system withdrawal limit of 0.386 mgd (30-day average), is 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 reporting requirements, as per Commission Regulation §803.43.

4. Within sixty (60) days from the date of this approval, the project sponsor shall install and maintain metering on Wells 5 and 6, accurate to within five (5) percent, to measure its

groundwater withdrawal. The project sponsor shall notify the Commission, in writing, when the meter is installed.

5. The project sponsor shall keep daily records of the metered withdrawals from each well and weekly water levels in Wells 5 and 6. The required reporting data shall be submitted to the Commission annually, and as otherwise required. Monitoring reports are due within sixty (60) days after the close of the preceding year.

6. The maximum instantaneous rates of production from Wells 5 and 6 shall not exceed 500 gpm. The wells shall not be operated simultaneously.

7. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §804.20(a).

8. The constant-rate pumping test requirement specified in Commission Regulation §803.43 (b) is hereby waived for Well 6.

9. If the Commission determines that the operation of the project's groundwater withdrawal from Wells 5 and 6 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. 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. 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.

13. 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.

14. 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.

15. 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.

16. This approval is effective until September 14, 2030. The project sponsor shall submit a renewal application by March 14, 2030, and obtain Commission approval prior to continuing operation beyond September 14, 2030.

17. 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:



Col. Francis X. Kosich, Chair
U.S. Commissioner

Dated: September 14, 2005



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. 20050902

Approval Date: September 14, 2005

OSG NORWICH PHARMACEUTICALS, INC. NORWICH FACILITY, NEW YORK

Consumptive Water Use of Up to 0.095 mgd,
for the Manufacturing of Pharmaceuticals,
Town of North Norwich, Chenango 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) Regulations §803.4, relating to projects requiring review and approval, and §803.42, relating to the consumptive use of water. The Commission received the application on June 22, 2001.

Description

Purpose. The purpose of this application is to request approval for the consumptive use of water associated with the manufacturing and packaging of pharmaceuticals.

Location. The project is located in the Upper Susquehanna Subbasin, HUC 02050102, Chenango River Watershed, Town of North Norwich, Chenango County, New York.

Project Features. The project sponsor has requested approval for the consumptive use of water up to 0.095 million gallons per day (mgd). Consumptive water use at the facility is the result of water incorporated into product, and evaporated from wastewater treatment ponds and two cooling towers used for process cooling. Based on metered water use data for the years 2001 through 2003, the project sponsor calculates the project's maximum average 30-day consumptive water use to be 0.020 mgd, and current peak-day consumptive water use to be 0.073 mgd.

OSG Norwich Pharmaceuticals, Inc. (OSG) is located on NYS Route 12, approximately four miles north of the Town of North Norwich. The property is bordered by the Chenango River. Production of pharmaceuticals at the facility began in 1976, under the ownership of Proctor & Gamble. OSG purchased the facility in July 2001.

Production water for the facility is supplied by two wells, Wells 1 and 2, that are located approximately 250 feet to the west of the Chenango River. The wells are drilled to total depths of 60.6 and 62 feet below ground surface (bgs), respectively, and finished in glacial outwash. Wells 1 and 2 have pump capacities of 300 and 400 gallons per minute (gpm), respectively. The wells have been in operation since 1976, prior to the effective date of Commission Regulation §803.43, relating to the withdrawal of groundwater.

Withdrawals from these wells are separately metered. To meet the current needs of the facility, the wells are used alternately and have a maximum daily withdrawal of 177,300 gallons per day (gpd) and a maximum average (30-day) withdrawal of 127,000 gpd. A third well, Well 3R, was installed in 1994 and is used at the wastewater treatment plant. Well 3R is metered and has an estimated yield of five gpm.

In the plant, water for the pharmaceutical manufacturing process is stored in one of two 8,000-gallon capacity storage tanks. All wastewater generated at the facility is directed to the on-site wastewater treatment plant. Wastewater is discharged to three lined ponds (Ponds 1, 2, and 3) that are connected in series. Ponds 1 and 2 are approximately 1.25 acres (each) and Pond 3 is approximately 0.8 acre. Treated wastewater from Pond 3 is metered and flows into the Chenango River. A fourth pond is available for the emergency storage of the wastewater but remains dry until needed. There are no meters associated with flow into or out of Pond 4.

A fifth pond, having a capacity of 500,000 gallons, stores water for fire flow, exclusively. In addition to this pond, the project sponsor also utilizes a 500,000-gallon storage tank for fire flow storage that occasionally requires additional water to maintain full capacity.

Findings

The project is subject to Commission approval and reporting requirements, as per Commission Regulation §803.42.

All water incorporated into products and evaporated by the facility is considered to be consumptively used. The facility has two cooling towers and three water storage ponds, with a total surface area of 3.30 acres. Commission staff recommends that the project's total daily consumptive water use be calculated as the difference between the metered water entering the plant and metered wastewater discharged from the plant.

Commission staff recommends that the project sponsor record both the total metered withdrawal from Wells 1 and 2 and outflow from Pond 3 on a daily basis to determine the project's daily consumptive water use. All measurements should be recorded at approximately the same time each day.

The project sponsor reports that water may periodically be pumped to Pond 5 and the 500,000-gallon storage tank for fire protection storage. Commission staff recommends that a meter be installed to quantify the daily water diverted for fire protection and that this quantity be removed from the consumptive water use calculation when appropriate.

Should the proposed accounting procedure utilizing daily metered inflow minus daily measured outflow consistently result in negative values, or otherwise not accurately measure the consumptive water use, the Commission reserves the right to modify the metering, monitoring, and accounting procedures. Commission staff will provide the project sponsor with written notice of any required change in the metering, monitoring, and accounting procedures. Any alternative monitoring or accounting procedure requested by the project sponsor will be reviewed and approved by Commission staff.

The project sponsor has requested a consumptive water use approval of up to 0.095 mgd. Based on an analysis of data provided by the project sponsor, Commission staff is recommending approval of the requested amount, which represents an increase of approximately 30 percent over current peak-day use of 0.073 mgd. Should the project's future consumptive water use exceed or be expected to exceed 0.095 mgd, the project sponsor must apply for a modification to this docket at that time.

The project's consumptive use of water is subject to water compensation requirements, as per Commission Regulation §803.42. To satisfy these requirements, the project sponsor proposes to make quarterly payments to the Commission in lieu of providing actual compensation water.

The project has been in operation since the spring of 1976. Withdrawals from Wells 1 and 2 predate the effective date of Commission Regulation §803.43. Commission staff and the project sponsor have agreed to a pre-1978 groundwater withdrawal of 0.035 mgd (30-day average) from Well 1 and 0.035 mgd (30-day average) from Well 2 and, for the purposes of this docket, the combined quantity from Wells 1 and 2 of 0.070 mgd (30-day average) is considered "grandfathered."

Should the facility's total 30-day average groundwater withdrawal from Wells 1 and 2 increase by 0.100 mgd and exceed 0.170 mgd, the project sponsor should immediately notify the Commission and submit a groundwater withdrawal application for review and approval of the withdrawal.

The project is subject to the Commission's water conservation requirements, as per Commission Regulation §804.20(b).

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

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

Compliance Incentive Program

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

Decision

1. The project's consumptive water use of up to 0.095 mgd is 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 consumptive water use reporting requirements, as per Commission Regulation §803.42.

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. 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 incorporated into products and evaporated by the facility's ponds and cooling towers, which is equal to the total metered groundwater withdrawal minus the metered wastewater discharged from Pond 3 to the Chenango River. The project sponsor shall maintain metering on Wells 1 and 2 and its wastewater discharge, accurate to within five (5) percent. The Commission reserves the right to inspect all measurement equipment and audit all measurement records.

5. To satisfy the Commission's current compensation requirements for consumptive water use set forth in Commission Regulation §803.42, the project sponsor shall make quarterly payments to the Commission based on the rate of \$0.14 per 1,000 gallons of water consumptively used by the project. Payment amounts shall be calculated by applying this rate to the daily amount of water used consumptively by the project. Payments shall be made quarterly and shall be calculated by applying this rate to the daily amount of water consumptively used by the project during the preceding calendar quarter. 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 may install and maintain metering on flow from Wells 1 and 2 that is directed to storage for fire protection, accurate to within five (5) percent, and that this daily quantity be removed from the consumptive water use calculation when appropriate. The project sponsor shall notify the Commission, in writing, when the meter is installed.

Commission staff shall review and approve the changes in the method of calculation of consumptive water use.

7. If an increase in the project's groundwater withdrawal exceeds the threshold specified in Commission Regulation §803.43, the project sponsor shall submit the appropriate application for review and approval by the Commission.

8. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §804.20(b).

9. The project sponsor is eligible to participate in the Commission's CIP. Therefore, the project sponsor is not subject to penalties for its prior noncompliance. In accordance with the CIP, payment to the Commission as a method of compensation for the project's consumptive water use shall be effective and applicable to all water consumptively used by the project beginning January 1, 2001. The project sponsor shall provide records of its consumptive water use and make a payment to the Commission based on the rate of \$0.14 per 1,000 gallons of water consumptively used during the period from January 1, 2001, until the effective date of this approval. This payment shall be calculated and included in the first quarterly payment made by the project sponsor in accordance with the requirements of Condition 5 above.

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 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. This approval is effective until September 14, 2030. The project sponsor shall submit a renewal application by March 14, 2030, and obtain Commission approval prior to continuing operation beyond September 14, 2030.

16. 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:



Col. Francis X. Kosich, Chair
U.S. Commissioner

Dated: September 14, 2005



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. 20050903

Approval Date: September 14, 2005

FOX LEDGE, INC. ORSON PROPERTY—SPRINGS 4 AND 5

Consumptive Water Use of Up to 0.090 mgd, for Bulk Water Hauling,
Preston Township, Wayne 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) Regulations §803.4, relating to projects requiring review and approval, and §803.42, relating to the consumptive use of water. The Commission received the application on April 4, 2005.

Description

Purpose. The purpose of the application is to request approval for the consumptive use of water for bulk hauling of water for sale as spring water.

Location. The project is located in the Middle Susquehanna Subbasin, HUC 02050107, East Branch Lackawanna River Watershed, Preston Township, Wayne County, Pennsylvania.

Project Features. The project sponsor has requested approval for the consumptive use of water of up to 0.090 million gallons per day (mgd). Based on the information provided by the project sponsor, system limitations will allow for a maximum daily withdrawal of 0.130 mgd; however, the total maximum average consumptive water use is anticipated to be 0.066 mgd.

The sources of water are two springs: Springs 4 and 5. Springs 4 and 5 are located along the western toe slope of Mount Ararat in glacially deposited materials. Mount Ararat is composed of the Catskill Formation sandstones and siltstones, rising to an elevation that is approximately 800 feet above the elevations of the springs. The bedding of Mount Ararat dips approximately five degrees west towards the springs.

Water from the springs will be pumped via three-inch suction lines from the individual spring boxes to the storage building using self-priming pumps that are located within the storage building. The project sponsor proposes to withdraw water from one spring at a time. Due to the limitations of the filtration and disinfection systems, the withdrawal rate will be limited to

90 gallons per minute (gpm). The treated water will be stored in a 15,000-gallon stainless steel storage tank. Water will be periodically removed from the storage tank by pumping the stored water directly into tanker trucks, which will then transport the water to the bottling facility.

Based on data provided by the project sponsor, a review of topographic maps, local geology, and the site inspection, Commission staff calculated an average daily flow (ADF) of 127.17 gallons per minute (gpm) for the 2 springs, combined.

Coordination. Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP) Northeast Region Office during review of the project. The spring passed surface water influence protocol (SWIP) monitoring, which was performed between February and August 2002. PADEP approved the springs as additional source on the existing water bottling permit on August 24, 2005. In its permit, PADEP has required a passby flow.

Findings

The project is subject to Commission approval and reporting requirements, as per Commission Regulation §803.42.

All water pumped to tanker trucks at the loading station is considered to be consumptively used. The project sponsor has agreed to meter the quantity of water as it enters the treatment/storage building.

The project sponsor requested approval for a consumptive water use of up to 0.090 mgd, with a 30-day average consumptive use of 0.066 mgd. Although the maximum daily withdrawal could be as high as 0.130 mgd if operated at the capacity of the treatment system (specified to be 90 gpm), the project sponsor anticipates that the average withdrawals from the site, both springs combined, will be less than 50,000 gallons per day (gpd). The project sponsor is requesting a maximum daily withdrawal from the springs that is below the system's capacity based on its projected needs, average flow of the springs, and the feasibility of hauling the water from the site. Should the project's future consumptive water use be expected to exceed 0.090 mgd, the project sponsor must apply for a modification to this docket at that time.

The project's consumptive use of water is subject to water compensation requirements, as specified in Commission Regulation §803.42. To satisfy these requirements, the project sponsor proposes to make quarterly payments to the Commission in-lieu-of providing actual compensation water. The payment will be based on the combined daily quantity of water pumped from the two springs.

Springs 4 and 5 are located in the headwaters of an unnamed tributary to the East Branch of the Lackawanna River, which is identified as a high quality (HQ) coldwater fishery (CWF) (Title 25, Chapter 93, Pennsylvania Code). The East Branch of the Lackawanna River has a wild brook trout population. Based on the stream's classification and its geographic location in the watershed, the Pennsylvania Fish and Boat Commission staff has recommended a minimum flow of 25 percent of the annual ADF. Commission staff recommends that the project sponsor allow a

minimum combined passby flow of 27.98 gpm, to leave the subbasin at Springs 4 and 5 at all times when water is being withdrawn from the spring. The project sponsor has agreed to design a passive system that will allow for a minimum outflow of 14 gpm from each spring during times of active pumping.

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

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

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

Decision

1. The project's consumptive water use of up to 0.090 mgd is 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 consumptive water use reporting requirements, as per Commission Regulation §803.42.

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. 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 pumped into the treatment/storage building. The project sponsor shall maintain metering where the water enters the treatment/storage building (the influent flow meter), accurate to within five (5) percent.

5. The project sponsor shall allow a combined flow (a passby flow) of 27.98 gpm to leave Springs 4 and 5 at all times when water is being withdrawn from the springs. This equals a minimum flow of 14 gpm from each spring box. To meet this passby requirement, the project sponsor shall construct a passive system that allows a minimum flow of 14 gpm to flow from each spring box during times of withdrawal. To insure that the passive system remains fully functional, daily measurements of the actual flows from the passby system shall be collected from each spring box, during times of water withdrawal. The project sponsor shall report the passby flow data to the Commission quarterly, and as otherwise required.

6. The project sponsor shall submit its design and a proposed construction schedule for the passive passby system within sixty (60) days from the date of this approval for review and

approval by Commission staff prior to any construction or installation. Included in this submittal shall be a proposed plan for the required monitoring and recording of the passby flows from each spring on a daily basis during times of active withdrawals. 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.

7. To satisfy the Commission's current compensation requirements for consumptive water use set forth in Commission Regulation §803.42, the project sponsor shall make quarterly payments to the Commission based on the rate of \$0.14 per 1,000 gallons of water consumptively used by the project. The daily quantity of water consumptively used shall be the quantity pumped to the treatment building (influent flow meter). Payments shall be made quarterly and shall be calculated by applying this rate to the daily amount of water consumptively used by the project during the preceding calendar quarter. 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.

8. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §804.20(b).

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 fines and 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 the environment.

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 14, 2030. The project sponsor shall submit a renewal application by March 14, 2030, and obtain Commission approval prior to continuing operation beyond September 14, 2030.

15. 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:



Col. Francis X. Kosich, Chair
U.S. Commissioner

Dated: September 14, 2005



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. 20050904

Approval Date: September 14, 2005

GLENN O. HAWBAKER, INC. HOSTETLER FACILITY

Consumptive Water Use of Up to 0.275 mgd, and a
Groundwater Withdrawal (30-Day Average) of 0.150 mgd from Wells 1 and 2,
for Mining and the Processing of Limestone,
Armagh Township, Mifflin 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) Regulations §803.4, relating to projects requiring review and approval; §803.42, relating to the consumptive use of water; and §803.43, relating to groundwater withdrawals. The Commission received the application for consumptive water use on March 7, 2005, and the application for groundwater withdrawal on August 4, 2005.

Description

Purpose. The purpose of the application is to request approval for groundwater withdrawals and the consumptive use of water associated with limestone mining and processing operations.

Location. The project is located in the Juniata River Subbasin, HUC 02050304, Honey Creek Watershed, Armagh Township, Mifflin County, Pennsylvania.

Project Features. The project sponsor has requested approval for a withdrawal of 0.150 million gallons per day (mgd) (30-day average) of groundwater and the consumptive use of water of up to 0.275 mgd. Consumptive water use at the facility includes evaporative losses from ponds, dust control for both haul roads and at the crushing plant, and water included in the aggregate product.

The Glenn O. Hawbaker, Inc. (Hawbaker) facility consists of an open-pit limestone mine, known as Hostetler Quarry, and an associated mineral processing facility. At the current floor elevation of the quarry, which is the maximum depth of mining currently permitted, no dewatering is required to proceed with the mining operation. The facility produces crushed stone aggregate and asphaltic or “bituminous” concrete. Hawbaker leases the property but controls the

mining permit, and is the operator of the quarry and related aggregate-production facilities. Hostetler Quarry has been operated by Hawbaker since May 1995. Historically, Bethlehem Steel mined the quarry in the 1920s.

Hostetler Quarry had been operated as a “dry” facility producing crushed stone aggregate until May 2005, when the project constructed a processing (crushing and washing) plant. The project also has an existing asphalt plant.

Water for the quarry’s operation is withdrawn from two water supply wells (Wells 1 and 2), a public water supplier (Lewistown Municipal Water Authority), and two sediment ponds. The wells and the public water supply connections are metered.

Water from Well 2 is pumped into a 238,000-gallon “clean water” storage tank and withdrawn for use at the processing plant for crushing and washing operations. The project sponsor also uses its public water supply connection to supply additional water to the storage tank.

The project sponsor constructed two sediment ponds to clarify turbid water and provide additional water storage for use at the processing plant. These ponds can store approximately 1,796,000 gallons of water, combined. The two ponds have a total surface area of two acres. Runoff from processing operations is collected and pumped to the sediment ponds (not metered) and reused for quarry operations. No water from the pond system is discharged from the facility.

Well 1 supplies water trucks that are used for dust control, and for washing vehicles and equipment. Water from Well 1 also can be used to dilute the reclaimed water at the flocculent building to reduce the sediment load (turbidity).

Well 1 is an 8-inch-diameter open-bedrock well that was installed in 1993 and drilled to a total depth of 90 feet below ground surface (bgs). Well 1 is equipped with a submersible pump and is pumped at a rate of 40 gallons per minute (gpm). Well 2 is a 6-inch-diameter open-bedrock well that was installed in January 2005, and drilled to a total depth of 300 feet bgs. Well 2 is equipped with a submersible pump capable of producing 72 gpm.

Pumping Tests. The project sponsor requested that the Commission waive its pumping test requirements for Wells 1 and 2. Well 1 was tested on March 14, 2005, for yield and specific capacity. The testing was not pre-approved by Commission staff. The analysis of the test data indicated a sustainable yield in excess of 96 gpm and a specific capacity of 32 gpm per foot. Water is withdrawn from Well 1 at a rate of 40 gpm, which results in slightly over 1 foot of drawdown.

A step test and a 48.6-hour constant-rate pumping test, not pre-approved by Commission staff, were performed on Well 2 on March 22-24, 2005. According to a hydrogeologic report submitted by the project sponsor, Well 2 was pumped at an average rate of 69.6 gpm. Although Honey Creek flows within 200 feet of the quarry, this portion of Honey Creek is dry, except during very high runoff periods. Several groundwater wells were also monitored. Based on the

testing results, there is no indication that the groundwater withdrawals from Wells 1 or 2 will significantly affect Honey Creek or any other local groundwater users.

A review of the local geology and hydrogeology indicates that significant adverse effects on regional surface water bodies or local groundwater users, due to the operation of the wells, is unlikely. Therefore, Commission staff recommends that the requirement for additional testing of Wells 1 and 2 be waived.

Coordination. Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP). PADEP has not approved mining below the water table at the project. PADEP Bureau of Mining, Pottsville District Office staff has reviewed this docket for consistency with its Surface Mining Permit No. 44030301.

Findings

The project is subject to Commission approval and reporting requirements, as per Commission Regulations §803.42 and §803.43.

All water used for aggregate production and retained in the aggregate, trucked off-site, used for dust control in processing and on haul roads, used for equipment washing, as well as evaporated from the two acres of settling ponds and the water storage tank, is considered to be used consumptively. Water evaporation from the treatment ponds and uncovered storage tank will be calculated by the project sponsor using a method acceptable to the Commission. Commission staff recommends that the project's total daily consumptive water use be calculated by summing the daily consumptive water use from these categories of use. The project sponsor may propose an alternative for Commission staff review and approval.

The project sponsor currently calculates consumptive water use as the total daily metered withdrawals from Wells 1 and 2 and the public water supply. This methodology is acceptable to Commission staff.

Commission staff recommends that the project sponsor maintain appropriate metering to allow for an accurate measurement of the groundwater withdrawal from Wells 1 and 2, and the water supplied by the public water supplier to calculate the total consumptive water use at the facility.

Should the proposed accounting procedure not accurately measure the consumptive water use, the Commission reserves the right to modify the metering, monitoring, and accounting procedures. Commission staff will provide the project sponsor with written notice of any required change in the metering, monitoring, and accounting procedures. Any alternative monitoring or accounting procedure requested by the project sponsor will be reviewed and approved by Commission staff.

The project sponsor has requested a consumptive water use approval of up to 0.275 mgd. Commission staff is recommending approval of the requested amount. Should the project's

future consumptive water use be expected to exceed 0.275 mgd, the project sponsor must apply for a modification to this docket at that time.

The project's consumptive use of water is subject to water compensation requirements, as specified in Commission Regulation §803.42. To satisfy these requirements, the project sponsor proposes to make quarterly payments to the Commission in lieu of providing actual compensation water.

The project sponsor operates two wells (Wells 1 and 2) that are currently metered. The project sponsor has requested a groundwater withdrawal of 0.150 mgd as a 30-day average. Commission staff reviewed the groundwater availability analysis, pumping test results, and supporting information submitted by the project sponsor.

A review of the pumping test results indicate that there were no observable affects on any surface water bodies (Honey Creek) as a result of the groundwater withdrawal from Well 2. Minor drawdown was observed along strike in one well, and no other affects were observable in any of the other observation wells. Commission staff has concluded that the withdrawal is not likely to have a significant adverse impact on water supply wells in the area, water quality, or the low flow of streams.

Commission staff recommends that the pumping test requirement be waived for Wells 1 and 2. Based on current operation, Commission staff recommends approval of peak instantaneous pumping rates of 40 and 70 gpm for Wells 1 and 2, respectively.

Commission staff recommends approval of the requested quantity of the groundwater withdrawal, which is a total withdrawal from Wells 1 and 2 of 0.150 mgd as a 30-day average. Should the project's future groundwater withdrawal be expected to exceed 0.150 mgd, the maximum instantaneous pumping rates increase, or new sources be developed, the project sponsor must submit the appropriate applications for testing and approval at that time.

The project is subject to the Commission's water conservation requirements, as per Commission Regulation 804.20(b).

The project sponsor has paid the appropriate application fees, in accordance with Commission Regulation §803.28, and in accordance with Commission Resolution 98-19, as amended by Commission Resolution 2000-06, and Commission Resolution 2005-03.

The project sponsor has provided all proofs of notification, as required by Commission Regulation §803.25.

The project sponsor has operated in violation of Commission regulations since May 11, 2005, when its consumptive water use exceeded 20,000 gallons per day (gpd) as a maximum 30-day average, and June 5, 2005, when its groundwater withdrawal exceeded 100,000 gpd as a 30-day average. The project sponsor voluntarily notified the Commission of its operation, complied with application procedures, and cooperated with Commission staff during its review of the project. The project sponsor has offered a \$4,200 settlement to the Commission to

compensate for noncompliance in violation of Commission Regulation §803.4 for the period of noncompliance beginning on May 14, 2005, and ending on the date of this approval. Commission staff recommends acceptance of the project sponsor's proposed settlement.

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 withdrawal of 0.150 mgd (30-day average) from Wells 1 and 2, and the consumptive water use of up to 0.275 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 consumptive water use reporting requirements, as per Commission Regulation §803.42, and groundwater withdrawal reporting requirements, as per Commission Regulation §803.43.

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. 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 total volume of water removed daily from Wells 1 and 2 and the city water line. The project sponsor shall maintain metering on the wells and connection with the public water supplier, accurate to within five (5) percent, to measure its consumptive water use. The project sponsor may propose alternative accounting procedures to the Commission for staff review and approval. The Commission reserves the right to inspect all measurement equipment and audit all measurement records.

5. The project sponsor shall maintain metering on the on-site wells, accurate to within five (5) percent, to measure its groundwater withdrawal. The project sponsor shall keep daily records of the project's groundwater withdrawal and weekly water levels in Wells 1 and 2, 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.

6. The maximum instantaneous rates of production from Wells 1 and 2 shall not exceed 40 and 70 gpm, respectively.

7. To satisfy the Commission's current compensation requirements for consumptive water use set forth in Commission Regulation §803.42, the project sponsor shall make quarterly payments to the Commission based on the rate of \$0.14 per 1,000 gallons of water consumptively used by the project. The daily quantity of water consumptively used shall be the total volume of water removed daily from Wells 1 and 2 and the city water line. Payment amounts shall be calculated by applying this rate to the daily amount of water used

consumptively by the project. 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.

8. The project sponsor has offered a settlement by agreement, pursuant to Commission Regulation §805.27, in the amount of \$4,200 for its consumptive water use and groundwater withdrawal found to be in noncompliance with Commission Regulation §803.42, and is hereby accepted. Except where the full amount of same has been tendered to the Commission in advance hereof, this action shall be contingent upon and shall not be effective until payment of the settlement amount is made to the Commission, or arrangements for such payment have been made that are acceptable to the Executive Director of the Commission. Failure to make such payment or payment arrangement with the Commission within forty-five (45) days hereof shall render this approval null and void.

9. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §804.20(b).

10. The constant-rate pumping test requirements specified in Commission Regulation §803.43(b) are hereby waived for Wells 1 and 2.

11. 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.

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 the environment.

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 September 14, 2030. The project sponsor shall submit a renewal application by March 14, 2030, and obtain Commission approval prior to continuing operation beyond September 14, 2030.

18. 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:



Col. Francis X. Kosich, Chair
U.S. Commissioner

Dated: September 14, 2005



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. 20030407-1

Approval Date: April 10, 2003

Modification Date: September 14, 2005

WEIS MARKETS, INC.

Consumptive Water Use of Up to 0.150 mgd,
for Manufacture of Food Products and Beverages,
City of Sunbury, Northumberland 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) Regulations §803.4, relating to projects requiring review and approval, and §803.42, relating to the consumptive use of water. The Commission received the application on April 25, 2005.

Description

Purpose. The Commission originally approved the project on April 10, 2003, as Docket No. 20030407 (docket), issued in the name of Weis Markets, Inc. In the docket, the project was approved for a consumptive water use of up to 0.088 million gallons per day (mgd), primarily from the Sunbury Municipal Authority public water supply system, subject to conditions enumerated in the docket. This docket modification rescinds certain provisions and increases the consumptive water use quantity from 0.088 mgd up to 0.150 mgd.

Findings

The project's original approved quantity of consumptive water use of up to 0.088 mgd was based on water use estimates provided by the project sponsor. As a requirement of the docket, effluent metering on three sanitary sewer outfalls was installed in September 2003. Since that time, the project sponsor has reported consumptive water uses in excess of its approved quantity on 15 separate occasions.

The docket indicates that water is consumptively used for the following: water contained in the process wastewater sludge hauled off-site, evaporation during various chilling processes, steam generation from cooling towers and in manufacturing process water (scalding, wash down, etc.), product incorporation, and bottling.

Water used consumptively was to be determined by the project sponsor by comparing daily inflow monitoring (purchased water is metered at four locations as it enters the facility) to daily outflow monitoring (the sum of the process wastewater and the sanitary wastewater discharged to the sanitary sewer system). Additionally, at the time of the docket approval, Commission staff determined a pre-1971 consumptive water use of 0.007 mgd for the project and, for purposes of the docket, this quantity of water is considered “grandfathered” and is exempt from water compensation requirements.

Discharge metering was added at three locations on September 29, 2003. The meters quantify the process wastes at the maintenance shop and at the milk plant, and wastewater at the pretreatment facility. A fourth waste stream is in the form of sludge that is collected and hauled off-site by truck on a weekly basis.

Commission staff recommends that, as specified in the original docket, Weis Markets, Inc. be required to collect readings from the four influent meters and the three effluent meters on a daily basis. Commission staff previously had recommended that the requirement of daily meter readings be waived based on statements from the project sponsor asserting that inaccurate “peaks and valleys” in the daily consumptive use would be reported due to water storage lags in the wastewater system. However, during the recent site investigation, Commission staff found that there were no significant holding times of wastewater in the treatment system. Thus, there is no physical impediment to monitoring consumptive water use with the standard accuracy provided using daily meter readings.

Commission staff recommends that the approved quantity of consumptive water use specified in the original docket be modified to a peak-day use of up to 0.150 mgd according to these findings.

Commission staff recommends that the project sponsor calculate its consumptive water use by summing the daily quantity of metered (four meters) water supplied to the facility from the public water supplier minus the sum of the process wastewater, plus the sanitary wastewater that is metered and discharged to the sanitary sewer. The project sponsor may propose alternative accounting procedures to the Commission for staff review and approval. The project sponsor shall maintain all required meters, accurate to within five (5) percent, to calculate the consumptive water use.

Should the proposed accounting procedure utilizing total daily metered inflow minus total daily measured outflow consistently result in negative values, or otherwise not accurately measure the consumptive water use, the Commission reserves the right to modify the metering, monitoring, and accounting procedures. Commission staff will provide the project sponsor with written notice of any required change in the metering, monitoring, and accounting procedures. Any alternative monitoring/accounting procedure requested by the project sponsor will be reviewed and approved by Commission staff.

The project sponsor has submitted its monitoring data as required in the docket. While the project’s water use has been in noncompliance with Commission regulations, there have been no identified adverse impacts associated with the consumptive water use and the project sponsor

has cooperated with Commission staff during its review. With the calculating and reporting of the consumptive water uses resolved, and with the previous metering requirements satisfied, the project sponsor should be able to accurately monitor the project's consumptive water use.

The project sponsor has paid the fee for the water consumed in excess of the previously approved amount based on the current data. Commission staff does not recommend imposition of a penalty for the prior noncompliance.

Commission staff recommends that all conditions in Commission Docket No. 20030407 that are not inconsistent with this docket action should remain effective.

The project is subject to the Commission's water conservation requirements, as per Commission Regulation §804.20(b).

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

Based on Commission Regulation §803.30(a), the prior docket approval is effective until, April 10, 2028. Commission staff recommends the duration of this docket modification be consistent with the term of the prior docket approval.

Decision

1. Commission Docket No. 20030407, as approved April 10, 2003, is hereby modified to approve an increase in consumptive water use of up to 0.150 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. Conditions "c," "d," and "j" of Commission Docket No. 20030407, as approved April 10, 2003, are hereby rescinded.

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 quantity used for boiler makeup, contained in the process wastewater sludge hauled off-site, evaporated from various manufacturing processes, evaporated by the facility's cooling towers, bottled, and incorporated into products. The project sponsor shall compute the daily consumptive water use by summing the daily quantity of metered (four meters) water supplied to the facility from the public water supplier (inflow), and then subtracting the sum of the metered process wastewater (two meters), plus the metered sanitary wastewater discharged to the sanitary sewer (outflow). The project sponsor shall maintain metering of the public water supply and the wastewater discharges, accurate to within five (5) percent.

5. To satisfy the Commission's current compensation requirements for consumptive water use set forth in Commission Regulation §803.42, the project sponsor shall make quarterly payments to the Commission based on the rate of \$0.14 per 1,000 gallons of water consumptively used by the project in excess of the grandfathered quantity. The daily quantity of water consumptively used shall be the quantity used for boiler makeup, evaporated from various manufacturing processes, evaporated from the waste sludge, evaporated by the facility's cooling towers, bottled, and incorporated into products. The project sponsor shall compute the daily consumptive water use by summing the daily quantity of metered (four meters) water supplied to the facility from the public water supplier (inflow), and then subtracting the sum of the metered process wastewater (two meters), plus the metered sanitary wastewater discharged to the sanitary sewer (outflow). 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 0.007 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. 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.

7. All other conditions in Commission Docket No. 20030407, not inconsistent herewith, shall remain effective.

8. Based on Commission Regulation §803.30(a), this approval is effective until April 10, 2028. The duration of this docket modification is in accordance with the term of the prior docket approval. The project sponsor shall submit a renewal application by October 10, 2027, and obtain Commission approval prior to continuing operation beyond April 10, 2028.

By the Commission:



Col. Francis X. Kosich, Chair
U.S. Commissioner

Dated: September 14, 2005



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. 20050905

Approval Date: September 14, 2005

WMPI PTY, L.L.C.

Groundwater Withdrawal of 7.000 mgd (30-Day Average) and
Consumptive Water Use of Up to 3.470 mgd (Peak Day)
for the Gasification and Liquefaction of Coal Waste,
and for the Ancillary Generation of Steam and Electricity,
Mahanoy and West 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) Regulations §803.4, relating to projects requiring review and approval; §803.42, relating to the consumptive use of water; and §803.43, relating to groundwater withdrawals. The Commission received the application on April 15, 2003, and the project sponsor submitted additional supporting information on August 28, 2003, and April 4, 2005.

Description

Purpose. The purpose of the application is to request approval for the withdrawal and consumptive use of water for the production of low-sulfur liquid fuels such as diesel oil and naphtha from primarily anthracite coal waste (“culm”), and possibly in part from petroleum coke or biomass, through a gasification and liquefaction process, with byproducts including high-grade sulfur and a fine vitreous aggregate (slag and/or fly ash). The process also involves the ancillary generation of steam for possible industrial use and electricity generation in a gas turbine, which will burn excess process off-gases.

Location. The project is located in the Lower Susquehanna Subbasin, HUC 02050301, Mahanoy Creek Watershed, Mahanoy and West Mahanoy Townships, Schuylkill County, Pennsylvania.

Project Features. The project sponsor has requested approval for the withdrawal of 7.000 million gallons per day (mgd) (30-day average) of groundwater and the consumptive use of water of up to 3.470 mgd (peak day; 3.300 mgd as a 30-day average) for a coal waste gasification and liquefaction plant.

The proposed WMPI PTY, L.L.C. (WMPI) gasification and liquefaction facility will be located east of the Borough of Frackville, on a broad east-northeast, west-southwest trending ridge, which is on the south-southeastern side of the Mahanoy Creek Valley. The location is adjacent to the existing Gilberton Power Corporation fluidized bed, coal-waste-burning power plant.

Groundwater will be withdrawn from the Gilberton Mine Pool (a flooded deep mine) at the Gilberton Mine Shaft. The Gilberton Mine Pool is bordered on the west by the Lawrence Mine Pool, on the north by the East Bear Ridge Mine Pool, and on the east by the St. Nicholas and Boston Run Mine Pools.

Currently, there are three other withdrawals at the mine pool. The Pennsylvania Department of Environmental Protection (PADEP) operates a pump at the Gilberton Mine Shaft to maintain a depressed water level in the mine pool to prevent basement flooding in the adjacent Village of Gilberton. Groundwater is also withdrawn from the Gilberton Mine Shaft and consumptively used by Gilberton Power Corporation, previously approved by the Commission in Docket No. 19851202. WMPI Coal Preparation Plant currently withdraws 2.160 mgd of groundwater from the Gilberton Mine Shaft for its existing coal and/or coal waste processing operations.

Water will be used consumptively at the facility in primarily three ways. The largest consumptive use will be evaporation and drift losses from the cooling water system, which will amount to approximately 2.530 mgd. Water consumed in the actual gasification-liquefaction process will amount to approximately 0.540 mgd. Water injected as steam into a gas turbine burning excess process off-gas will amount to approximately 0.230 mgd. Other lesser consumptive uses include potential moisture addition to fly ash to improve handling characteristics.

Of the 7.000 mgd (30-day average) to be pumped from the Gilberton Mine Pool, the project sponsor intends to re-infiltrate up to 3.700 mgd (30-day average) of treated process wastewater in an existing tailings pond in the Mahanoy Creek valley located approximately 1 mile east of the Gilberton Mine Shaft. This tailings pond was constructed prior to 1971 and is currently used by WMPI. The pond, located over the Boston Run Mine Pool, was previously used by B&D Mining Company as part of its coal and/or coal waste processing operations.

Pumping Test. The project sponsor has requested that the required constant-rate pumping test of the Gilberton Mine Pool be waived. The Pennsylvania Department of Environmental Resources (PADER, predecessor agency of PADEP) conducted a 10-day pumping test at the Gilberton Mine Shaft in 1976 that showed the Gilberton and the Lawrence Mine Pools are well interconnected. Water levels measured in the St. Nicholas Mine Pool were substantially higher than those in the Gilberton Mine Pool and lower in the West Bear Ridge Mine Pool than in the Gilberton Mine Pool, and these mine pools demonstrated no drawdown from the pumping in the Gilberton Mine Pool. Long-term hydrographs of the few available boreholes in some of the mine pools confirm that barrier pillars between the various mine pools have not all been breached or so severely compromised so as to allow free flows of groundwater among the mine pools.

Coordination. Commission staff has coordinated with the PADEP Bureau of Abandoned Mine Reclamation (BAMR), Wilkes-Barre District Office; the Water Management Program in the Northeast Region Office; and Bureau of Mining and Reclamation (BMR), Pottsville District Office, during review of the project.

Findings

The project is subject to Commission approval and reporting requirements, as per Commission Regulations §803.42 and §803.43.

All water: (1) mixed with the feedstock in the gasification-liquefaction process; (2) lost through steam injection in the gas turbine; (3) lost as drift and from evaporation from the cooling water system; and (4) used in wetting fly ash for improved handling, is considered to be consumptively used. Commission staff recommends that the project's total daily consumptive water use be calculated as the difference between raw water inflow and treated wastewater discharge minus any stormwater infiltration.

Commission staff recommends that the project sponsor submit a metering plan to accurately quantify the daily consumptive water use at the facility for review and approval by Commission staff. The plan should contain metering, accurate to within five percent, on the raw water withdrawal from the Gilberton Mine Shaft, on the treated wastewater discharge, and other locations, as appropriate. The project sponsor should report the daily consumptive water use data to the Commission quarterly.

Should the proposed accounting procedure fail to accurately measure the project's consumptive water use, the Commission reserves the right to modify the metering, monitoring, and accounting procedures. Commission staff will provide the project sponsor with written notice of any required change in the metering, monitoring, and accounting procedures. Any alternative monitoring or accounting procedure requested by the project sponsor must be reviewed and approved by Commission staff.

The project's consumptive use of water is subject to water compensation requirements, as per Commission Regulation §803.42. To satisfy these requirements, the project sponsor proposes to make quarterly payments to the Commission in lieu of providing actual compensation water.

The project sponsor has requested a groundwater withdrawal of 7.000 mgd, as a 30-day average, at the Gilberton Mine Shaft in the Gilberton Mine Pool at an anticipated pumping rate of 4,900 gallons per minute (gpm). The proposed source of water is part of an extensive network of abandoned and flooded mine workings beneath the Mahanoy Creek valley that collectively stores large quantities of water, measured in billions of gallons. Based on the nature of the source, the project sponsor requested a waiver of the required constant-rate pumping test.

Commission staff reviewed the groundwater availability analysis submitted by the project sponsor's geologic consultant, historic pumping test results, and supporting information

submitted by the project sponsor. The Pennsylvanian-Age Llewellyn Formation within the Mahanoy Creek valley has been extensively deep mined and surface mined for anthracite coal, and unreclaimed, mining-disturbed land is extensive in the valley bottom and on the lower valley walls. This synclinal valley forms the Western Middle Anthracite Coal Field.

The abandoned deep mines in the valley are flooded and form artificial aquifers, commonly termed “mine pools,” of extremely high transmissivity. During deep mining, un-mined sections or “barrier pillars” were maintained between the various deep mines to prevent flooding of active mines when adjacent mines were abandoned. Some of these barriers were breached, interconnecting and allowing large groundwater flows between some mine pools. In other locations, the barriers are intact, allowing only limited leakage between mine pools.

This degree of interconnection among the mine pools is a critical underlying assumption in the review of the project as it relates to the idea of “vastness” of the collective mine pool (artificial aquifer). However, considering the Mahanoy Creek watershed, including the approximately 8.15-square-mile area upgradient of the Gilberton and Lawrence Mine Pools, Commission staff concludes that recharge is likely in the range of 5.150 to 8.150 mgd during a 1-in-10-year drought. When combined with the collective storage available, Commission staff finds that the water resources are sufficient to support the proposed development. The water supply may need to be withdrawn from more than one mine pool to meet the project’s demand and avoid local adverse impacts.

Commission staff recommends approval of the requested maximum instantaneous pumping rate of 4,900 gpm and an average daily withdrawal of 7.000 mgd (as a 30-day average), consistent with: (1) the probable sustainable yield of mine pool complex; (2) projected needs, as submitted by the project sponsor; and (3) protective drawdown limits, as described below.

Sustainable Yield of the Mine Pool. PADEP has collected over 30 years of pumping data for the Gilberton Mine Pool through its control of the mine pool elevation to prevent basement flooding in the Village of Gilberton following Hurricane Agnes in 1972. The record of withdrawal from the mine pool by PADEP demonstrates that 7.400 mgd can be supplied from the Gilberton Mine Shaft during all but the most severe droughts.

PADEP’s pumping test clearly established a connection only between the Gilberton and the Lawrence Mine Pools. Commission staff finds that the connected mine pools (Gilberton and Lawrence) have a recharge area of approximately 2 square miles, and determined that the total recharge available is approximately 2.500 mgd using a 1-in-2-year recharge rate of 1.260 mgd per square mile. This recharge rate considers that infiltration rates over land disturbed by mining may be higher than average.

Local direct recharge on the mine pools likely accounts for approximately one-third of the demonstrated yield from the Gilberton Mine Pool of 7.400 mgd. Other sources of recharge must supply the balance. Although some leakage likely occurs from the neighboring mine pools, the pumping test demonstrated that the St. Nicholas and Boston Run Mine Pools do not have an efficient hydraulic connection and, therefore, cannot significantly contribute to a withdrawal from the Gilberton and Lawrence Mine Pools. Commission staff has identified flow losses from

Mahanoy Creek as it flows over the Gilberton and Lawrence mines as a plausible source of the remaining 4.900 mgd (which brings the total to 7.6 cubic feet per second [cfs]).

Commission staff recommends that the project sponsor perform seepage runs of Mahanoy Creek in July, August, and September during the first two years of project operation to confirm the magnitude and location(s) of flow losses. The seepage runs should be conducted along the reach passing over the Gilberton Mine Pool and for 500 feet upstream and downstream of the mine pool, or as directed by Commission staff. Flow measurement stations should be spaced a maximum of 500 feet apart. The seepage runs should be performed during a period of base flow, and the results tabulated and reported in an interpretive report to the Commission within 30 days of the date of the streamflow measurements. The report should contain a description and an analysis of the results, and a map showing all of the flow measurement stations and the associated flows.

With time, as abandoned mine lands in the valley are reclaimed, recharge rates to the mine pools may diminish, which may limit the available water supply. In order to insure sustainability of the water supply for the project, Commission staff recommends that the project sponsor repeat these seepage studies after 10 years of project operation. The project sponsor should submit a plan for the fieldwork for review and approval by Commission staff within 90 days of Commission approval. The seepage runs should be performed during a period of base flow during the months of July, August, and September, and the results tabulated and reported in an interpretive report to the Commission within 30 days of the date of the streamflow measurements. The report should contain a description and an analysis of the results, and a map showing all of the flow measurement stations and the associated flows.

Projected Needs. Existing withdrawals from the Gilberton Mine Shaft currently include approximately 2.000 mgd (up to 1.510 mgd approved for consumptive water use) for Gilberton Power Corporation and a reported 2.160 mgd by WMPI Coal Preparation Plant for its coal waste processing operations. The project sponsor's geologic consultant asserts that the current total "net" withdrawal is much less, approximately 2.700 mgd due to recirculation of process wastewater. Similarly, the project's geologic consultant anticipates that the additional "net" withdrawal for WMPI is on average 3.300 mgd, assuming that the treated wastewater from the plant re-infiltrates through the tailings pond into the Boston Run Mine Pool and effectively recirculates to the Gilberton Mine Pool.

However, if the Boston Run Mine Pool and the Gilberton Mine Pool are not well interconnected and recirculation of treated wastewater is ineffective, the effective withdrawal from the Gilberton Mine Pool will approach the withdrawal limit of 7.000 mgd. The project sponsor should monitor the water level in the Gilberton Mine Pool. If it becomes apparent that the mine pool level would have to be drawn down to the meet water supply demand of the gasification-liquefaction plant during drought periods, the project sponsor could investigate an alternate means of re-infiltrating the treated wastewater so that it more effectively recirculates to the Gilberton Mine Pool. As an alternative, the project sponsor could develop an additional water supply in another mine pool to meet the project's demand. If the project sponsor proposes to withdraw groundwater from another location in the Gilberton Mine Pool or any other mine

pool, the project sponsor must submit the required application(s) to the Commission for its review and approval.

Protective Drawdown Limits. PADEP maintained the level of the Gilberton Mine Pool in the elevation range of 1,094 to 1,112 feet above mean sea level (AMSL) through automated, level-controlled pumping up until 1998. Since that time, PADEP has maintained the pool level at or below elevation of 1,113 feet, using manual pumping. The pump shut off currently is set at an elevation of 1,096 feet AMSL.

The project sponsor's geologic consultant presented an analysis of PADEP's pumping records for the Gilberton Mine Shaft, and an analysis of drought recharge rates and storage in the mine pools. This analysis indicates that if the net withdrawal from the Gilberton Mine Shaft is on the order of 3,300 mgd, drawdown of the Gilberton Mine Pool during drought periods should not be more than an average of 12 feet, which is within the range of drawdown created since active pumping at the Gilberton Mine Shaft was begun by PADEP.

However, this analysis further indicated that if the recirculation is not effective and the net withdrawal approaches 7,000 mgd, drawdown of the Gilberton Mine Pool of as much as 100 feet could be created during drought periods. Such large drawdowns have the potential to induce mine subsidence in the project area. As the project sponsor has not demonstrated a good interconnection between the Boston Run Mine Pool over which re-infiltration of treated wastewater will occur and the Gilberton Mine Pool from which the groundwater withdrawal will take place, and as recharge rates to the mine pools may diminish as abandoned mine lands in the Mahanoy Creek valley are reclaimed, Commission staff recommends long-term monitoring of the level of the Gilberton Mine Pool.

Further, to insure that the planned withdrawal does not cause excessive drawdown of this mine pool, Commission staff recommends that if drawdown reaches an elevation of 1,087 feet AMSL at the Gilberton Mine Shaft, the project sponsor should evaluate the potential for additional drawdown. Should these projections show that the water level will reach 1,084 feet AMSL, the project sponsor should prepare and submit the necessary applications to the Commission for supplemental withdrawal location(s). This elevation represents a reasonable balance between the lowest level of the mine pool since active pumping began in the 1970s, potentially adverse impacts from subsidence, and the water supply needs of the project.

Commission staff also recommends that the project sponsor carry out a program of monitoring of the water levels in the Boston Run and St. Nicholas Mine Pools, and other nearby mine pools as appropriate, as future decisions on managing the Gilberton Mine Pool and adjacent mine pools as artificial aquifers to support the high water demand of this new project, that of the existing Gilberton Power Corporation plant, and the existing processing operation of WMPI, will depend on a complete groundwater level database.

Other Considerations. There are several public water supply wells in the Borough of Frackville, on the broad ridge on the south side of the valley, the closest of which is the Nice Street Well. This well is located approximately 1.6 miles southwest of the Gilberton Mine Shaft and approximately 2,000 feet south of the southern limit of the combined Gilberton-Lawrence

Mine Pool. The Nice Street Well is drilled into the Mississippian-Age Mauch Chunk Formation, and it is across strike from the mine pools of the Mahanoy Creek valley, on the southern limb of the syncline. Commission staff finds that the potential for significant adverse impact to this well is highly unlikely and, therefore, does not recommend any additional monitoring at this time.

Based on the findings above, Commission staff recommends that the requirement for the pumping test be waived for the proposed withdrawal at the Gilberton Mine Shaft.

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

The project sponsor has paid the appropriate application fee, in accordance with Commission Regulation §803.28, and in accordance with Commission Resolution No. 98-19, as amended by Commission Resolution 2000-06. The project sponsor has provided all proofs of notification, as required by Commission Regulation §803.25.

No adverse impacts to other area groundwater withdrawals are anticipated. 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 withdrawal of 7.000 mgd (30-day average) from the Gilberton Mine Pool, and the consumptive use of water of up to 3.470 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 consumptive water use reporting requirements, as per Commission Regulation §803.42, and groundwater withdrawal reporting requirements, as per Commission Regulation §803.43.

4. Prior to commencing operation, the project sponsor shall install and then maintain meters, accurate to within five (5) percent, to measure the daily quantity of water entering and leaving the facility's process water system. The project sponsor may propose alternative monitoring to the Commission for staff review and approval.

5. 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 difference in quantity of water pumped from the Gilberton Mine Shaft and the quantity of treated wastewater discharged to the tailings pond. The Commission reserves the right to inspect all measurement equipment and audit all measurement records.

6. Within sixty (60) days from the date of this approval, the project sponsor shall submit a metering plan to the Commission for review and approval by Commission staff that accounts for all water withdrawn from the Gilberton Mine Shaft, the treated wastewater discharge, and the total consumptive water use at the facility, as well as accounts for water discharged as wastewater through stormwater flows. The project sponsor shall propose a methodology to account for its consumptive water use based on metering, rather than estimation. Following approval, the project sponsor shall execute the plan and complete any installation of meters in accordance with the approved schedule, and shall certify to the Commission that the monitoring plan has been implemented. The project sponsor shall maintain meters, accurate to within five (5) percent.

7. The maximum instantaneous pumping rate from the Gilberton Mine Shaft shall not exceed 4,900 gpm.

8. If the pumping water level in the Gilberton Mine Shaft reaches 1,087 feet AMSL, the project sponsor shall submit its projections and evaluation of anticipated additional drawdown. Should the evaluation show that the water level will decline below 1,084 feet AMSL, the project sponsor shall submit the appropriate application(s) for supplemental withdrawal locations.

9. The project sponsor shall install and maintain metering on the groundwater withdrawal, accurate to within five (5) percent, and keep daily records of the project's groundwater withdrawal, and measure water levels at the Gilberton Mine Pool, as described in Condition 10. The project sponsor 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 Commission reserves the right to inspect all measurement equipment and audit all measurement records.

10. The project sponsor shall monitor the water levels in the Gilberton Mine Pool, and in all the mine pools immediately surrounding the Gilberton Mine Pool, daily. Within sixty (60) days from the date of this approval and prior to commencing withdrawals from the Gilberton Mine Shaft, the project sponsor shall submit a plan for monitoring these mine pools to the Commission for review and approval by Commission staff. The monitoring data shall be submitted to the Commission in a quarterly report due within thirty (30) days after the close of the preceding quarter. The report shall contain both a description and an analysis of the monitoring results, and include a map with all of the monitoring points and their associated water levels, expressed as feet AMSL.

11. The project sponsor shall perform seepage runs of Mahanoy Creek along the reach passing over the Gilberton Mine Pool complex, and for an additional 500 feet upstream and downstream. The seepage runs shall be performed during a period of base flow, during the months of July, August, and September, for the first two years of project operation (a total of six seepage runs). Flow measurement stations shall be no further than 500 feet apart. These shall be submitted to the Commission in a report due by October 31. The report shall contain both a description and an analysis of the results, and include a map with all of the flow measurement points and their associated flows.

12. In 2016, or after 10 years of operation, whichever comes later, the project sponsor shall repeat the seepage runs of Mahanoy Creek along the reach passing over the Gilberton Mine Pool complex, and for an additional 500 feet upstream and downstream. The seepage runs shall be performed during a period of base flow, during the months of July, August, and September, for the first two years of project operation (a total of six seepage runs). Flow measurement stations shall be no further than 500 feet apart. These shall be submitted to the Commission in a report due by October 31. The report shall contain both a description and an analysis of the results, and include a map with all of the flow measurement points and their associated flows.

13. To satisfy the Commission's current compensation requirements for consumptive water use set forth in Commission Regulation §803.42, the project sponsor shall make quarterly payments to the Commission based on the rate of \$0.14 per 1,000 gallons of water consumptively used by the project. The daily quantity of water consumptively used shall be the difference between the quantity of water pumped from the Gilberton Mine Shaft and the quantity of treated wastewater returned to the tailings pond for re-infiltration. Payments shall be made quarterly and shall be calculated by applying this rate to the daily amount of water consumptively used by the project during the preceding calendar quarter. 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.

14. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §804.20(b).

15. The constant-rate pumping test requirement specified in Commission Regulation §803.43 (b) is hereby waived.

16. If the Commission determines that the operation of the project's groundwater withdrawal from the Gilberton Mine Shaft 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.

17. 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.

18. 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.

19. 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.

20. 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.

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 September 14, 2030. The project sponsor shall submit a renewal application by March 14, 2030, and obtain Commission approval prior to continuing operation beyond September 14, 2030.

23. 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:



Col. Francis X. Kosich, Chair
U.S. Commissioner

Dated: September 14, 2005



Exhibit B7

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. 20040305-1

Approval Date: March 10, 2004

Modification Date: September 14, 2005

BC NATURAL CHICKEN, LLC

Groundwater Withdrawal (30-Day Average) of 0.137 mgd from Wells 3, 4, 5, and 6,
a Total Well Field Withdrawal (30-Day Average) of 0.400 mgd,
and Consumptive Water Use of Up to 0.400 mgd,
for the Processing of Poultry,
Bethel 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) Regulations §803.4, relating to projects requiring review and approval; §803.42, relating to the consumptive use of water; and §803.43, relating to groundwater withdrawals.

Description

Purpose. The Commission originally approved the project on March 10, 2004, as Docket No. 20040305 (docket), issued in the name of BC Natural Chicken (formerly Pennfield Farms). In the docket, the project was approved for a groundwater withdrawal (30-day average) of 0.137 million gallons per day (mgd) from Wells 3, 4, 5, and 6 and a total well field withdrawal (30-day average) of 0.400 mgd, and consumptive water use of up to 0.045 mgd, for the processing of poultry, subject to conditions enumerated in the docket. The project sponsor also withdraws an average of 0.250 mgd of groundwater from grandfathered Wells 1 and 2 (combined), and purchases water from the Fredricksburg Sewer and Water Authority at an average rate of 0.479 mgd. This docket modification rescinds certain provisions and increases the consumptive water use quantity from 0.045 mgd to 0.400 mgd. There is no change in the approval for the groundwater withdrawal.

Findings

The project's original approved quantity of consumptive water use of up to 0.045 mgd was based on 30-day average water use estimates provided by the project sponsor. As a requirement of the docket, metering was installed in 2004. The project sponsor has reported consumptive water uses in excess of its approved quantity.

The docket indicates that water is consumptively used for the following: ice production, evaporation during chilling processes, steam generation from cooling towers and in process water (scalding, wash down, etc.), product absorption, and the wastewater treatment system. Wastewater treatment ponds were in existence prior to the regulation and are not included in the consumptive water use calculations. Water used consumptively was to be determined by the project sponsor by comparing daily inflow monitoring (groundwater withdrawals and purchased water) to daily outflow monitoring (discharge to the on-site treatment plant). Additionally, at the time of the docket approval, Commission staff determined a pre-1971 consumptive water use of 0.014 mgd for the project and, for purposes of the docket, this quantity of water is considered “grandfathered” and is exempt from water compensation requirements.

According to the data collected by the project sponsor since 2004, the actual consumptive water use averages 0.166 mgd and the current peak-day consumptive water use is estimated to be 0.400 mgd. The project sponsor asserts that the large increase in approved peak-day consumptive use is required to allow for surges due to the on-site storage of water and the batch processing of poultry and wastewater.

However, because of the ambiguity of the data submitted by the project sponsor and the project’s location in an area identified where the groundwater resources are potentially stressed, Commission staff recommends a metering and monitoring plan be developed by the project sponsor and submitted to Commission staff for review and approval. After the collection of three years of data, Commission staff will reevaluate the approved quantity of consumptive water use, based on these data.

During its review of the project, Commission staff found that water can be discharged from the facility through the on-site water treatment facility or, as a secondary discharge point, directly to Fredericksburg’s sanitary sewer system. The project sponsor did not previously identify the secondary discharge location. Commission staff recommends that metering of the municipal sewer discharge be installed and that this quantity be included in the consumptive water use calculation.

Commission staff recommends that the approved quantity of consumptive water use specified in the original docket be modified to a peak-day use of up to 0.400 mgd, according to these findings.

Commission staff recommends that the project sponsor should calculate its consumptive water use by summing the daily quantity of metered water withdrawn from the incoming water storage tank plus metered water purchased from the Fredricksburg Sewer and Water Authority (inflow), and subtracting the daily metered discharges at the treatment plant and the municipal sewer outfall (outflow). The project sponsor may propose alternative accounting procedures to the Commission for staff review and approval. The project sponsor shall maintain all required meters, accurate to within five (5) percent, to calculate the consumptive water use.

Should the proposed accounting procedure utilizing total daily metered inflow minus total daily measured outflow consistently result in negative values, or otherwise not accurately measure the consumptive water use, the Commission reserves the right to modify the metering, monitoring, and accounting procedures. Commission staff will provide the project sponsor with written notice of any required change in the metering, monitoring, and accounting procedures.

Any alternative monitoring/accounting procedure requested by the project sponsor must be reviewed and approved by Commission staff.

Although the project sponsor has submitted its monitoring data as required in the docket, the improper placement of the meters and failure to include the municipal sewer discharge in the consumptive water use calculations resulted in inaccurate reporting of the consumptive water use. Commission staff recognized likely inaccuracies in the data reports, contacted the project sponsor, and required modification of the existing docket. The project sponsor has been cooperative in resolving the inaccuracies.

While the project's water use has been in noncompliance with Commission regulations, there have been no identified adverse impacts associated with the consumptive water use, and the project sponsor has cooperated with Commission staff during its review. With the calculating and reporting of the consumptive water uses resolved, and with the requirements of this docket modification for the installation of additional meters, the project sponsor should be able to accurately monitor the project's consumptive water use.

The project sponsor has paid the fee for the water consumed in excess of the previously approved amount based on the current data. Commission staff does not recommend imposition of a penalty for the prior noncompliance.

Commission staff recommends that all conditions in Commission Docket No. 20040305 that are not inconsistent with this docket action should remain effective.

The project is subject to the Commission's water conservation requirements, as per Commission Regulation §804.20(b).

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

Based on Commission Regulation §803.30(a), the prior docket approval is effective until, March 10, 2029. Commission staff recommends the duration of this docket modification be consistent with the term of the prior docket approval.

Decision

1. Commission Docket No. 20040305, as approved March 10, 2004, is hereby modified to approve an increase in consumptive water use of up to 0.400 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. Conditions "b" and "l" of Commission Docket No. 20040305, as approved March 10, 2004, are hereby rescinded.

4. Within sixty (60) days from the date of this approval, the project sponsor shall install and then maintain meters, accurate to within five (5) percent, on the incoming water storage tank and on the municipal sewer discharge.

5. The project sponsor shall compute the daily consumptive water use by summing the withdrawals from the incoming water storage tank and the city water purchased from Fredricksburg Sewer and Water Authority (inflow), and then subtracting the discharge at the treatment plant and the municipal sewer discharge (outflow).

6. Within thirty (30) days from the date of this approval, the project sponsor shall submit a plan for the metering and monitoring described above (Condition 5) for Commission staff review and approval. Upon approval of the metering and monitoring plan, the project sponsor shall implement the plan. Following the collection of three years of data, the Commission will reevaluate the approved quantity of consumptive water use.

7. 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.

8. All other conditions in Commission Docket No. 20040305 not inconsistent herewith shall remain effective.

9. Based on Commission Regulation §803.30(a), this approval is effective until March 10, 2029. The duration of this docket modification is in accordance with the term of the prior docket approval. The project sponsor shall submit a renewal application by September 10, 2028, and obtain Commission approval prior to continuing operation beyond March 10, 2029.

By the Commission:



Col. Francis X. Kosich, Chair
U.S. Commissioner

Dated: September 14, 2005



Exhibit B8

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. 20050906

Approval Date: September 14, 2005

PFIZER, INC.

Consumptive Water Use of Up to 0.250 mgd,
for the Manufacture of Pharmaceutical Health Care Products,
Lititz 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) Regulations §803.4, relating to projects requiring review and approval, and §803.42, relating to the consumptive use of water. The Commission received the application on May 6, 2005.

Description

Purpose. The purpose of the application is to request approval for the consumptive water use associated with the manufacture of pharmaceutical health care products.

Location. The project is located in the Lower Susquehanna Subbasin, HUC 02050306, Conestoga River Watershed, Lititz Borough, Lancaster County, Pennsylvania.

Project Features. The project sponsor has requested approval for the consumptive use of water of up to 0.250 million gallons per day (mgd). Consumptive water use at the facility is the result of water incorporated in the products and a single cooling tower used for process cooling. Based on monthly water use records since 1993, Commission staff calculates the project's current maximum average 30-day consumptive water use to be 0.220 mgd, and current peak-day consumptive water use to be 0.230 mgd.

Operations began at the facility in 1956, under the name Warner Hudnet, which became Warner Lambert. Pfizer, Inc. acquired the facility in 2000. The project sponsor manufactures pharmaceutical health care products at the facility, including Listerine brand mouthwash, several lotions including Lubriderm and Corn Huskers brands, Neopolysporin ointment, and cough and cold medicines.

Water is provided to the facility by the Lititz Borough public water supply and is metered as it enters the facility. Once inside the plant, water is purified using a reverse osmosis process

for incorporation into products. Mouthwash manufactured at the facility is a combination of water and alcohol, and the finished product contains 70 to 75 percent water. Other products are oil-based and contain less water. All wastewater generated at the facility, including wash-down water, filter backwash, sanitary use, and storm water, is discharged through a flume and treated at Lititz Borough's wastewater treatment plant.

Findings

The project is subject to Commission approval and reporting requirements, as per Commission Regulation §803.42.

All water incorporated into products or evaporated by the facility is considered to be consumptively used. Commission staff recommends that the project's total daily consumptive water use be calculated as the difference between the metered inflow to the facility and metered outflow from the facility on a daily basis to determine the project's daily consumptive water use. All measurements should be recorded at approximately the same time each day.

The project sponsor reports that wastewater discharges may periodically include storm water collected in a sump and discharged to the wastewater stream. Commission staff recommends that a meter be installed to quantify the storm water component of the wastewater and remove it from the outflow calculation.

Should the proposed accounting procedure utilizing daily metered inflow minus daily measured outflow consistently result in negative values, or otherwise not accurately measure the consumptive water use, the Commission reserves the right to modify the metering, monitoring, and accounting procedures. Commission staff will provide the project sponsor with written notice of any required change in the metering, monitoring, and accounting procedures. Any alternative monitoring/accounting procedure requested by the project sponsor shall be subject to review and approval by Commission staff.

The project sponsor has requested a consumptive water use approval of up to 0.250 mgd. Based on an analysis of monthly records of water supplied to the facility and discharged to the wastewater treatment system, Commission staff is recommending approval of the requested amount, which represents an increase of approximately 8 percent over current peak-day use of 0.230 mgd. Should the project's future consumptive water use exceed or be expected to exceed 0.250 mgd, the project sponsor must apply for a modification to this docket at that time.

Commission staff and the project sponsor have agreed to a pre-1971 consumptive water use of 0.037 mgd for the project and, for purposes of this docket, this quantity of water is considered "grandfathered" and is exempt from water compensation requirements.

The project's consumptive use of water in excess of the grandfathered quantity is subject to water compensation requirements, as per Commission Regulation §803.42. To satisfy these requirements, the project sponsor proposes to make quarterly payments to the Commission in-lieu-of providing actual compensation water.

The project is subject to the Commission's water conservation requirements, as per Commission Regulation §804.20(b).

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

The project sponsor has operated in violation of Commission regulations since February 1995. The project sponsor, when notified by the Commission of its regulations, complied with the application procedures and cooperated with Commission staff during its review of the project. The project sponsor has offered a settlement to the Commission to compensate for the noncompliance with Commission Regulation §803.4 for the period beginning February 1995 and ending on the date of this approval. Commission staff recommends acceptance of the project sponsor's proposed settlement of \$76,970.

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 consumptive water use of up to 0.250 mgd is 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 consumptive water use reporting requirements, as per Commission Regulation §803.42.
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. 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 incorporated into products and evaporated by the facility's cooling tower, which is equal to metered water entering the plant plus the water pumped from the stormwater sump minus the metered process wastewater discharged to Lititz Borough's sanitary sewer system. The project sponsor shall maintain metering on its incoming water supply and wastewater discharge, accurate to within five (5) percent. The Commission reserves the right to inspect all measurement equipment and audit all measurement records.
5. To satisfy the Commission's current compensation requirements for consumptive water use set forth in Commission Regulation §803.42, the project sponsor shall make quarterly payments to the Commission based on the rate of \$0.14 per 1,000 gallons of water consumptively used by the project in excess of the grandfathered quantity. 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 0.037 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. Payments shall be made quarterly and shall be calculated by applying this rate to the daily amount of water consumptively used by the project during the preceding calendar quarter. 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 has offered a settlement by agreement pursuant to Commission Regulation §805.27 in the amount of \$76,970 for its consumptive water use found to be in noncompliance with Commission Regulation §803.42, and is hereby accepted. Except where the full amount of same has been tendered to the Commission in advance hereof, this action shall be contingent upon, and shall not be effective until payment of the settlement amount is made to the Commission, or arrangements for such payment have been made that are acceptable to the Executive Director of the Commission. Failure to make such payment or payment arrangement with the Commission within forty-five (45) days hereof shall render this approval null and void.

7. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §804.20(b).

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 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.

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 September 14, 2030. The project sponsor shall submit a renewal application by March 14, 2030, and obtain Commission approval prior to continuing operation beyond September 14, 2030.

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:



Col. Francis X. Kosich, Chair
U.S. Commissioner

Dated: September 14, 2005



Exhibit B9

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. 20050907

Approval Date: September 14, 2005

COMMUNITY REFUSE SERVICES, INC. dba CUMBERLAND COUNTY LANDFILL

Consumptive Water Use of Up to 0.090 mgd, for Landfill Operations,
North Newton and Hopewell Townships, Cumberland 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) Regulations §803.4, relating to projects requiring review and approval, and §803.42, relating to the consumptive use of water. The Commission received the application on June 1, 2005.

Description

Purpose. The purpose of the application is to request approval for the consumptive use of water for landfill operations.

Location. The project is located in the Lower Susquehanna Subbasin, HUC 02050305, Conodoguinet Creek Watershed, North Newton and Hopewell Townships, Cumberland County, Pennsylvania.

Project Features. The project sponsor has requested approval for the consumptive use of water of up to 0.090 million gallons per day (mgd) from treated leachate and groundwater. The project sponsor calculates the current maximum day consumptive water use to be approximately 0.045 mgd, and current maximum 30-day average consumptive water use to be 0.032 mgd.

The landfill, operated by Community Refuse Services, Inc., was originally permitted by the Pennsylvania Department of Environmental Protection (PADEP) in 1974 and has been in continuous operation since that time. Operations began in Hopewell Township and expanded into North Newton Township in 2001. The section of the landfill located in Hopewell Township was closed in 2004. The project sponsor has indicated that it intends to request approval from PADEP to expand the landfill in the future.

Water for landfill operations is supplied from a pump-and-treat system that has a capacity of 30,000 gallons per day (gpd), and a supply well (Well PW-29) that has a pumping capacity of 25 gallons per minute (gpm). The pump-and-treat system collects leachate from a closed part of the landfill, and intercepts potentially contaminated groundwater using five wells. Water is treated at an on-site wastewater treatment facility and used at the landfill or discharged to the Conodoguinet Creek. The wastewater treatment facility was updated in 2001 at the time of the expansion into North Newton Township, and includes an uncovered, 2,000,000-gallon storage tank for treated wastewater.

The project consumptively uses water for dust and odor control, truck washing, and to stabilize solid waste on the operating work face of the landfill. Water for dust control and waste stabilization is conveyed by truck and is applied directly to the area of use. The project sponsor currently maintains a log of the daily number of truckloads of water withdrawn from the leachate treatment system. All water applied to haul roads is evaporated, and most of the water applied to the workface evaporates or is absorbed by the waste. Some water infiltrates into the landfill and may be recycled at the leachate treatment plant.

Water for the truck wash is also supplied from the wastewater treatment facility. The truck wash is automatic and operates when a haul truck passes a sensor as it is leaving the facility. The sensor activates pumps that pull water from a settling/storage tank to feed high pressure nozzles situated on either side of a sump covered by a grate. The truck passes through the spray and is washed, and wash water is returned to the storage tank for reuse via the sump. The truck wash only operates on days when mud accumulates on trucks due to the condition of the haul roads.

Well PW-29 was completed in 2000 and supplies water to the odor control mister curtains and supplements other landfill needs when treated water is unavailable.

Coordination. Commission staff has coordinated with the PADEP, Bureau of Land Recycling and Waste Management, during review of the project. PADEP approved the project's landfill operation in 1974. PADEP staff has reviewed this docket for consistency with its permits.

Findings

The project is subject to Commission approval and reporting requirements, as per Commission Regulation §803.42.

All water used for dust and odor control, evaporated from truck washing, the leachate treatment system tank, and the work face of the landfill are considered to be used consumptively.

All water supplied to the misters for odor control is evaporated; therefore, Commission staff recommends that the project sponsor install a meter to measure the daily quantity of water supplied to the misters from Well PW-29. The project sponsor may propose an alternative to metering for Commission staff review and approval.

The project sponsor currently maintains a log of the daily number of truckloads of water withdrawn from the leachate treatment system for dust control and waste stabilization at the work face. Commission staff recommends that the volume of the water trucks and number of truckloads of water be recorded on a daily basis.

Water evaporated from the storage tank at the leachate treatment system will be calculated by the project sponsor employing a methodology acceptable to the Commission.

The total quantity of water consumptively used through evaporation from the truck wash operation is equal to the surface area subjected to the evaporative losses or approximately 2,500 square feet. Commission staff has determined that the maximum day evaporation loss is less than 300 gpd on those days the truck wash is in operation. Commission staff finds this consumptive water use to be de minimis and recommends that it not be included in the consumptive water use calculation.

Commission staff recommends the consumptive water use of the facility be the sum of the water trucks filled on any day, plus the metered quantity supplied to the mister system, plus the quantity evaporated from the storage tank.

Should the proposed accounting procedure fail to accurately measure the project's consumptive water use, the Commission reserves the right to modify the metering, monitoring, and accounting procedures. Commission staff will provide the project sponsor with written notice of any required change in the metering, monitoring, and accounting procedures. Any alternative monitoring or accounting procedure requested by the project sponsor will be reviewed and approved by Commission staff.

The project's consumptive use of water is subject to water compensation requirements, as per Commission Regulation §803.42. To satisfy these requirements, the project sponsor proposes to make quarterly payments to the Commission in lieu of providing actual compensation water.

The project sponsor has requested a consumptive water use approval of up to 0.090 mgd. Based on an analysis of water use records supplied by the project sponsor and the anticipated expansion of the landfill, Commission staff is recommending approval of the requested amount. Should the project's future consumptive water use be expected to exceed 0.090 mgd, the project sponsor must apply for a modification to this docket at that time.

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

The project sponsor operated in violation of Commission regulations since June 1, 2001, when its consumptive water use exceeded the regulation threshold. The project sponsor voluntarily submitted its application to the Commission, complied with application procedures, and cooperated with Commission staff during its review of the project. The project sponsor has

offered an \$8,971.06 settlement to the Commission for the noncompliance with Commission Regulation §803.4. Commission staff recommends acceptance of the project sponsor's proposed settlement.

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 consumptive water use of up to 0.090 mgd is 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 consumptive water use reporting requirements as per Commission Regulation §803.42.

4. Within sixty (60) days from the date of this approval, the project sponsor shall install a meter on the mister system. The project sponsor shall install and maintain metering, accurate to within five (5) percent. The project sponsor shall notify the Commission, in writing, when the meter is installed. The Commission reserves the right to inspect all measurement equipment and audit all measurement records. The project sponsor may propose alternative accounting procedures to the Commission for staff review and approval.

5. 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 used for dust and odor control, applied to the work face of the landfill, and evaporated from the storage tank. The project sponsor shall maintain metering on the mister system, accurate to within five (5) percent. Commission staff shall review and approve the method of calculation of evaporative loss from the leachate treatment system tank and the area of truck washing.

6. To satisfy the Commission's current compensation requirements for consumptive water use set forth in Commission Regulation §803.42, the project sponsor shall make quarterly payments to the Commission based on the rate of \$0.14 per 1,000 gallons of water consumptively used by the project. The daily quantity of water consumptively used shall be the total volume of water trucks filled, plus the metered quantity supplied to the mister system, plus evaporation from the storage tank on that day. Payments shall be made quarterly and shall be calculated by applying this rate to the daily amount of water consumptively used by the project during the preceding calendar quarter. 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.

7. The project sponsor has offered a settlement by agreement, pursuant to Commission Regulation §805.27, in the amount of \$8,971.06 for its consumptive water use found to be in noncompliance with Commission Regulation §803.4, and is hereby accepted. Except where the full amount of same has been tendered to the Commission in advance hereof, this action shall be contingent upon and shall not be effective until payment of the settlement amount is made to the Commission, or arrangements for such payment have been made that are acceptable to the Executive Director of the Commission. Failure to make such payment or payment arrangements with the Commission within forty-five (45) days hereof shall render this approval null and void.

8. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §804.20(b).

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 fines and 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 the environment.

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 14, 2030. The project sponsor shall submit a renewal application by March 14, 2030, and obtain Commission approval prior to continuing operation beyond September 14, 2030.

15. If the project is discontinued for such a period of time and under such circumstances 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:



Col. Francis X. Kosich, Chair
U.S. Commissioner

Dated: September 14, 2005



Exhibit B10

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. 20050908

Approval Date: September 14, 2005

WEST MANCHESTER TOWNSHIP AUTHORITY

Groundwater Withdrawal (30-Day Average) of 0.210 mgd from Well 9,
and a Total System Withdrawal Limit (30-Day Average)
of 1.000 mgd, for Public Water Supply,
West Manchester 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) Regulations §803.4, relating to projects requiring review and approval, and §803.43, relating to groundwater withdrawals. The Commission received the application on December 10, 2001.

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 02050107, Susquehanna River Watershed, West Manchester Township, York County, Pennsylvania.

Project Features. The project sponsor requested approval for the withdrawal (30-day average) of 0.346 million gallons per day (mgd) from Well 9, and reduced its request to 0.210 mgd on April 27, 2005, in consideration of Commission staff concerns of potential adverse impacts. The well will be used as a source for the public water supply system that currently relies on eight wells (Wells 1 through 8) that are located within West Manchester Township, at varying distances and directions from Well 9.

The Commission previously approved a 0.400 mgd withdrawal from the West Manchester Township Authority Well 7 in Docket No. 19780903, and a withdrawal of 0.160 mgd from West Manchester Township Authority Well 8, with a system cap of 1.000 mgd in Docket No. 19980904.

Well 9 is located approximately 1,200 feet southwest of Bull Road, on the floodplain and within 100 feet of Conewago Creek. Riparian wetlands occur at various locations

along the creek. The project sponsor reported that wetlands in the vicinity of Well 9 had been filled.

Well 9 is an open-rock well, drilled to a total depth of 500 feet and constructed with 10-inch-diameter casing to a depth of 59 feet, and an open-rock borehole with a diameter of 10 inches to 280 feet and 8 inches from 280 to 500 feet. Well 9 penetrates approximately 29 feet of stream channel and overbank sediments, and is completed in interbedded sandstone, siltstone, and shale of the Triassic-Aged Gettysburg Formation. Major yielding zones in the well occur at 106 feet, 176 feet, 178 feet, 280 feet, and 371 feet below ground surface. These yielding zones are stratigraphically controlled, based on the strongly directional drawdown exhibited during the pumping test.

In 2000, average daily water demand for the system was 0.617 mgd, with a maximum daily demand of 0.764 mgd. By 2029, the average and peak daily demands are expected to grow to 0.742 and 0.994 mgd, respectively. The current system capacity is approximately equal to 1.6 times the current average 0.617 mgd demand. Well 9 was developed by the project sponsor to meet growing residential water needs in the eastern portion of the township.

Pumping Test. A 48-hour constant-rate pumping test of Well 9 was conducted on October 28-30, 2002, with prior Commission approval. In addition to the pumping well, 2 wells were monitored: a residential well located approximately 1,350 feet northeast and along strike of Well 9, and a test well located approximately 12 feet from Well 9.

Conewago Creek; a small unnamed tributary to Conewago Creek, approximately 2,200 feet to the northeast from Well 9; a wetland, located along strike and approximately 2,300 feet to the southwest from Well 9; and a stormwater pond, approximately 240 feet to the southeast from Well 9, were also monitored during the testing.

Pumping at an average rate of 220 gallons per minute (gpm), drawdown at the pumping well was approximately 199 feet at the end of the 48-hour test. End-of-test drawdown of approximately 31 feet and the appearance of “muddy” water occurred at the residential well. There was no measurable change observed on the Conewago Creek or the unnamed tributary. Drawdown was observed in both the shallow and deep piezometers at the wetland.

Approximately 0.95 inches of rainfall occurred 3 days before the test, 0.90 inches of rainfall at 36 hours into the test, and 0.63 inches of rainfall during the recovery period. The precipitation decreased but did not fully cancel the drawdown observed in the wetland piezometers.

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

Findings

The project is subject to Commission approval and reporting requirements, as per Commission Regulation §803.43.

Pumping test results and geologic data on the well indicate that Well 9 draws water from a moderately transmissive, highly anisotropic (directional) fractured-rock aquifer. Commission staff concludes that at the rate tested, long-term drawdown (on the order of tens of feet) could extend to distances as great as several thousand feet. Test results indicate that the area of influence for Well 9 may overlap those for two municipal water supply wells, potentially decreasing the amount of water available from them.

Commission staff recommends limiting the withdrawal from Well 9 to 0.210 mgd (as a 30-day average) to minimize impact from Well 9 to the 2 existing municipal wells and to the wetlands. Commission staff recommends approval of a peak instantaneous pumping rate of 150 gpm for Well 9.

The recommended rate of withdrawal (0.210 mgd) should reduce potentially adverse impacts to municipal water supply wells and wetlands in the area. However, Commission staff recommends that the project sponsor verify this through a period of monitoring. The project sponsor has agreed to monitor a private well (known as the “swimming pool” well) located between Well 9, the municipal wells, and the wetland piezometers located approximately 2,300 feet southwest of Well 9. The monitoring should commence at least 30 days prior to the start-up of Well 9, and extend for a period of at least 150 days with utilization of at least 50 percent of the approved withdrawal rate, and during a seasonally dry period with normal precipitation between the months of June and December.

Results from the monitoring should be reported on a semiannual basis (twice a year). Each report should include hydrographs of the data at appropriate scales, a digital copy of the data and graphs, and a concise interpretive analysis. The monitoring should continue until such time as Commission staff is able to verify the lack of adverse impacts resulting from operation of Well 9.

Commission staff recommends that the project sponsor mitigate the impact to the impacted residential well within 90 days of this approval. Mitigation efforts should be reported within 120 days of the date of this approval.

The project sponsor should immediately notify the Commission of any adverse impacts to existing withdrawals or wetlands within 30 days of detection.

The projected average daily demand through 2029 is 0.994 mgd. Commission staff recommends approval of a total system withdrawal of 1.000 mgd, which equals the previously approved average system withdrawal limit of 1.000 mgd, and meets the projected system demand through 2029.

The project is subject to the Commission's water conservation requirements, as per Commission Regulation §804.20(a). The water system is 100 percent metered, which is in compliance with this regulation, and system losses were 20 percent in 2002, the maximum set forth in Commission Regulation §804.20(a)(1).

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

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

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 0.210 mgd (30-day average) from Well 9, and a total system withdrawal limit (30-day average) of 1.000 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 reporting requirements, as per Commission Regulation §803.43.
4. Except as provided for in Condition 7 below, the project sponsor shall keep daily records of the metered withdrawal and daily water levels in Well 9. The required reporting data shall be submitted to the Commission annually, and as otherwise required. Annual monitoring reports are due within sixty (60) days after the close of the preceding year.
5. The project sponsor shall install a meter, accurate to within five (5) percent, on Well 9. The project sponsor shall notify the Commission, in writing, when the meter is installed. The Commission reserves the right to inspect all measurement equipment and audit all measurement records.
6. The maximum instantaneous rate of production from Well 9 shall not exceed 150 gpm.
7. Within sixty (60) days from the date of this approval and prior to operating the well, the project sponsor shall develop a plan for monitoring a private well (the "swimming pool" well) and wetlands, and submit the plan for Commission staff review and approval. This plan

shall include a schedule for implementation of the plan, a description of the proposed monitoring including locations and instrumentation, and mitigation measures for any affected wells or wetlands. Water level measurements shall be recorded hourly in the monitoring points and continuously in Well 9. The project sponsor should immediately notify the Commission of any adverse impacts to existing withdrawals or wetlands within thirty (30) days of detection. The overall monitoring period shall include a 30-day period prior to the initiation of operation of Well 9, and at least one hundred fifty (150) days with utilization of at least 50 percent of the approved withdrawal rate, and during a seasonally dry period with normal precipitation between the months of June and December. Upon approval of the monitoring plan, the project sponsor shall implement the monitoring plan and supply the results of the monitoring to the Commission semiannually (twice a year). The monitoring results shall be documented in an interpretive report, including the monitoring data in digital and graphical form, due sixty (60) days after each monitoring period, or otherwise as directed by Commission staff. After review of the report, Commission staff will determine any modification or changes to the monitoring program based on its findings. Should the monitoring prove to be inconclusive, the Commission reserves the right to require additional monitoring, as necessary.

8. The project sponsor shall mitigate the residential well identified as impacted during the testing within sixty (60) days of this approval and prior to the initiation of operation of Well 9. The project sponsor shall report its mitigation within ninety (90) days of the date of this approval.

9. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §804.20(a).

10. The project sponsor shall notify the Commission of any impacts or alleged impacts identified by or reported to the project in the area of concern addressed by the monitoring plan.

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

13. 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.

14. 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.

15. 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.

16. 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.

17. 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.

18. 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.

19. This approval is effective until September 14, 2030. The project sponsor shall submit a renewal application by March 14, 2030, and obtain Commission approval prior to continuing operation beyond September 14, 2030.

20. 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:



Col. Francis X. Kosich, Chair
U.S. Commissioner

Dated: September 14, 2005