

Susquehanna River Basin Commission

a water management agency serving the Susquehanna River Watershed



May 15, 2006

TO ALL CONCERNED:

At the March 15, 2006 meeting, the draft minutes of the December 14, 2005 Commission meeting were approved as written. Please attach this notice to your copy of the December 14, 2005 minutes.



- DRAFT -

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

**MINUTES OF THE
SUSQUEHANNA RIVER BASIN COMMISSION
March 15, 2006
#2006-01**

The meeting was held at the Pennsylvania College of Technology, One College Avenue, Williamsport, Pennsylvania.

ROLL CALL

Commissioners Present

Col. Robert J. Davis, District Engineer, USACE,
Baltimore District

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

Ms. Cathleen C. Myers, Dep. Sec. for Water
Management, Pa. Department of Environmental
Protection (PADEP)

Mr. Matthew G. Pajerowski, Chief, Water Policy
and Security Division, MDE

**Alternate Commissioners
and Advisors Present**

Ms. Amy M. Guise, USACE, Baltimore District

Mr. William A. Gast, Chief, Division of Water Use
Planning, PADEP

Staff Present

Mr. Paul O. Swartz, Executive Director

Mr. Thomas W. Beauduy, Deputy Director

Mr. Michael G. Brownell, Chief, Water Resources
Management Division

Ms. Susan S. Obleski, Director of Communications

Mr. David W. Heicher, Chief, Watershed
Assessment and Protection

Mr. Duane A. Friends, Chief Admin. Officer

Mr. Richard A. Cairo, Counsel/Secretary

Ms. Deborah J. Dickey, Executive Administrator

INTRODUCTION/WELCOME

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

ACTION ITEMS

1. Minutes of the December 14, 2005 Commission Meeting

On a motion by Commissioner Myers, seconded by Commissioner Pajerowski, the minutes of the regular business meeting of December 14, 2005 were unanimously adopted as written.

2. Hydrologic Conditions

Water Management Division Chief Mike Brownell presented information on current hydrologic conditions in the basin. The basin had received a normal amount of precipitation in 2005; however, the distribution of that precipitation was erratic, with only the intervention of tropical storm rains returning the year to a normal level.

There was severe flooding in the upper basin during April 2005, due to heavy rains and a melting snow pack. Large amounts of melting snow in the headwaters area of New York State saturated soil conditions and brought flooding along the Chenango River and the Susquehanna River down to the Pennsylvania State Line.

In contrast, the snow pack for early 2006 is virtually non-existent, greatly reducing the possibility of floods but posing a possible drought problem should dry conditions persist through the spring and summer months. Therefore, hydrologic conditions in the basin will need to be closely monitored in the coming months.

3. 2006 Annual Water Resources Program

Counsel presented the 2006 Annual Water Resources Program for adoption by the Commission. The Susquehanna River Basin Compact Section 14.2 requires that the Commission adopt an annual water resources program.

The 2006 program was greatly improved by a large amount of input obtained from the federal agencies participating in the SRBC-sponsored federal summit held in December 2005 in Baltimore, Md. This information was compiled in chart form and appended to the program. The agencies have pledged to review and update this information each year as part of an overall effort to improve coordination, share scarce resources and avoid duplication of effort.

Some of the other improvements added to the program include an expansion from 7 to 12 "Water Resource Needs," giving more precise definitions of those needs; placement of narrative descriptions of member jurisdiction programs and projects under narrative descriptions of Commission programs and projects; and an overall reduction in the amount of verbiage in the narrative portion of the program to facilitate its use.

Counsel extended a special thank you to General Grisoli and Colonel Davis for the time and effort they put into encouraging other federal agencies to participate in the formulation of the 2006 Water Resources Program and the summit meeting in December. As a result of those efforts, staff feels that the summit session was very successful.

On a motion by Commissioner Pajerowski, seconded by Commissioner Myers, the 2006 Annual Water Resources Program was unanimously adopted (Exhibit A).

4. Conowingo Pond Workgroup Report

Commissioner Pajerowski presented the Conowingo Pond Workgroup report to the Commission. The Workgroup was chaired by the Maryland Department of the Environment and was intended to represent the interests of key stakeholders in the operation and use of the Pond. The report is the product of a 4-year effort to develop a plan for management of the Conowingo Pond, the impounded portion of the Susquehanna River behind the Conowingo Dam that spans the Pennsylvania-Maryland border.

Many important water uses depend on the Pond including: thermal and hydroelectric power production, recreation, and public water supply. During low flow conditions on the Susquehanna River, there is the potential for conflict among uses to the point where difficult economic and environmental decisions need to be made.

Deputy Director Beauduy went on to provide an overview of the group's work. A detailed analysis was made of pond uses, potential conflicts among these uses and limitations on use. Use of the Pond is essentially limited to 4 feet of freeboard. Other limitations are imposed by the minimum flow requirements through Conowingo Dam set forth in the Federal Energy Regulatory Commission (FERC) license.

The group looked at six management options. Modeling tools were used to evaluate the options, including the Commission's OASIS daily flow model. In this way, the group could simulate the effects of various changes or adjustments in use of the pond. In the end, the group chose the "Automatic Q-FERC + 1,000" option under which Conowingo Dam receives credit for leakage through the dam whenever flows come within 1,000 cubic feet per second (cfs) of the Q-FERC flow level, which is the minimum flow through the dam that is required by FERC.

The Automatic Q-FERC + 1,000 option demonstrated the most favorable balance for preserving adequate levels in the pond, ensuring reliable multipurpose use of the pond, and meeting the requirements for the quantity of water released to the downstream reaches of the Susquehanna River and the Chesapeake Bay. Exelon, the licensee for the Conowingo Hydroelectric Project, will now need to petition FERC for an amendment of its license to allow implementation of this option.

The report also identifies three related actions beneficial to management of the Pond that the Commission should consider for inclusion in its regulatory and water resource management programs. These are:

- The Commission should consider the impacts of increasing consumptive water use in the basin on the Conowingo Pond and determine what measures, if any, are necessary to mitigate the impacts.
- The water supply storage owned by the Commission at the federal Cowanesque and Curwensville Lake projects should be investigated for alternative operational strategies to provide more effective low flow augmentation, including benefits to the Conowingo Pond and instream resources below the dam.
- The Commission should incorporate key management principles and tools described in the workgroup report, including the use of the annually updated hydrologic model, into the Commission's regulatory and water resource management programs.

The Commission will also need to reconvene the workgroup on an annual basis to review project operations, assess the potential for hydrologic conditions to develop into drought, and conduct a drought operations exercise.

Chairman Davis acknowledged Ron Smith and Don Baldwin from Exelon for their cooperation in completing the study. The Executive Director pointed out that this exercise was an excellent example of the Commission carrying out one of its most important duties, i.e. coordinating the actions of public and private entities to achieve the proper management of the basin's water resources. It was also an exercise in foresighted planning that anticipates a problem before it occurs and puts in place a strategy for avoiding that problem in the future. He went on to list the numerous public and private interests brought together by SRBC in this planning process.

Commissioner Myers recounted her experiences as a young attorney for the Pennsylvania Dept. of Environmental Resources in the early 1980s relicensing of the Conowingo Hydroelectric Project. PADER and all of the intervener parties had focused particularly on insuring that minimum flows through the dam would be mandated, along with the installation of fish passage facilities. She felt that this relicensing exercise was one of the most important environmental battles of her career. Based on that experience, she was convinced that the recommendations of the workgroup will allow all of the socio-economic needs of Pond users to be addressed while, at the same time, preserving adequate minimum flows through Conowingo Dam. It was, in short, a win-win situation for both users and the environment.

Commissioner Pajeroski moved that the Commission:

1. Accept the report of the Conowingo Pond Workgroup and thank its members for their interest, their commitment over the past four years and, most importantly, their valuable contribution toward development of this important document;
2. Direct staff to prepare a draft Conowingo Pond Management Plan by April 1, 2006, based on the report and incorporating the management recommendations of the workgroup; and

3. Release the draft management plan for a 45-day public review and comment period in anticipation of final Commission action on the plan at the June 2006 meeting.

This motion was seconded by Commissioner Myers and unanimously adopted by the Commission.

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. Mike 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 12 projects¹:

- Knight Settlement Sand & Gravel (Exhibit B1)
- World Kitchens, Inc.- Pressware Plant (Exhibit B2)
- Elk Mountain Ski Resort, Inc. (Exhibit B3)
- City of Dubois (Exhibit B4)
- PPL Montour, LLC (Exhibit B5)
- Fredericksburg Sewer & Water Authority (Exhibit B6)
- Country Club of Harrisburg (Exhibit B7)
- Ephrata Area Joint Authority (Exhibit B8)
- Newville Borough Water and Sewer Authority (Exhibit B9)
- Newville Borough Water and Sewer Authority (Modification) (Exhibit B10)
- Arendtsville Municipal Authority (Exhibit B11)
- Conectiv Mid Merit LLC – Delta Power Plant Project (Exhibit B12)

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

¹ Docket decisions are not included with the hard copy of the minutes. However, they are available upon request and at www.srbc.net.

Mr. Dan Guers, Borough Manager for the Borough of Akron, thanked the Commission and staff for reopening the Ephrata Area Joint Authority (EAJA) docket and addressing the Borough's concerns. Mr. Bob Thompson, representing EAJA also thanked the staff for working cooperatively with the Authority.

On a motion by Commissioner Lynch, seconded by Commissioner Pajerowski, the Commission unanimously approved the staff recommendations for all the dockets presented.

b. Compliance Matters – Honey Run & Monroe Valley Golf Courses

Mr. Brownell presented settlement in-lieu-of penalty agreements with the owners of Honey Run and Monroe Valley Golf Courses for approval by the Commission and requested that the Executive Director be authorized to execute those agreements. On a motion by Commissioner Myers, seconded by Commissioner Pajerowski, the Commission unanimously granted the Executive Director the authority to execute the settlement agreements.

c. Aqua Pennsylvania, Inc. Emergency Certificate

Mr. Brownell explained that, under the authority of Section 803.27 of the Commission's Regulations and Procedures for Review of Projects, the Executive Director had issued an emergency certificate to Aqua Pennsylvania, Inc for a well installation to meet an emergency public water supply need. Rehabilitation work is in progress at the site and a regular application for Commission approval is in preparation and should be ready for Commission action in June 2006. In view of the circumstances, Mr. Brownell requested that the Commission extend the emergency certificate until June 14, 2006. This would also synchronize SRBC's emergency certificate with emergency authority issued by PADEP.

Chairman Davis inquired whether the project was moving forward so that there would be no need to extend the certificate a second time. Mr. Brownell indicated that the project should be ready for full approval by the June meeting of the Commission. Commissioner Myers noted that, while emergency certificates should not be issued or extended lightly, she was persuaded that this project was making sufficient progress toward approval in June and she therefore agreed that the certificate could be extended.

On a motion by Commissioner Lynch, seconded by Commissioner Pajerowski, the Commission unanimously agreed to extend the emergency certificate for Aqua Pennsylvania, Inc. to June 14, 2006.

PRESENTATIONS & DISCUSSIONS

a. Panel Session – The West Branch Region: Enhancing the Quality of Life

The Commission convened a panel session featuring some of the many priority projects currently taking place in the West Branch subbasin—all of these being carried out with the intent to enhance people's quality of life and to restore and protect the environment. The four participating panelists were: 1) Scott Roberts, Deputy Secretary, Mineral Resources

Management, PADEP; 2) Rebecca Burke, Chair, Lycoming County Commissioners; 3) H.W. (Skip) Wieder, Jr., Senior Vice President Emeritus, Geisinger Health System and Vice President WVIA Public Television; and 4) Amy Wolf, Director, Abandoned Mine Programs, Trout Unlimited. Alternate Pennsylvania Commissioner Cathy Myers moderated the session.

Commissioner Myers opened the session by noting how excited Pennsylvania Governor Ed Rendell is about the potential for recreation and economic development in the West Branch Subbasin. The Governor is particularly enthusiastic about the unique features that this area offers, including its forest and water resources and its wildlife, such as elk. He is deeply committed to continued improvement in the quality of life in the West Branch through such programs as Pennsylvania Wilds and the West Branch Task Force.

Deputy Secretary Roberts described the cooperative effort that is now underway with SRBC to bring 8 mgd of cleaned up mine water back into the Susquehanna River Basin from the abandoned Barnes and Tucker mine operation. Abandoned Mine Drainage (AMD), caused mainly by the oxidation of pyretic materials exposed by unregulated mining and other earth disturbing activities, pollutes thousands of miles of streams in the coal extraction areas of Pennsylvania. The West Branch Subbasin contains a large percentage of those polluted stream miles, including a large reach of the West Branch downstream of the Barnes and Tucker Mine.

Fortunately, the Commonwealth has gained a great deal of experience on how to deal with this problem, particularly since the 1980s when a better understanding of the chemistry involved in the process was achieved. This, in turn, has led to a more effective permitting program that has eliminated 99 percent of the AMD problems associated with new mining projects. There is still, however, the legacy of the abandoned mine operations that continues to pose a tremendous challenge.

Some of the AMD sources in the West Branch are massive and cannot be dealt with entirely by passive treatment systems. Therefore, other solutions are being considered, including a joint project with the SRBC involving a new treatment facility for Barnes and Tucker that would redirect 8 mgd of treated water to the West Branch Subbasin, greatly improving a 25-mile reach of the West Branch and providing a portion of the compensation needed for agricultural consumptive use of water. The treated mine water originates in the Susquehanna River Basin but is being diverted to the Ohio basin by the current inadequate treatment facility.

The new project fits well with similar efforts by the PADEP to realize economic benefits from abandoned mine restoration. It will also serve as a possible model for the treatment and release of mine water at several other severely-polluted mine discharge sites in the West Branch. Thus, as Commissioner Myers reiterated, there is a potential to establish a system of underground reservoirs contributing water to the river basin system to compensate for consumptive water use while treating polluted mine discharges.

County Commissioner Burke described the Williamsport River Walk Project, the Market Street Bridge Project, the Downtown Revitalization Project and other projects to improve and complement the waterfront area of Williamsport. These projects are being carried out under a partnership effort among the state, county, city, chamber of commerce, a visioning group, and

other private sector interests. Similar to several other river cities in the Susquehanna River Basin, Williamsport is protected from flooding by an extensive levee system. While this protection is certainly desirable, the levee system stretching along the full length of the city's waterfront tends to isolate the West Branch from the city and its people. The Williamsport River Walk Project will reconnect the city with the river by providing access to its shoreline. The project will revitalize the city and foster a greater appreciation of the river and the many benefits it provides. She went on to describe other efforts that are underway to develop, improve and mark river trails and a greenway system throughout the county.

Mr. Skip Wieder discussed the Susquehanna River Heartland Environmental Coalition project and the Center for Health Research and Rural Advocacy. Essentially, the purpose of the project is to advocate for restoring the quality of the environment and for the use of the natural amenities offered by the Susquehanna River and the other environmental resources of the area to improve physical health and quality of life for residents of the Geisinger Health System service area. For example, if residents can be encouraged to make use of these natural amenities for physical activity, it could help to curb a variety of health problems that plague the region, such as obesity.

Community regeneration is another focus of the advocacy effort. Along with the Susquehanna River, these small communities are also the foundation for a good quality of life for residents.

The resources that colleges and universities can offer to local communities need to be maximized. At a time when governmental resources are scarce, the expertise that is available from college faculty and students is more important than ever for a variety of activities leading to an improved quality of life, such as environmental protection.

Mr. Wieder concluded his remarks by noting the need for people in the local communities to be informed about the work that is being done by agencies like the SRBC and PADEP, and public interest groups, such as the Chesapeake Bay Foundation. They also need to know more about the resources that these agencies seek to protect in order to gain an appreciation for those resources. This is where public television stations like WVIA and its "Looking to the River" production can play an important role in getting this information out to the public. Classroom education will also play a critical role.

Ms. Amy Wolf, of Trout Unlimited (TU), heads up the Kettle Creek Home Rivers Initiative that, since 1999, has grown into a \$2.5 million model stream restoration project that Trout Unlimited now hopes it can apply to the entire West Branch. Abandoned mine drainage is the chief cause of water degradation in the West Branch and impacts over 1,000 miles of streams in the West Branch subbasin, constituting a full one-third of the AMD problem in the Commonwealth of Pennsylvania. Therefore, AMD is the main focus of the West Branch Restoration Initiative.

There has been improvement in some West Branch streams that has allowed a limited amount of trout stocking to take place, albeit of a put-and-take nature. The West Branch Subbasin, because of its topography, certainly has the potential to one day become a tremendous

trout habitat. Nevertheless, some reaches of the West Branch itself are essentially devoid of life due to AMD pollution, and other reaches are still in need of improvement.

The number of abandoned mine features throughout the subbasin is quite large. In addition to water quality problems, there are health and safety concerns associated with these features as well. There are some 800 mine discharges with flows exceeding 300,000 gallons per minute. A particular problem more prevalent in the AMD pollution of the West Branch is the presence of heavy concentrations of aluminum in the discharges, something that is not as common in the anthracite fields of the northeast and the bituminous fields of the southwest. Aluminum, with very low pH levels, is a lethal combination for fish. This is a major challenge to the effectiveness of passive pH treatment.

The West Branch Susquehanna Task Force is a partnership among government agencies and non-profit conservation organizations that came together in late 2004. The mission is to restore water resources affected by abandoned mine lands in the West Branch Susquehanna River Subbasin and to improve the quality of life for residents and visitors to the watershed. The goals are to develop a restoration plan, provide technical support to those working on the AMD problem in the West Branch, build public support for those efforts, and secure funding to clean up abandoned mine discharges. Millions of dollars will be required to complete the West Branch cleanup.

Some things accomplished so far include the production of a “State of the Watershed” report, the convening of a West Branch Symposium in May 2005 that was very well attended, and establishment of a citizens’ group called the West Branch Susquehanna Restoration Coalition. The Coalition represents all of the watershed groups throughout the West Branch so that there is one strong voice speaking out to the media and the public on the problems in the West Branch.

PADEP, PADCNR and TU have also partnered to contract with the SRBC to develop an AMD reclamation strategy for the West Branch. SRBC is particularly suited to perform this task with the large water quality database that it possesses on the West Branch Subbasin and the TMDL work that it has done in the area. SRBC will develop a model that will help to prioritize major AMD problems. Up to this point, there have been several cleanup efforts underway in individual West Branch watersheds, but there has never been a single comprehensive plan for targeting limited resources to the most troublesome locations.

Meanwhile, TU will be continuing its work on the Kettle Creek Initiative and expects to be working very closely with the Task Force and the Coalition on such matters as the development of an economic analysis of West Branch cleanup benefits. Using a Growing Greener Grant and a Mellon Foundation Grant, TU will continue to provide technical assistance. A West Branch Symposium will also be held on May 12 at which a variety of subjects relating to West Branch cleanup will be discussed. Trout Unlimited’s national office near Washington will also be working for long-term federal funding West Branch restoration efforts.

b. William Jeanes Award

Chairman Davis presented the Commission's William Jeanes Award for Environmental Excellence to panelist Skip Wieder for his leadership role in the Susquehanna Heartland Coalition, the Science in Motion project, and the recent production of "Looking to the River" by WVIA public television. Commissioner Myers said that, as Pennsylvania's representative to the Commission, she was delighted to have Mr. Wieder receive this award. He is a true hero of the Susquehanna Heartland.

c. FY-2007 Budget Revisions

Chief Administrative Officer Duane Friends presented revisions to the FY-2007 budget, which had been previously adopted by the Commission in June 2005. Each year, as the beginning of a fiscal year approaches, the Commission customarily makes adjustments in the budget to fit the revenue that it anticipates receiving for that fiscal year.

The budget lists \$4 million in revenues for FY-2007, with \$388,000 from New York, \$732,000 from Pennsylvania, \$308,000 from Maryland and \$2.6 million from grants and other fund transfers.

This revised budget is actually \$450,000 smaller than the initial FY-2007 adopted in June 2005, due to a reduction in the revenue stream to the Commission from the member jurisdictions. The smaller budget will be implemented through staff reductions and retirement attrition.

Mr. Friends then reviewed the major program areas covered in the budget, including work with the National Weather Service on the basinwide flood forecasting and warning system, public education and outreach, water resource planning assistance to Pennsylvania under Act 220, water quality sampling at six main sampling sites on the Susquehanna and 17 minor sites on tributaries, water quality assessments in each of the major subbasins and preparation of Total Maximum Daily Loads (TMDLs).

The Commission is also hoping to receive funding for the preparation of a regional storm water management plan for Paxton Creek in Dauphin County, Pennsylvania, and for the preparation of an AMD strategic plan for the West Branch Susquehanna River.

Also, there will be very vigorous pursuit of the Commission's project review program. This program involves not only the initial review, docketing and approval of projects under the Compact and SRBC regulations, but also a considerable amount of time and effort on compliance and enforcement of conditions placed in each docket approval. Finally, there will be continuing improvement of the Commission's computer and GIS capabilities with the addition of new technology. With that, Mr. Friends respectfully requested the approval of the revised FY-2007 budget as presented.

Chairman Davis said that he appreciated the staff's ability to adjust the budget to changing financial circumstances as other member jurisdiction agencies have had to do for

reasons of fiscal responsibility. Commissioner Myers agreed with the Chairman's assessment but added that it was both sad and ironic that, while more and more is being asked of the Commission in terms of support to basin residents, municipalities and watershed groups, less and less discretionary funding is flowing to the Commission from the member jurisdictions, thus necessitating staff reductions.

Commissioner Myers added that Pennsylvania has done all that it has been asked to do in terms of funding the SRBC and is now faced with a flat budget for this year that cannot provide any extra funds to the Commission to help resolve this budgetary shortfall. She urged members of the audience to talk to their elected officials about this funding situation and about setting proper priorities. Also, much of the Commission's problem is linked to the federal government's refusal to provide any funding to the SRBC for the past eight years.

On a motion by Commissioner Myers, seconded by Commissioner Pajerowski, the Commission unanimously approved the revised FY-2007 budget.

d. Grant and Contract Approvals

Mr. Dave Heicher, SRBC Watershed Assessment and Protection Chief, presented the following grants/contracts for Commission ratification.

1. SEDA-COG Greenway Grant/MOU

This funding in the amount of \$5,000 is provided by SEDA-COG for the SRBC to produce a 20-25 page summary report of the draft Susquehanna Greenway Strategic Action Plan. The SRBC is a member of the Susquehanna Greenway Partnership Planning Team and will coordinate with the team's ad hoc review committee to prepare the summary. The work will be performed under a Memorandum of Understanding (MOU) with SEDA-COG. PADCNR supports the plan and is helping to fund this work. The grant received 8-out-of-10 on the SRBC grant evaluation scale.

Jerry Walls, Executive Director of the Lycoming County Planning Commission and Chairman of the Greenway Planning Team, added that this has been a premier planning effort involving stakeholders from 22 counties in Pennsylvania and with considerable interest from Maryland and New York as expressed at the Riverfront Symposium in June 2005 in Harrisburg. The outreach process insured that there was a consensus among all the groups on the implementation of the project.

Development of the Greenway is going to mobilize a lot of projects that will directly contribute to attainment of SRBC's mission for the basin. The project is also going to help communities along the river enhance the quality of life for their residents and improve economic development opportunities for both the communities and the Commonwealth as a whole.

2. Deer Creek Watershed Study Grant

This grant from the State of Maryland will help defray the Commission's cost to conduct a water availability study for the Deer Creek Watershed in southern Pennsylvania and northern Maryland. SRBC is working with a consultant on the study that will inventory and assess key water resources in this important interstate watershed. The study will identify the estimated sustainable yield, describe and inventory current water uses, project demands, evaluate future water availability, and identify future alternatives to meet current and projected needs.

The total amount of the supplemental funding to be provided by the State of Maryland is \$25,000. The grant scored 10-out-of-10 on the SRBC grant evaluation scale.

3. Yield Analysis Tool Contract

The third item involves a contract with Buchart-Horn, Inc. to develop a yield analysis tool. The tool kit will be used to assist Pennsylvania in the implementation of the Water Resources Planning Act of 2002 (Act 220). The tool kit is GIS-based with several water analysis modules linked to a geo-database. It will enable desktop calculations and spatial data assessments that will be used in water use permitting and allocation decision making. The total amount of the contract is \$40,000 to be paid by SRBC to Buchart-Horn for its consulting services.

Commissioner Pajerowski said that Maryland was particularly pleased to see the Deer Creek Study proceed in view of the circumstances giving rise to the study. The study also fits in very well with a recent recommendation by a Governor's advisory group that this very kind of study be conducted in watersheds across Maryland. It is just the kind of study where SRBC, as an interstate agency, can make a tremendous contribution to watershed residents on both sides of the state line and to Maryland's overall policy goals for the Deer Creek Watershed.

Commissioner Myers commented that the need for this study was painfully obvious, given the continuing questions concerning the amount of water that should be allocated to the City of Aberdeen from the Deer Creek Watershed. She agreed with Commissioner Pajerowski's assessment regarding the unique ability of the SRBC to approach the problem on a watershed basis without regard to the political boundary between the two states, something that neither Maryland or Pennsylvania could do on their own. The Executive Director added that, as in the case of the Conowingo Pond Management Plan effort, the SRBC has established a stakeholder group with which it plans to work during the course of the study.

Commissioner Myers also added one more comment on the potential usefulness of the yield analysis tool to be developed by Buchart Horn under contract with SRBC. That tool, with its GIS base, will be of tremendous value to water planners at every level.

On a motion by Commissioner Pajerowski, seconded by Commissioner Myers, the Commission unanimously ratified all three grant/contract items described by Mr. Heicher.

PUBLIC COMMENTS

Ms. Elizabeth Lynch, Clinton County Planning Commission, expressed her disappointment that adequate funding is not being provided to the Commission. She said that she was well aware of the good work that the SRBC has been performing since she learned of the Commission's presence some six years ago. She cited the assistance that SRBC had provided to groups in her county to conduct a streamside cleanup project. She promised that she would make the public and policymakers aware of the Commission's financial situation.

Chairman Davis responded that, while the members of the Commission were bound by the policies of their respective governors and the President, the Commission would still be very grateful for any efforts that could be made to make both the public and policymakers aware of the valuable work that the Commission performs. Commissioner Myers agreed, noting that Pennsylvania's Governor is very supportive of the Commission and that is why the Administration has also tried to funnel resources to the Commission through other sources, such as the "Growing Greener" program.

Mr. Jerry Walls, Lycoming County Planning Commission, spoke as a member of the Upper Middle Susquehanna Basin Water Resources Planning Committee created under Act 220 in Pennsylvania. He thanked the Commission for its assistance to the committee in completing a water budget for this part of the basin and for working harmoniously and cooperatively with the PADEP. Without SRBC's technical and coordinative involvement, the progress that has been made by the committee would not have been possible.

Mr. Kevin McJunkin, Environmental Planner for Lycoming County, asked about SRBC involvement in storm water management. He is currently working on a PA Act 167 storm water project on Lycoming Creek. The Executive Director replied that, while SRBC has not to date been heavily involved in storm water management issues, the Commission has now submitted a proposal to EPA for a Targeted Watershed Grant to put together a storm water management plan in the Paxton Creek Watershed in Dauphin County, Pennsylvania. This project is part of the SRBC's FY-2007 budget as mentioned in Mr. Friend's presentation. The main thrust of SRBC involvement is to provide a vehicle for all the municipalities in the watershed to work together on the project.

Mr. Dave Heicher pointed out that this project may serve as a model for similar planning efforts in other small watersheds in the basin. The SRBC Water Quality Advisory Committee also devoted an entire session to this subject about a year and a half ago, but the Paxton Creek Plan is really the first project on storm water management to be undertaken by SRBC.

Commissioner Myers mentioned the relationship between controlling sedimentation on small flashy streams like Paxton Creek to the overall basinwide effort to reduce the amount of sediment that is reaching the lower Susquehanna River. No real solution to that sediment problem has emerged, so the only realistic place to start any control effort is in the small streams and tributaries that feed into the river's main stem.

Mr. Lysle Sherwin of the Penn State Center for Watershed Stewardship asked about the time line for preparation of the yield analysis tool discussed earlier. When would it be available for use in water resources management? Mr. Brownell indicated that work would probably start on the tool in late summer 2006 and that it would take at least another year beyond that until the tool is developed.

Mr. George Tallman of Tallman Family Farms, Schuylkill County, Pa., which owns land along the Wiconisco Creek in the Susquehanna River Basin, had a question about TMDLs. Mr. Heicher explained the program and how SRBC conducts TMDL studies. If it is necessary to enter private property to conduct a study, permission is sought from the owner. In many cases, TMDL studies can be prepared from existing data without entering private property.

Commissioner Myers added that TMDLs are part of a restoration plan effort that will allow an impaired stream to eventually meet water quality standards. TMDLs are mandated under the Clean Water Act if a stream is found to be impaired.

Mr. Greg Confer, Manager of Elk Mountain Ski Resort, expressed his concerns about the fiscal impacts of rising health care costs on agencies like the Commission and the need to urge lawmakers to do something about it.

ADJOURNMENT

There being no further business before the Commission, the Chairman adjourned the meeting at 12:00 noon.

NEXT MEETING

The next regular meeting of the Commission is tentatively scheduled for June 14, 2006 in Corning, New York.

Date Adopted


Richard A. Cairo
General Counsel/Secretary to the Commission

RESOLUTION NO. 2006-01

A RESOLUTION of the Susquehanna River Basin Commission adopting an Annual Water Resources Program for 2006.

WHEREAS, Section 14.2 of the Susquehanna River Basin Compact, P.L. 91-575, provides: "The Commission shall annually adopt a water resources program, based upon the comprehensive plan, consisting of the projects and facilities which the Commission proposes to be undertaken by the Commission and by other authorized governmental and private agencies, organizations, and persons during the ensuing six years or such other reasonably foreseeable period as the Commission may determine;" and

WHEREAS, the staff has updated a statement of the projects and programs proposed to be undertaken by the Commission during such six-year period; and

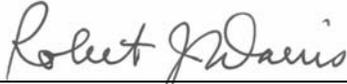
WHEREAS, the member jurisdictions have prepared or are preparing a listing of their own projects to be undertaken in the basin during this same period; and

WHEREAS, the Commission is also including in the Water Resources Program a list of legislative initiatives that it would respectfully request the U.S. Congress and the legislatures of the member states to consider for enactment.

NOW THEREFORE BE IT RESOLVED THAT:

1. The accompanying document titled, "2006 Annual Water Resources Program, Susquehanna River Basin Commission," including the said list of legislative initiatives, is hereby adopted by the Commission in accordance with Section 14.3 of the Compact.
2. The Water Resources Program of the Commission shall be updated, from time-to-time as the need appears, to include any additional projects or programs of the Commission or its member jurisdictions.
3. This Resolution shall be effective immediately.

Date: March 15, 2006



Col. Robert J. Davis, Jr., Chairman



Exhibit B1

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. 20060301

Approval Date: March 15, 2006

KNIGHT SETTLEMENT SAND & GRAVEL, LLC

Consumptive Water Use of Up to 0.080 mgd,
for Processing of Sand and Gravel and Concrete Production,
Town of Bath, Steuben County, New York

Review Authority

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulations §803.4, relating to projects requiring review and approval, and §803.42, relating to the consumptive use of water. The Commission received the application on July 2, 2001.

Description

Purpose. The purpose of the application is to request approval for the consumptive use of water associated with sand and gravel processing and concrete production.

Location. The project is located in the Chemung River Subbasin, HUC 02050105, Cohocton River Watershed, Town of Bath, Steuben County, New York.

Project Features. The project sponsor has requested approval for the consumptive use of water of up to 0.080 million gallons per day (mgd). Consumptive water use at the facility includes dust control for haul roads, dust control at the processing plant, equipment washing, and water included in the aggregate product and concrete production. Based on water use records submitted by the project sponsor, Commission staff calculates the project's current maximum average 30-day consumptive water use to be 0.029 mgd. The sand and gravel processing plant has been operating since 1968.

The project sponsor excavates sand and gravel from the property and utilizes water withdrawn from an on-site storage pond for material processing. Water is pumped from the storage pond (also known as the "freshwater" pond) to the processing plant, where it is mixed with the sand and gravel to transport the material through the system and separate the various grain sizes. Water also is used to remove the unsuitable silts and clays.

Water is supplied to the storage pond from the Cohocton River. Water is pumped from the intake to an elevated storage/load-out facility which, upon filling, spills into the storage pond. The river intake is not metered but has a pump with a capacity of 830 gallons per minute (gpm) and an hour meter. The project sponsor estimates that approximately 0.281 mgd of water is withdrawn as a peak 30-day average, and 1.195 mgd on a peak day.

The withdrawal from the storage pond to the processing plant is not metered but has a pump with a capacity of 3,000 gpm and an hour meter. The sediment-laden water from the processing plant discharges to a siltation pond and the water is recirculated, flowing through a stone berm to the storage pond for reuse.

The storage pond and the siltation pond (having surface areas of 1 and 8 acres, respectively) existed prior to 1971.

Water from the elevated storage/load-out facility supplies water trucks for dust control on haul roads. The project sponsor operates one water truck (3,000-gallon capacity). The withdrawal is not metered; however, the project sponsor maintains a log documenting the daily number of truckloads of water withdrawn from the storage tank.

Water for concrete production at the facility is supplied by a well. The groundwater withdrawal, initiated in 1968, is metered. The project sponsor estimates that approximately 0.018 mgd of water is withdrawn as a peak 30-day average, and 0.038 mgd on a peak day.

Coordination. Commission staff has coordinated with the New York State Department of Environmental Conservation (NYSDEC) during review of the project. NYSDEC has reviewed this docket for consistency with its Mining Permit No. 8093-30-0013.

Findings

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

All water retained in the product (sand, aggregate, and concrete) and used for dust control is considered to be used consumptively. Commission staff recommends that the project's total daily consumptive water use be calculated by summing the daily consumptive water use from these categories. The storage pond and the siltation pond predate the Commission's consumptive use regulation; therefore, the project sponsor is not required to provide compensation for the evaporative losses from these ponds.

The total quantity of water supplied to the processing plant from the storage pond, minus the total quantity of wash water discharged from the processing plant (density compensated), is the quantity of water consumptively used through evaporation during processing and retention in the product. Commission staff recommends that the project sponsor install meters to measure the daily quantity of water entering and leaving the processing plant. The project sponsor could propose an alternative to metering to quantify the consumptive water use for Commission staff review and approval.

The entire daily metered quantity of water withdrawn from the well at the concrete plant is considered to be consumptively used. This quantity includes all water used for equipment washing and concrete production.

Water withdrawn from the elevated storage/load-out facility for dust control should be calculated based on the capacity of the trucks and the number of truckloads of water. The project sponsor should maintain a log of the daily number of truckloads of water withdrawn. All water used for dust control is considered to be consumptively used.

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.

Operations at the facility predate January 23, 1971. The project sponsor has no documentation of the pre-1971 consumptive water use. Commission staff estimates the pre-1971 consumptive water use at the facility to be 0.0025 mgd. This quantity of water is, therefore, “grandfathered” and not subject to consumptive use compensation.

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 0.080 mgd. Based on an analysis of water use records supplied by the project sponsor, Commission staff is recommending approval of the requested amount, which represents an increase of approximately 10 percent above the current estimated peak day use of 0.072 mgd. This will allow for an anticipated increase in water usage over the 25-year duration of this approval. Should the project’s future consumptive water use exceed or be expected to exceed 0.080 mgd, the project sponsor must apply for a modification to this docket at that time.

The project sponsor asserts that the withdrawal of water from the Cohocton River occurred prior to 1995, the effective date of Commission Regulation §803.44, relating to surface water withdrawals. Based on data supplied by the project sponsor, Commission staff has calculated that the maximum 30-day average withdrawal at that time was 0.281 mgd, which, for the purposes of this docket, is considered to be grandfathered. The project sponsor has not exceeded the regulatory threshold since that time, requiring Commission review and approval.

However, the maximum instantaneous pumping rate of 830 gpm from the Cohocton River exceeds 10 percent of a 7-day, 10-year low flow (Q7-10) of 15.1 cubic feet per second (cfs) or 6,785 gpm. Commission staff recommends that the rate of withdrawal be regulated at the point of taking to meet the passby requirements. The project sponsor has agreed to reduce its

maximum pumping rate to 670 gpm, thereby satisfying Commission Policy No. 2003-01, "Guidelines for Using and Determining Passby Flows and Conservation Releases for Surface Water and Groundwater Withdrawal Approvals."

The project sponsor reports that the production well near the concrete plant is utilized at a total of less than 100,000 gallons per day (gpd) on a 30-day average and, therefore, this withdrawal is currently less than the threshold specified in Commission Regulation §803.43, relating to groundwater withdrawals. If the groundwater withdrawal from the well(s) is expected to exceed 100,000 gpd on a 30-day average, the project sponsor must submit a groundwater withdrawal application to the Commission.

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 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.

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 0.080 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 and then maintain meters, accurate to within five (5) percent, on the withdrawal from and discharge to the processing ponds to measure the quantity of water entering and leaving the

processing plant. The project sponsor may propose alternative monitoring to quantify daily consumptive water use 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 of water retained in the product, plus the quantity of water used for fugitive emission control, plus the quantity of water used for concrete production. The Commission reserves the right to inspect all measurement equipment and audit all measurement records.

6. The project sponsor shall install and maintain metering on the surface water withdrawal, accurate to within five (5) percent, and keep daily records of the project's surface water withdrawal. The project sponsor shall report the data to the Commission quarterly, and as otherwise required. 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.

7. The maximum instantaneous rate of withdrawal from the Cohocton River shall not exceed 670 gpm.

8. The project sponsor shall maintain metering on the Concrete Plant Well, 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 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.

9. 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.

10. To satisfy the Commission's current compensation requirements for consumptive water use set forth in Commission Regulation §803.42, the project sponsor shall make quarterly payments to the Commission based on the rate of \$0.14 per 1,000 gallons of water consumptively used by the project in excess of the grandfathered quantity. The daily quantity of water consumptively used shall be the quantity of water retained in the product, used for dust control, and used for concrete production. 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 0.0025 mgd. If the daily grandfathered quantity exceeds the projects daily consumptive water use, that day's consumptive water use is considered 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.

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

12. 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 in excess of the grandfathered quantity of 0.0025 mgd during the period from January 1, 2001, until the effective date of this approval. This payment shall be calculated and included in the first quarterly payment made by the project sponsor in accordance with the requirements of Condition 10 above.

13. Commission approval shall not be construed to exempt the project sponsor from obtaining all necessary permits and/or approvals required for the project from other federal, state, or local government agencies having jurisdiction over the project. The Commission reserves the right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.

14. The Commission reserves the right to inspect or investigate the project facility, and the project sponsor shall allow authorized employees or agents of the Commission, without advance notice or a search warrant, at any reasonable time and upon presentation of appropriate credentials, and without delay, to have access to and to inspect all areas where the project is being constructed, operated, or maintained. Such employees or agents shall be authorized to conduct tests or sampling; to take photographs; to perform measurements, surveys, and other tests; to inspect the methods of construction, operation, or maintenance; to inspect all measurement equipment; to audit, examine, and copy books, papers, and records pertinent to any matter under investigation; and to take any other action necessary to assure that the project is constructed, operated, or maintained in accordance with the terms and conditions of this approval or any other rule, regulation, or order of the Commission.

15. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the Commission may suspend, modify, or revoke its approval of same, and may impose appropriate penalties. Upon written notice by the Commission, the project sponsor shall have thirty (30) days to correct such noncompliance, unless an alternate period is specified in the notice. Nothing herein shall preclude the Commission from exercising its authority to immediately modify, suspend, or revoke this approval where it determines exigent circumstances warrant such action, or from imposing fines and penalties, regardless of the period of noncompliance.

16. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment.

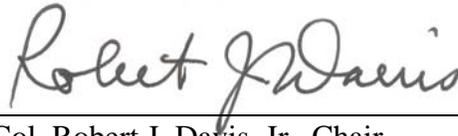
17. Commission approval confers no property rights upon the project sponsor. The securing of all rights necessary and incident to the project sponsor's development and operation

of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.

18. This approval is effective until March 15, 2031. The project sponsor shall submit a renewal application by September 15, 2030, and obtain Commission approval prior to continuing operation beyond March 15, 2031.

19. If the project is discontinued for such a period of time and under such circumstances that an abandonment of the project may reasonably be inferred, the Commission may rescind the approval of the project unless a renewal is requested by the project sponsor and approved by the Commission.

By the Commission:



Col. Robert J. Davis, Jr., Chair
U.S. Commissioner

Dated: March 15, 2006



Exhibit B2

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. 20060302

Approval Date: March 15, 2006

WORLD KITCHEN, INC.—PRESSWARE PLANT

Groundwater Withdrawal (30-Day Average) of 1.900 mgd from Well 1R,
for Manufacturing Water Supply,
City of Corning, Steuben County, New York

Review Authority

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulations §803.4, relating to projects requiring review and approval, and §803.43, relating to groundwater withdrawal. The Commission received the application on December 29, 2005.

Description

Purpose. The purpose of the application is to request approval for the withdrawal of groundwater for distribution in an industrial non-contact cooling water system at World Kitchen, Inc. (World Kitchen).

Location. The project is located in the Chemung Subbasin, HUC 02050105, Chemung River Watershed, City of Corning, Steuben County, New York.

Project Features. The project sponsor has requested approval for the withdrawal (30-day average) of 1.900 million gallons per day (mgd) from Well 1R. Well 1R was installed as a replacement for Well 1 and will be used as a source for the non-contact water system at World Kitchen's Pressware Plant, which manufactures Corelle. The facility is adjacent to the Chemung River in the City of Corning, New York.

Groundwater cycled through the facility as once-through, non-contact cooling water is discharged through a metered outfall to the Chemung River (New York State Department of Environmental Conservation [NYSDEC] Permit No. NY-0245526). World Kitchen currently discharges, on average, 1.500 to 2.000 mgd to the Chemung River, with peak discharges up to 6.000 mgd during precipitation events. The City of Corning supplies the facility with water for all potable needs.

The project sponsor has three on-site wells (Wells 1, 2, and 3) at the facility. Well 3, drilled in 1990 and originally approved on December 13, 2001 as Docket No. 20011202,

currently is the only reliable source of groundwater. The approval was modified on September 8, 2004 (Commission Docket No. 20011202-1), to allow for withdrawals up to 1.728 mgd on a 30-day average. Currently, Well 3 is pumped at an average daily rate of 1.440 mgd.

Wells 1 and 2 were historically pumped at rates of 400 and 1,000 gallons per minute (gpm), respectively, for a combined withdrawal of 2.016 mgd. Due to a collapsed well screen and casing, Well 1 currently is producing “only a limited amount of water” according to the project sponsor. Well 2 is no longer utilized due to a damaged pipeline that is inaccessible and cannot be repaired.

Well 1R was drilled in 2005 to replace Well 1. Well 1R is located approximately 600 feet south of the Chemung River and 25 feet south of Well 1. The well penetrates sand and gravel glacial outwash deposits within the Chemung River valley. Well 1R is 67 feet deep and finished with 47 feet of 18-inch-diameter casing and 20 feet of variable slotted, stainless steel well screen.

Pumping Test. A 72-hour, constant-rate pumping test of Well 1R was conducted on November 8-11, 2005, with prior Commission approval. In addition to the pumping well, 5 observation wells were monitored, including the City of Corning’s Well 9, which is located approximately 2,800 feet to the west of Well 1R. Groundwater temperature from Wells 1 and 3, and pH and conductivity from Well 1, also were monitored during the testing.

Pumping at an average rate of 1,350 gpm, drawdown at the pumping well was less than 2 feet at the end of the 72-hour test. Observed drawdown within the aquifer was minimal. The estimated radius of influence from pumping Well 1R at 1,350 gpm is 1,500 feet. Water levels across the site started to recover after 36 hours of pumping due to a precipitation event (0.56 inches of rain). However, the collected test data was sufficient to make a final determination of Well 1R’s sustainability and anticipated affect on the aquifer.

Findings

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

Commission staff reviewed the groundwater availability analysis, pumping test results, and supporting information submitted by the project sponsor. Data collected during the testing indicated that the well penetrates a highly transmissive, semi-confined sand and gravel aquifer that is hydraulically connected to the Chemung River. Prolonged pumping at the test pumping rate of 1,350 gpm should have minimal impact on other wells in the area.

Commission staff recommends approval of the requested withdrawal (30-day average) of 1.900 mgd. Should the project’s groundwater withdrawal exceed or be expected to exceed the approved amount, the project sponsor must apply for a modification to this docket at that time.

Commission staff recommends that the maximum instantaneous rates of production from Well 1R not exceed 1,350 gpm.

Commission staff recommends that the project sponsor install appropriate metering on Well 1R. Further, Commission staff recommends that Wells 1 and 2, installed circa 1930 and 1956, should be properly decommissioned and abandoned in accordance with American Water Works standards.

The well field is located in the valley of the Chemung River in an area identified as potentially stressed. The project sponsor documented that the withdrawal and consumptive use of water has declined since the late 1960s. Additionally, the proposed combined withdrawal from Wells 1R and 3 is significantly less than 10 percent of the 7-day, 10-year low flow, and much of the water is discharged to the river adjacent to the facility. Therefore, no adverse impacts related to the withdrawal are anticipated.

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 2005-03. 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.

Decision

1. The project's groundwater withdrawal of 1.900 mgd (30-day average) from Well 1R 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 Well 1R, accurate to within five (5) percent, to measure its groundwater withdrawal. The project sponsor shall keep daily records of the metered withdrawal and weekly water levels in Well 1R. 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. The project sponsor shall notify the Commission, in writing, when the meter is installed.

5. The maximum instantaneous rate of production from Well 1R shall not exceed 1,350 gpm.

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

7. 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.

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 fines and penalties, regardless of the period of noncompliance.

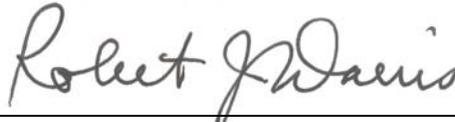
11. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment.

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

13. This approval is effective until March 15, 2031. The project sponsor shall submit a renewal application by September 15, 2030, and obtain Commission approval prior to continuing operation beyond March 15, 2031.

14. 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. Robert J. Davis, Jr., Chair
U.S. Commissioner

Dated: March 15, 2006



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. 20060303

Approval Date: March 15, 2006

ELK MOUNTAIN SKI RESORT, INC.

Surface Water Withdrawal of Up to 2.160 mgd, When Available,
from East Branch Tunkhannock Creek, for Snowmaking,
Herrick Township, Susquehanna 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 §803.44, relating to surface water withdrawals. The Commission received the application for the proposed withdrawal from East Branch Tunkhannock Creek on October 20, 2005.

Description

Purpose. The purpose of the application is to request approval for a surface water withdrawal as an additional water source in support of the production of snow at an existing ski resort.

Location. The project is located in the Middle Susquehanna Subbasin, HUC 02050106, East Branch Tunkhannock Creek Watershed, Herrick Township, Susquehanna County, Pennsylvania.

Project Features. The project sponsor has requested approval for a maximum daily withdrawal of up to 2.160 million gallons per day (mgd) of water, when available, from the East Branch Tunkhannock Creek. The project sponsor currently is approved to withdraw up to 5.760 mgd, when available, from an unnamed tributary of the East Branch of the Tunkhannock Creek and consumptively use up to 1.267 mgd for the purpose of snowmaking (Commission Docket No. 20031003-1).

The approved source of water is a withdrawal from a series of ponds at the base of Elk Mountain. Overflow from the main storage pond discharges to an unnamed tributary to the East Branch of Tunkhannock Creek. Commission Docket No. 20031003-1 requires a minimum flow of 25 percent of the annual average daily flow, or 87.3 gallons per minute (gpm), at the main pond overflow, during snowmaking operations and during pond refilling periods, to prevent loss

of aquatic habitat. However, storage in the existing pond is not sufficient to meet the project sponsor's snowmaking needs while allowing for the release of water below the dam.

The project sponsor proposed and the Commission approved (Docket No. 20031003-1) construction of a new 4.8-acre off-stream storage pond (Moore Pond) with a capacity of 16.3 million gallons, when full, to ensure the facility can meet the passby requirement of 25 percent average daily flow from the existing storage pond during the ski season. The new storage pond will be supplied by the proposed withdrawal from the East Branch of the Tunkhannock Creek.

The project sponsor plans to locate the intake on the main stem of the East Branch of the Tunkhannock Creek, approximately 1,000 feet upstream of the confluence with the unnamed (North Elk) tributary currently utilized as the water supply source for the facility. The project sponsor proposes to install a pumping station capable of a maximum instantaneous withdrawal rate of up to 1,500 gpm.

Findings

The project is subject to Commission approval and reporting requirements, as per Commission Regulation §803.44.

The project sponsor has requested a surface water withdrawal of up to 2.160 mgd from the East Branch Tunkhannock Creek. Commission staff recommends approval of the requested quantity. The proposed withdrawal will be limited to a maximum instantaneous pumping rate of 1,500 gpm and will be equipped with a totalizing flow meter capable of measuring the instantaneous pumping rate.

The East Branch Tunkhannock Creek is classified as a cold-water fishery (CWF) (Title 25, Chapter 93, Pennsylvania Code). Based on the stream's classification, its geographic location in the watershed, and the anticipated associated fishery of trout and combined species of fish, Commission staff has determined a minimum flow of 25 percent of the annual average daily flow, or 314.4 gpm, is required at the point of withdrawal to prevent loss of aquatic habitat. Commission staff recommends that the project sponsor install a passive system that will allow a minimum passby flow of 314.4 gpm at all times during active pumping.

The project sponsor should submit its design and proposed construction schedule for the withdrawal and passby flow device within 60 days following Commission action for review and approval by Commission staff prior to any construction.

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 2005-03. 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 surface water withdrawal from East Branch Tunkhannock Creek of up to 2.160 mgd, when available, 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 surface water withdrawal reporting requirements, as per Commission Regulation §803.44.

4. The project sponsor shall install and maintain metering on the surface water withdrawal, accurate to within five (5) percent, and keep daily records of the project's withdrawal from East Branch Tunkhannock Creek. 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 project sponsor may propose alternative monitoring to the Commission for staff review and approval.

5. The maximum instantaneous rate of withdrawal from the East Branch of the Tunkhannock Creek shall not exceed 1,500 gpm.

6. The project sponsor shall allow a flow to pass in East Branch Tunkhannock Creek directly below the point of withdrawal of not less than 0.700 cubic feet per second (cfs) (314.4 gpm). When the streamflow below the point of withdrawal is less than this amount, the withdrawal shall be reduced to maintain 0.700 cfs (314.4 gpm) in the stream channel below the intake. When the natural flow is equal to or less than 0.700 cfs (314.4 gpm), no water may be withdrawn, and the entire natural flow shall be allowed to pass the point of withdrawal to maintain such natural flow in the channel below the point of withdrawal as may prevail above.

7. The project sponsor shall submit its design and a proposed construction schedule for the passby flow measurement device within sixty (60) days of the date of this approval for review and approval by Commission staff prior to any construction. Following approval, the project sponsor shall complete construction in accordance with the approved schedule, and shall certify to the Commission that construction has been completed in accordance with the approved design. The passby system shall be kept fully functional and free of debris.

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 fines and penalties. Upon written notice by the Commission, the project sponsor shall have thirty (30) days to correct such noncompliance, unless an alternate period is specified in the notice. 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.

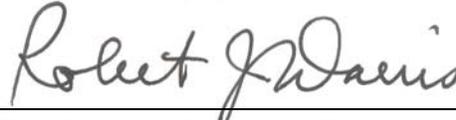
12. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment.

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 March 15, 2031. The project sponsor shall submit a renewal application by September 15, 2030, and obtain Commission approval prior to continuing operation beyond March 15, 2031.

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:



Dated: March 15, 2006

Col. Robert J. Davis, Jr., Chair
U.S. Commissioner



SUSQUEHANNA RIVER BASIN COMMISSION

1721 North Front Street • Harrisburg, Pennsylvania 17102-2391

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

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

Docket No. 20060304

Approval Date: March 15, 2006

CITY OF DUBOIS

Withdrawal of Up to 3.000 mgd from Anderson Creek Reservoir,
and Consumptive Water Use Through an Out-of-Basin Diversion
of Up to 3.000 mgd, for Water Supply to the City of DuBois,
Clearfield 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 consumptive water use and the diversion of water from the basin. The Commission received the consumptive water use application on October 5, 2005. The project sponsor submitted additional information relating to the out-of-basin diversion to the Commission on January 23, 2006.

Description

Purpose. The purpose of the application is to request approval for the withdrawal of water from Anderson Creek Reservoir and diversion of water from the basin to supply water to the City of DuBois and its subsidiary water suppliers.

Location. Anderson Creek Reservoir is located in the West Branch Susquehanna River Subbasin, HUC 02050201, Anderson Creek Watershed, in Union Township, Clearfield County, Pennsylvania. The City of DuBois is located in the Ohio River Basin, Allegheny River Watershed, outside of the Susquehanna River Basin, approximately five miles west of the Anderson Creek Reservoir.

Background. The City of DuBois has operated a public water supply system using Anderson Creek Reservoir since the reservoir's construction in 1903. Water is withdrawn from the reservoir and conveyed through a 6-foot by 7-foot tunnel, approximately 3,450 feet in length and a 20-inch cast-iron main 12,800 feet in length, to the treatment plant located within Union Township. The City of DuBois has operated its withdrawal and diversion under an Order of Confirmation (No. WA-41) issued in 1943 by the Pennsylvania Department of Forests and Waters, Water and Power Board, now the Pennsylvania Department of Environmental Protection (PADEP). The Order allocates up to 3.000 million gallons per day (mgd) and contains no expiration date.

The City of DuBois' diversion is recognized in the Commission's Comprehensive Plan as an authorized pre-Compact diversion. Historically, the City of DuBois provided water to the City, the Borough of Sykesville, and Sandy Township.

Union Township Municipal Authority (UTMA) has requested approval to purchase treated water from the City of DuBois, based on a 1996 agreement between the City of DuBois and UTMA. Exercising this option creates a new service area for the City of DuBois beyond that when the applications and associated permits for the 3.000 mgd were issued. This expanded service area is not covered by the pre-Compact authorization, and any diversion or transfer of water beyond the service area originally permitted is subject to Commission review and approval. Thus, the City of DuBois has made application to the Commission for approval of the diversion from the basin.

Project Features. The project sponsor has requested approval for a surface water withdrawal of up to 3.000 mgd from Anderson Creek Reservoir, and a consumptive water use through an out-of-basin diversion of up to 3.000 mgd (peak daily water requirement).

Anderson Creek Reservoir, constructed in 1903, is supplied water from Anderson Creek, Dressler Run, and Montgomery Run. The drainage area of the reservoir is approximately 26 square miles. The reservoir has a surface area of 210 acres and a design capacity of 615 million gallons. Water is conveyed by gravity from the reservoir to the treatment plant.

UTMA currently purchases raw water from the City of DuBois' Anderson Creek Reservoir and treats the water at its own filtration plant to supply to customers residing both inside and outside of the Susquehanna River Basin. The diversion of up to 0.057 mgd from the Susquehanna River Basin is approved in Commission Docket No. 19920701.

The distribution system is 100 percent metered. Current annual average daily demand of the City of DuBois system is 1.682 mgd and the peak day withdrawal is 2.153 mgd.

Effluent from the City of DuBois system is treated at the City of DuBois wastewater treatment plant or the Sandy Township Slab Run wastewater treatment plant. The City of DuBois wastewater treatment plant discharges to Sandy Lick Creek and the Sandy Township Slab Run wastewater treatment plant discharges to Wolf Run, which is a tributary to Sandy Lick Creek, both located in the Ohio River Basin. Some effluent is discharged to on-lot systems.

Coordination. Commission staff has coordinated with the PADEP Northcentral Region Office during review of the project. Commission staff also has coordinated with PADEP Division of Water Use Planning, PADEP Division of Dam Safety, and the Pennsylvania Fish and Boat Commission. PADEP is holding its approvals of water allocation permits for Sandy Township Water and Sewer Authority and UTMA, pending Commission action.

Findings

The project's diversion of water from the basin and withdrawal from Anderson Creek Reservoir are subject to Commission review and approval, as per Commission Regulations §803.42 and §803.44. The application also has been reviewed with respect to Commission Policy No. 98-01, regarding diversions of water from the Susquehanna River Basin and past decisions of the Commission regarding out-of-basin diversions.

All water withdrawn from Anderson Creek Reservoir and transmitted for water supply to DuBois constitutes a diversion of the Susquehanna River Basin's waters as defined in Section 1.2(4) of the Compact. The diverted waters are considered to be consumptively used under Commission Regulation §803.42. The daily metered withdrawal from Anderson Creek Reservoir should be used to determine the daily consumptive water use. The daily records should be submitted to the Commission quarterly, and as otherwise required, to document the out-of-basin diversion.

Average and maximum demands on the City of DuBois' water system currently are 1.682 mgd and 2.153 mgd, respectively. Projections by the project sponsor for the year 2035 indicate a maximum need for 2.400 mgd. This level of demand includes bulk sales of 0.474 mgd to other water suppliers. Currently, the amount of bulk sales is 0.157 mgd.

The project sponsor has requested a consumptive water use approval of up to 3.000 mgd, and Commission staff is recommending approval of the requested amount. Should the project sponsor's future consumptive water use be expected to exceed 3.000 mgd, the project sponsor must apply for a modification to this docket at that time.

This diversion began in 1903. Commission staff has determined that the pre-1971 diversion and consumptive water use for the City of DuBois was 2.500 mgd, based on a peak 30-day average. For purposes of this docket, the pre-1971 quantity of water consumptively used by the City of DuBois water system is considered "grandfathered," and is exempt from water compensation requirements, although the project would not be exempt from other Commission regulations, including those related to environmental protection and reporting requirements.

In addition to the City of DuBois, the water was historically supplied to Sandy Township and the Borough of Sykesville. The expanded service area into Union Township is not covered by the pre-Compact authorization and is subject to Commission review and approval. Therefore, Commission staff finds that the entire use by UTMA is subject to Commission Regulation §803.42. The project sponsor should install accurate measuring and recording devices to monitor the amount of water sold to UTMA.

The project's diversion and consumptive use of water in excess of the grandfathered quantity and outside of the original service area are subject to compensation requirements, as per Commission Regulation §803.42. To satisfy these requirements, the project sponsor should make quarterly payments to the Commission in lieu of providing actual compensation water or discontinuing use.

Anderson Creek below the dam is a Class D Brown Trout Cold Water Fishery. Commission staff calculates the 7-day, 10-year flow (Q7-10) for the 26-square-mile drainage area to be 2.06 cubic feet per second (cfs) equal to 1.330 mgd. The project sponsor is required to adhere to a specified minimum release requirement of 1.520 mgd (2.35 cfs) from Anderson Creek Reservoir at all times, according to PADEP Permit No. D17-005A (Bureau of Dams, Waterways, and Wetlands). Commission staff finds that the minimum release requirement satisfies Commission Policy No. 2003-01, "Guidelines for Using and Determining Passby Flows and Conservation Releases." The project sponsor should maintain accurate measuring and recording devices to demonstrate that the minimum release is maintained, and report these data to the Commission.

The project sponsor has requested an approval for a withdrawal of up to 3.000 mgd. The design capacity of the Anderson Creek Reservoir is 615 million gallons. The project sponsor has submitted "Anderson Creek Reservoir Hydraulic Analysis and Drought Contingency Plan," prepared by the City of DuBois Engineering Department, dated June 21, 1999, which evaluates the storage volume of the reservoir and storage depletion due to sediment. The plan provides a conservative estimate of available storage to be 495 mgd.

The withdrawal is subject to the Commission's water conservation requirements, as per Commission Regulation §804.20(a). The water system is 100 percent metered; however, system losses reported for 2002 were greater than 33 percent. Commission staff recognizes improvements in unaccounted for water for the years 2003 and 2004, when reported unaccounted for water equaled 19 and 20 percent, respectively. The unaccounted for water loss of less than 20 percent is less than the maximum specified in Commission Regulation §804.20(a)(1). Commission staff recommends that the project sponsor continue to achieve 100 percent compliance with the requirements and should report its results to the Commission annually.

The project sponsor has paid the appropriate application fee, in accordance with Commission Regulation §803.28, and in accordance with Commission Resolution No. 2005-03. The project sponsor has provided all proofs of notification, as required by Commission Regulation §803.25.

The project is physically feasible. This project is required for the optimum planning, development, conservation, utilization, management, and control of the water resources of the basin and, as a diversion, may significantly affect the water resources of the basin.

The project involves a diversion of water and a public hearing is required to be held in conjunction with the Commission's review process. Notice as required in Compact Section 3.10(5) has been provided. Commission staff also has reviewed the application according to Policy No. 98-01, as enumerated below.

Out-of-Basin Diversion Considerations

1. *Any adverse effects and cumulative adverse effects the project may have on the ability of the Susquehanna River Basin to meet its own present and future needs.*

The requested quantity of the diversion of water from the basin is still within the quantity identified in the Commission's Comprehensive Plan and approved by PADEP. Provided that the minimum release requirement is maintained, Anderson Creek will be protected from adverse habitat loss in the downstream fishery and flow loss to the basin during critical low flow periods. Further, the project's increased taking from Anderson Creek Reservoir to serve Union Township will be offset by the cessation of the existing withdrawal by UTMA approved in Commission Docket No. 19920701. Commission staff anticipates it will recommend that the Commission rescind the existing approval after the transfer of treated water to UTMA commences later this year.

2. *The location, amount, timing, purpose, and duration of the proposed diversion and how the project will individually and cumulatively affect the flow of any impacted stream or freshwater inflow of the Chesapeake Bay.*

Anderson Creek Reservoir, located in the West Branch Susquehanna River Subbasin, historically has been the sole source of supply for the City of DuBois and its subsidiary systems. Withdrawals from the reservoir occur 365 days a year and provide water to approximately 18,000 people. Providing that the City of DuBois operates in compliance with the Commission's consumptive water use regulation and other permits from PADEP, the project will have minimal increased impact beyond that contemplated in the Commission's Comprehensive Plan on the flow regimes of the Susquehanna River or the Chesapeake Bay. Focusing on low flow periods, the dam permit issued by PADEP in 1995 required the City to maintain a continuous conservation release from the dam equal to 1.520 mgd.

3. *How the project will individually or cumulatively affect other environmental, social, and recreational values.*

Commission staff finds no significant individual or cumulative social or recreational impacts. No recreational uses of the land or water resources on the reservoir property are currently authorized.

4. *Whether there is a reasonably foreseeable need for the quantity of water requested by the project sponsor and how that need is measured against other reasonably foreseeable needs in the Susquehanna River Basin.*

Yes. There is a reasonably foreseeable need for the water use by the project sponsor. Average and maximum day demands on the City of DuBois' water system are 1.682 mgd and 2.153 mgd, respectively. Projections by the project sponsor for the year 2035 indicate a maximum need of 2.400 mgd. Commission staff reviewed these projections and found them to be reasonable in light of the design capacity of the system and the opportunity for growth in the project sponsor's service area.

5. *The impact of the diversion on economic development within the Susquehanna River Basin, the member jurisdictions, or the United States of America.*

The proposed project is expected to positively impact that part of the basin immediately adjacent to the project area.

6. *The cost of the diversion versus other alternatives, including certain external costs such as impacts on the environment or natural resources.*

The project sponsor has relied on the Anderson Creek Reservoir as its sole source of supply for more than 100 years, and Union Township also currently is only supplied by Anderson Creek Reservoir. The City of DuBois has not undertaken any alternative supply studies nor have they provided an economic analysis of the environmental impacts.

7. *The amount and location of water being diverted to the Susquehanna River Basin from the importing basin.*

UTMA reports that approximately 20,000 gallons per day (gpd) of water diverted will be returned to the basin through on-lot septic systems in the township. Commission staff recommends the project sponsor provide a detailed accounting procedure to accurately measure the water returned to the basin.

8. *The proximity of the project to the Susquehanna River Basin.*

The City of DuBois is located in the Ohio River Basin, approximately five miles west of the Susquehanna River Basin divide in Clearfield County. Some of UTMA's service area is within the Susquehanna River Basin.

9. *The project sponsor's pre-Compact legal authority to withdraw or divert the waters of the basin.*

Pre-Compact uses have already been addressed in the findings section of this docket.

10. *Any policy of the member jurisdictions relating to water resource, growth, and development.*

The Commonwealth's recommended approval of the subsidiary allocation requests from Union and Sandy Townships demonstrates consistency with water resources development and planning for the Commonwealth.

11. *Any land use or natural resource planning being carried out in the importing basin?*

The project is consistent with known land use and natural resource planning at the municipal, county, state, and federal level.

12. *Has the project sponsor demonstrated that reasonable efforts have been made to develop sources within the basin of need?*

The project sponsor has relied on Anderson Creek Reservoir for more than 100 years, and as the requested quantity of withdrawal and diversion does not represent an increase in its PADEP permit, it has not explored any alternative supply within the basin of need. With appropriate water conservation measures in place and acceptable drought contingency planning that insures maintenance of the requested conservation release below the dam, the project sponsor could continue to rely on Anderson Creek Reservoir throughout the duration of this approval.

Following a thorough review of the material submitted by the project sponsor, and providing that the project sponsor meets all conditions contained in this docket and all other necessary governmental approvals, Commission staff has determined that the proposed diversion of water meets the requirements of the Commission's out-of-basin diversion policy.

Decision

1. The project's surface water withdrawal from Anderson Creek Reservoir of up to 3.000 mgd, when available, and consumptive water use through an out-of-basin diversion of up to 3.000 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 consumptive water use reporting requirements, as per Commission Regulation §803.42, and surface water withdrawal reporting requirements, as per Commission Regulation §803.44.

4. The project sponsor shall keep daily records of the project's consumptive water use resulting from the out-of-basin diversion, and shall report the data to the Commission quarterly, and as otherwise required. Quarterly data are due within thirty (30) days after the close of the preceding quarter. The daily quantity of water consumptively used by the project shall be the withdrawal from Anderson Creek Reservoir.

5. Within sixty (60) days from the date of this approval, the project sponsor shall install and maintain metering on bulk water sold to UTMA, accurate to within five (5) percent. The project sponsor shall notify the Commission, in writing, when the meter is installed.

6. Within sixty (60) days from the date of this approval, the project sponsor shall install and maintain metering on the surface water withdrawal from Anderson Creek Reservoir, accurate to within five (5) percent, and keep daily records of the project's surface water withdrawal. The project sponsor shall notify the Commission, in writing, when the meter is installed. 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 project sponsor may propose alternative monitoring to the Commission for staff review and approval.

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 within the pre-1971 service areas (City of DuBois, Sandy Township, and the Borough of Sykesville). The quantity of water consumptively used by the project within the pre-1971 service areas shall be the sum of the daily quantity of water withdrawn from Anderson Creek Reservoir, less the quantity delivered to UTMA, less the grandfathered quantity of 2.500 mgd. If the daily grandfathered amount exceeds the project's daily water use withdrawal from Anderson Creek Reservoir, that part of the 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.

8. 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 within the UTMA service area. The quantity of water consumptively used by the project within the UTMA service area shall be the sum of the quantity of water delivered to UTMA minus the quantity returned to the basin. 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.

9. Within sixty (60) days from the date of this approval, the City of DuBois shall provide certified maps documenting the extent of its current water distribution system and those of all consecutive water supply systems receiving water from Anderson Creek Reservoir. Prior to any expansion of service areas beyond the existing boundaries, the City of DuBois shall apply for a modification to this docket.

10. Within sixty (60) days from the date of this approval, the City of DuBois shall submit a plan, for Commission staff review and approval, to accurately account for the water returned to the Susquehanna River Basin via the UTMA system.

11. The project sponsor shall maintain a downstream release of water from Anderson Creek Reservoir of 2.35 cfs (1.520 mgd). The project sponsor shall keep daily records of the release, 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 project sponsor shall maintain flow measurement devices and the release works shall be kept fully functional and free of debris.

12. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §804.20(a). The project sponsor shall report its unaccounted for water losses to the Commission annually.

13. 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.

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

15. 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.

16. The Commission reserves the right to inspect or investigate the project facility, and the project sponsor shall allow authorized employees or agents of the Commission, without advance notice or a search warrant, at any reasonable time and upon presentation of appropriate credentials, and without delay, to have access to and to inspect all areas where the project is being constructed, operated, or maintained. Such employees or agents shall be authorized to conduct tests or sampling; to take photographs; to perform measurements, surveys, and other tests; to inspect the methods of construction, operation, or maintenance; to inspect all measurement equipment; to audit, examine, and copy books, papers, and records pertinent to any matter under investigation; and to take any other action necessary to assure that the project is constructed, operated, or maintained in accordance with the terms and conditions of this approval or any other rule, regulation, or order of the Commission.

17. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the Commission may suspend, modify, or revoke its approval of same, and may impose appropriate penalties. Upon written notice by the Commission, the project sponsor shall have thirty (30) days to correct such noncompliance, unless an alternate period is specified in the notice. Nothing herein shall preclude the Commission from exercising its authority to immediately modify, suspend, or revoke this approval where it determines exigent circumstances warrant such action, or from imposing fines and penalties, regardless of the period of noncompliance.

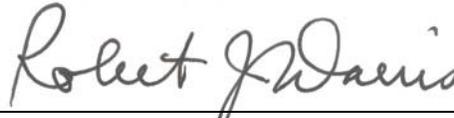
18. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment.

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

20. This approval is effective until March 15, 2031. The project sponsor shall submit a renewal application by September 14, 2030, and obtain Commission approval prior to continuing operation beyond March 15, 2031.

21. 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:

A handwritten signature in cursive script that reads "Robert J. Davis". The signature is written in black ink and is positioned above a horizontal line.

Col. Robert J. Davis, Jr., Chair
U.S. Commissioner

Dated: March 15, 2006



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. 19940901-1

Approval Date: September 27, 1994

Modification Date: March 15, 2006

PPL MONTOUR, LLC

Surface Water Withdrawal of Up to 28.000 mgd,
from Lake Chillisquaque, Anthony Township, and
Consumptive Water Use of Up to An Additional 5.200 mgd (Peak Day)
for Power Plant Operation and Flue Gas Desulfurization
at the Montour Steam Electric Station,
and for the Ancillary Production of Commercial Wallboard
Above the Existing 17.000 mgd Consumption on a 30-Day Average,
Derry Township, Montour 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 §803.44, relating to surface water withdrawals. The Commission received the consumptive water use application on May 20, 2005, and an amended consumptive water use application and the surface water withdrawal application on March 2, 2006.

Description

Purpose. The purpose of the application is to request approval of increased consumptive water use and surface water withdrawal for processes related to operations at the Montour Steam Electric Station (Montour SES) and a proposed industrial plant. PPL Montour, LLC (PPL) plans to install two flue gas desulfurization systems (scrubbers) at Montour SES, the waste byproduct of which will be used by the industrial plant in the manufacture of commercial wallboard. Although the wallboard plant will be owned and operated by a third party, PPL will provide process water to the plant and will be responsible to the Commission for all consumptive water use at the plant. PPL's surface water withdrawal from Lake Chillisquaque will increase to provide process water to the wallboard plant.

Location. The project is located in the West Branch Susquehanna Subbasin, HUC 02050301, Chillisquaque Creek Watershed, Derry Township, Montour County, Pennsylvania. The existing surface water intake and wastewater discharge for the project are

located in the West Branch Susquehanna Subbasin, HUC 02050206, on the West Branch Susquehanna River and Lake Chillisquaque, Delaware Township, Northumberland County, and Anthony Township, Montour County, respectively, Pennsylvania.

Project Features. The project sponsor has requested approval for an increase in consumptive water use of up to 5.200 million gallons per day (mgd) on a peak day, separate from and in addition to the existing consumptive water use of 17.000 mgd as a 30-day average. The project sponsor has also requested approval for a surface water withdrawal of up to 28.000 mgd (peak day) from Lake Chillisquaque.

Current Operations. The project as it currently exists consists of two primary electric generating units (Units 1 and 2) and an auxiliary unit (Unit 11). Units 1 and 2 are coal-fired baseload units; Unit 11 provides steam to Unit 1 or is used to generate power for in-plant use. Units 1 and 11 together are rated at 774 megawatts, and Unit 2 is rated at 766 megawatts. Unit 1 began commercial operation in April 1972, and Units 2 and 11 began operation in 1973. All three units have closed-cycle cooling systems with evaporative cooling towers. Montour SES is approved by the Commission to consumptively use water in the amount of 17.000 mgd on a 30-day average basis, which was established in a Settlement Agreement (attached) between the Commission and PPL in 1994. Under the terms of the Settlement Agreement, the consumptive water use compensation provided by PPL at Cowanesque and Lake Chillisquaque was determined to satisfy the Commission's compensation requirement for the existing operations in support of Units 1, 2, and 11. Sources of current consumptive water use are cooling tower evaporation, drift losses, and detention basin evaporation.

Montour SES's current maximum estimated total water withdrawal is 27.000 mgd (peak day). Under normal operation, water for general plant use and cooling tower makeup is taken from a pump station located along the West Branch Susquehanna River and piped 12 miles to the plant site. The pump station contains 2 main operating pumps, which provide approximately 21.600 mgd when operated individually and 33.800 mgd when operated together. When only one pump operates, any additional water need is met by withdrawal from Lake Chillisquaque, which was constructed as a backup water source on the Middle Branch of the Chillisquaque Creek, approximately 2.5 miles northeast of the plant site. When both pumps are operating, water in excess of plant needs is pumped into Lake Chillisquaque. At times of extreme high or low river flows, pumping from the river may be discontinued due to intake hydraulics or water quality problems. During such conditions, all Montour SES water needs are met from Lake Chillisquaque. Water is conveyed in both directions between the lake and the plant via a 2.5-mile long pipeline.

Useable storage in the reservoir would permit the station to operate at full capacity for approximately three weeks and, thus, alone is insufficient as a method of compliance for consumptive water use. In July 1994, the Commission and PPL reached a Settlement Agreement for the combined use of Lake Chillisquaque (incorporating modified drought operations) and excess storage available to PPL at the Cowanesque Reservoir to meet the compliance requirement.

Cooling tower blowdown passes through an industrial waste treatment basin, where it combines with miscellaneous plant drainage and stormwater for treatment before discharging to the Middle Branch of the Chillisquaque Creek.

Proposed Operations. PPL plans to install scrubbers on Units 1 and 2, to become operational during 2008. The scrubbers will remove nearly all the sulfur dioxide emitted by Montour SES. Operation of the scrubbers will result in a maximum additional consumptive water use of up to 4.200 mgd through evaporation and other losses. The wastewater discharge from the scrubbers, in the amount of 0.330 mgd, will be discharged to the West Branch Susquehanna River via a pipeline separate from that handling the effluent currently discharged from the plant. It may be necessary to add up to 0.670 mgd of water taken from the existing plant wastewater discharge to the scrubber wastewater discharge flow for cooling purposes.

PPL also will provide all non-potable process water to a proposed commercial wallboard plant to be located in the vicinity of Montour SES. The non-potable water required by the wallboard plant will be delivered from the raw water supply of Unit 2 at Montour SES. Up to 1.000 mgd will be delivered to the wallboard plant, thus increasing Montour SES's maximum total surface water withdrawal when withdrawing from Lake Chillisquaque by 1.000 mgd. Nearly all of the water delivered to the wallboard plant will be evaporated or incorporated into product. Operations at the wallboard plant will result in a maximum additional consumptive water use of up to 1.000 mgd.

PPL proposes to supply water for the scrubbers from the facility's detention basin, which is fed by cooling tower blowdown, Units 1 and 2 ash sluices, miscellaneous plant wastewater, and stormwater. Effluent from the detention basin currently discharges to the Chillisquaque Creek in the amount of 8.000 mgd (maximum 30-day average). Operation of the scrubbers will require up to 5.200 mgd from the existing discharge, of which up to 4.200 mgd will be consumptively used and up to 1.000 mgd will be discharged to the West Branch Susquehanna River via the new pipeline for effluent.

The wallboard plant will use most of the diverted water in industrial processes, with small quantities diverted for landscaping. Initially, approximately 0.315 mgd will be evaporated during gypsum processing, and up to 0.124 mgd will be incorporated into the wallboard product, with a peak day consumption of 0.500 mgd. In the future, a second production line will result in a total wallboard plant consumption of up to 1.000 mgd.

Coordination. Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP) Northcentral Region Office and the Pennsylvania Fish and Boat Commission during review of the project.

Findings

The project is subject to Commission approval and reporting requirements, as per Commission Regulations §803.42 and §803.44.

The project is subject to the 1994 Settlement Agreement between PPL and the Commission. The agreement identified PPL's method of compliance for the consumptive use of water at Montour SES of 17.000 mgd on a 30-day average. The agreement does not cover any additional consumptive water use beyond cooling tower evaporation, drift losses, and detention basin evaporation associated with Units 1, 2, and 11, as they existed at the time of execution of the Settlement Agreement (1994). Further, the Settlement Agreement does not cover any additional consumptive use resulting from additions, changes, or modifications that would constitute a "project" under Commission regulations, including the installation of any air quality related scrubbers. Because the agreement predates the Commission's surface water withdrawal regulation, it contains no provisions or conditions related to surface water withdrawal.

The project sponsor has requested a modification to its existing approval for the additional consumptive water use of up to 5.200 mgd for scrubbers at the Montour SES and process water at the proposed commercial wallboard plant. The proposed source of water for the scrubbers is a portion of the existing wastewater discharge to Chillisquaque Creek. Process water for the wallboard plant will be supplied from the raw water supply to Montour SES Unit 2. The project sponsor also has requested approval for the anticipated increase in surface water withdrawal from Lake Chillisquaque to meet the needs of the wallboard plant.

All water: 1) evaporated or otherwise lost from the scrubbers; and 2) supplied to the wallboard plant, is considered to be an increase over existing consumptive water use and should be calculated as the difference between water inflow and wastewater discharges from the two facilities, minus any stormwater capture.

Commission staff recommends that the project sponsor submit a plan to accurately quantify the daily consumptive water use associated with operation of the scrubbers and the wallboard plant, and the project's total surface water withdrawal from Lake Chillisquaque for review and approval by Commission staff. The plan should contain metering, accurate to within five percent, or other suitable methods of measurement on the water diverted to the scrubbers and the wallboard plant, on the wastewater discharges, other locations, as appropriate, and of the total water withdrawal from Lake Chillisquaque. The project sponsor should report the daily consumptive water use and surface water withdrawal data to the Commission quarterly.

Should the proposed accounting procedure fail to accurately measure the consumptive water use of the scrubbers and wallboard plant, and the project's total water withdrawal from Lake Chillisquaque, the Commission reserves the right to modify the measuring, monitoring, and accounting procedures. Commission staff will provide the project sponsor with written notice of any required change in the measuring, monitoring, and accounting procedures. Any alternative measuring, 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 for the increased consumptive water use, the project sponsor proposes to make quarterly payments to the Commission in lieu of providing actual compensation water. The project sponsor will continue

to provide compensation water from Lake Chillisquaque, in accordance with the 1994 Settlement Agreement.

The project sponsor will be responsible for the supply, measuring, monitoring, reporting, conservation requirements, and water compensation requirements of the proposed commercial wallboard plant.

The existing surface water withdrawal predates the effective date of Commission Regulation §803.44; however, the proposed increase from Lake Chillisquaque exceeds the regulatory threshold and triggers Commission review and approval of the total withdrawal. PPL contends that the existing surface water withdrawal was implicitly approved as a result of the 1994 Settlement Agreement and docket approving the consumptive water use, and that only the increased withdrawal requires Commission review and approval. Commission staff disagrees with PPL's contention and consistent with Commission regulations recommends that the total water withdrawal be subject to Commission review and approval.

Commission staff recommends approval of the requested surface water withdrawal of up to 28.000 mgd (peak day), as submitted by the project sponsor.

Commission staff recommends that the existing continuous release requirement from Lake Chillisquaque of 0.81 cubic feet per second (cfs) be maintained at all times.

Commission staff recommends approval of the requested additional consumptive water use of up to 5.200 mgd (peak day), consistent with projected needs for the scrubbers and the wallboard plant, as submitted by the project sponsor, for a total consumptive water use of 17.000 mgd on a 30-day average, plus up to an additional 5.200 mgd (peak day).

Other Considerations. The use of the wastewater discharge to supply the proposed increase in consumptive water use will eliminate most of the discharge to the Chillisquaque Creek, which has received the discharge on a constant basis for over 30 years. For reasons of thermal assimilation and water quality, the PADEP regional office is supportive of the elimination of the discharge and expects the overall impacts to be positive to Chillisquaque Creek.

Because the new processes require an increased withdrawal of water from Lake Chillisquaque, there is the potential that Lake Chillisquaque will not have sufficient storage to supply Montour SES operations and process water to the wallboard plant during drought operations. Staff recommends that the project sponsor assess the provisions of the Drought Operations Plan and submit a proposal for any necessary modifications prior to beginning operation of the scrubbers and wallboard plant.

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. 2005-03.

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

No adverse impacts to other area surface water 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.

Based on the terms of the 1994 Settlement Agreement, there is no duration associated with the existing consumptive water use, and Commission staff recommends that this provision be recognized in this docket modification. Pursuant to the increased consumptive water use and surface water withdrawal, Commission staff recommends the duration of this docket modification be 25 years, through March 15, 2031.

Decision

1. The project's surface water withdrawal from Lake Chillisquaque of up to 28.000 mgd and up to an additional 5.200 mgd (peak day) consumptive water use above the existing consumptive water use of 17.000 mgd (30-day average), are approved pursuant to Article 3, Section 3.10, of the Compact.

2. The foregoing findings and the attached Settlement Agreement 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 and surface water withdrawal reporting requirements, as per Commission Regulations §803.42 and §803.44.

4. The project sponsor shall keep daily records of the scrubbers' and wallboard plant's consumptive water use and surface water withdrawal, 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 by the scrubbers and wallboard plant shall be the difference in quantity of water diverted from Montour SES process lines, and the quantity of wastewater discharged to Chillisquaque Creek or the West Branch Susquehanna River, minus any stormwater capture.

5. Within sixty (60) days from the date of this approval, the project sponsor shall submit to the Commission for review and approval by Commission staff a plan to meter or use other suitable methods of measuring surface water withdrawals that accounts for all water withdrawn from Lake Chillisquaque, the wastewater discharge, and the total consumptive water use at the two facilities associated with operation of the scrubbers and the wallboard plant. The project sponsor shall propose a methodology to account for its consumptive water use and surface water withdrawal. Following approval, the project sponsor shall execute the plan and complete any installation of meters or other means of measuring surface water withdrawals 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 or other means of measuring surface water withdrawals, accurate to within five (5) percent.

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 additional water consumptively used by the scrubbers and wallboard plant combined. The project sponsor shall continue to provide compensation water from Lake Chillisquaque and Cowanesque Reservoir for the 17.000 mgd (30-day average) of water consumptively used for cooling tower evaporation, drift losses, and detention basin evaporation related to the operation of Units 1, 2, and 11. The daily quantity of water consumptively used by the scrubbers and wallboard plant combined shall be the water diverted from Montour SES process lines for scrubber operation and wallboard supply, and the quantity of wastewater discharged to Chillisquaque Creek or the West Branch Susquehanna River, minus any stormwater capture. Payments for water consumptively used by the scrubbers and wallboard plant combined shall be made quarterly and shall be calculated by applying this rate to the daily amount of water consumptively used 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 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 fines and penalties, regardless of the period of noncompliance.

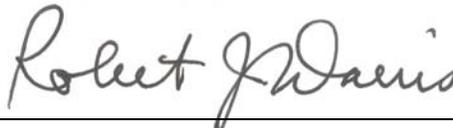
11. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment.

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

13. This approval as it pertains to the increased consumptive water use and surface water withdrawal is effective until March 15, 2031. The project sponsor shall submit a renewal application by September 15, 2030, and obtain Commission approval prior to continuing operation beyond March 15, 2031. The prior approval for the existing consumptive water use and surface water withdrawal is not subject to the same duration, in accordance with the 1994 Settlement Agreement.

14. 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. Robert J. Davis, Jr., Chair
U.S. Commissioner

Dated: March 15, 2006



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. 20060305

Approval Date: March 15, 2006

FREDERICKSBURG SEWER & WATER AUTHORITY

Groundwater Withdrawals (30-Day Averages) of 0.065 mgd from Well 2, 0.096 mgd from Well 5, and 0.216 mgd from Well 6, and a Total Groundwater System Withdrawal Limit (30-Day Average) of 0.377 mgd, for Public Water Supply, 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, and §803.43, relating to groundwater withdrawals. The Commission received the application on November 10, 2005, and supplemental information on February 8, 2006.

Description

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

Location. The project is located in the Lower Susquehanna River Basin, HUC 02050305, Swatara Creek Watershed, Bethel Township, Lebanon County, Pennsylvania.

Project Features. The project sponsor requested approval for the withdrawal (30-day averages) of 0.101 million gallons per day (mgd) from Well 5 and 0.430 mgd from Well 6. Fredericksburg Sewer & Water Authority (FSWA) reports maximum day withdrawals of 0.096 mgd from Well 5 and 0.216 mgd from Well 6. The project sponsor plans to use the wells to supply its public water supply system, and to reduce its dependency on the existing interconnection with the City of Lebanon (Commission Docket No. 19961101). Commission staff recommends approval of less than the requested quantity, as described below.

FSWA currently has three wells (Wells 2, 5, and 6) as sources for its public water supply system, in addition to the 0.500 mgd through its interconnection with the City of Lebanon, plus 1.34 million gallons of storage. Well 2 was installed in 1940, predating Commission regulations. Well 5 was drilled in 1988 and has continually operated at rates less than the Commission's withdrawal threshold. Well 6 was drilled in 1991 and previously was approved in Commission Docket No. 19920905. The docket specified that the duration of the approval was limited to five

years to require the project sponsor to demonstrate substantial progress in the development of an additional water source. To that end, the project sponsor installed an interconnection with the City of Lebanon, allowing for the purchase of up to 0.500 mgd (based on a 30-day average), but a renewal for the operation of Well 6 was not processed and no Commission action was taken. Therefore, that approval expired in September 1997.

Well 2 was drilled to a depth of 455 feet and likely is completed in the Hamburg Formation (Upper Cambrian to Upper Ordovician Age). The well is an 8-inch-diameter open borehole bedrock well constructed with 49 feet of casing. Based on the operational data provided by the project sponsor, Well 2 is operated continually, with a 30-day average of 0.065 mgd.

Well 5 was drilled to a depth of 400 feet as an 8-inch-diameter open borehole bedrock well constructed with an undocumented amount of casing. Based on the operational data that was provided from the project sponsor, Well 5 is operated continually, with a 30-day average withdrawal of 0.096 mgd. Well 5 is completed in the Hamburg Formation (Upper Cambrian to Upper Ordovician Age).

Well 6 was drilled to a depth of 410 feet as an 8-inch-diameter open borehole bedrock well constructed with 42 feet of 14-inch-diameter casing and 183 feet of 8-inch-diameter casing. Well 6 is also completed in the Hamburg Formation.

FSWA serves Bethel Township. The water supply system has an existing average demand of 0.375 mgd and an existing maximum daily demand of 0.881 mgd. The average and maximum daily demands are projected to be 0.750 and 1.300 mgd, respectively, by 2030.

The project sponsor reports that 100 percent of the wastewater is treated at the Fredericksburg Waste Water Treatment Plant and discharged to Deep Run. Deep Run is a tributary of Little Swatara Creek.

Pumping Test. Wells 5 and 6 were each tested for 48 hours at pumping rates of approximately 105 gallons per minute (gpm) and 300 gpm, respectively. Well 5 had a specific capacity of 1.2 gpm per foot of drawdown. Well 6 had a specific capacity of 2.4 gpm per foot of drawdown. The pumping tests were completed prior to 1992.

Commission staff recommends that the pumping test requirements be waived for Wells 5 and 6, and that operational data be accepted in lieu of testing. The system has been in operation in its current configuration since 1992.

Coordination. Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP) Southcentral Region Office (SCRO) during review of the project. Well 5 currently is operated under a PADEP public water supply permit, issued on June 11, 1991 (Permit No. 3891502), at a maximum rate of 70 gpm (or 0.101 mgd).

Findings

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

Commission staff recommends that the pumping test requirements be waived for Wells 5 and 6.

The project sponsor's 3 production wells and the 12 other high capacity production wells located within the groundwater basin are utilizing virtually 100 percent of the 1-in-10-year drought recharge. Based on this criterion, Fredericksburg was identified as a potentially stressed area by the Commission in Publication No. 236, "Groundwater Management Plan for the Susquehanna River Basin."

The approximate 12-square-mile groundwater basin is underlain by low permeability shales interbedded with thin, discontinuous, high permeability carbonates that trend in an east-west fashion. Streams crosscut the alternating shaly and carbonate beds, typically switching between gaining and losing sections. The high yields of the production wells are sustained by water drawn from the streams that cross the high permeability carbonates. Groundwater is withdrawn within the basin and is returned to downstream reaches of streams.

Based on these considerations, Commission staff recommends limiting the quantity and rate of the three production wells to the current reported use until a water resources study is completed and the findings from that study demonstrate that additional withdrawals can be made without adverse impacts.

Commission staff recommends approval of the following withdrawals (as 30-day averages): from Well 2 of 0.065 mgd, Well 5 of 0.096 mgd, and from Well 6 of 0.216 mgd. Although less than those requested by FSWA, the quantities will meet the existing demands. Commission staff recommends approval of peak instantaneous pumping rates of 110 gpm for Well 2, 70 gpm for Well 5, and 200 gpm for Well 6.

The projected average daily demand is 0.750 mgd (2030). Commission staff recommends approval of a total system groundwater withdrawal limit of 0.377 mgd, as a 30-day average. The remaining demand will be met by the interconnection with the City of Lebanon.

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

When the project sponsor was notified that its Commission approval for Well 6 had expired (Docket No. 19920905), FSWA agreed to submit an application for review and approval of its groundwater sources. While the project's interim withdrawals from Well 6 have been in noncompliance with Commission regulations, these withdrawals have been approximately 50 percent lower than the previously approved quantity and there have been no adverse impacts

identified with the lower withdrawal rate. The project sponsor has cooperated with Commission staff during its application review. Commission staff does not recommend the assessment of penalties associated with this noncompliance.

The project sponsor has paid the appropriate application fee in accordance with Commission Regulation §803.28, and in accordance with Commission Resolution 2005-03. 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 30-day averages of 0.065 mgd from Well 2, 0.096 mgd from Well 5, and 0.216 mgd from Well 6, and a total system groundwater withdrawal limit (30-day average) of 0.377 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. The project sponsor shall keep daily records of the metered withdrawal and weekly water levels in Wells 2, 5, and 6. 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 separate meters, accurate to within five (5) percent, on Wells 2, 5, and 6. The project sponsor shall notify the Commission, in writing, when the meters are installed. The Commission reserves the right to inspect all measurement equipment and audit all measurement records.

6. The constant-rate pumping test requirements for Wells 5 and 6 specified in Commission Regulation §803.43(b) are hereby waived.

7. The maximum instantaneous rate of production from Wells 2, 5, and 6 shall not exceed 110, 70, and 200 gpm, respectively.

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

9. The project sponsor shall notify the Commission of any impacts or alleged impacts identified by or reported to the project.

10. 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.

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

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 fines and penalties, regardless of the period of noncompliance.

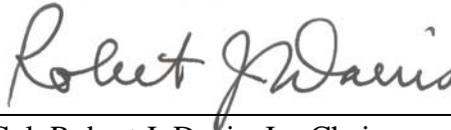
15. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment.

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 March 15, 2031. The project sponsor shall submit a renewal application by September 15, 2030, and obtain Commission approval prior to continuing operation beyond March 15, 2031.

18. 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. Robert J. Davis, Jr., Chair
U.S. Commissioner

Dated: March 15, 2006



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. 20020616-1

Approval Date: June 12, 2002

Modification Date: March 15, 2006

COUNTRY CLUB OF HARRISBURG

Surface Water Withdrawal of Up to 0.382 mgd, When Available, from Fishing Creek, and a Groundwater Withdrawal (30-Day Average) of 0.037 mgd from Well 2, and a Consumptive Water Use of Up to 0.382 mgd, for Golf Course Irrigation, Middle Paxton Township, Dauphin 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 §803.44, relating to the withdrawal of surface water. The Commission received the modification request on September 27, 2005.

Description

Purpose. The purpose of the application is to request approval to increase from 0.382 million gallons per day (mgd) to 0.482 mgd the withdrawal from Fishing Creek and the consumptive water use at an existing 18-hole golf course. In addition, the project sponsor requested approval of an additional source of supply for irrigation water and the addition of two new storage ponds. The original Commission approval for consumptive water use and surface water withdrawal was issued on June 12, 2002, as Commission Docket No. 20020616 (docket). This docket modification rescinds certain provisions, revises the method of calculation of consumptive water use, revises the project features, and adds an additional source (Well 2) of water for consumptive use.

Findings

The project's modification is subject to Commission approval and reporting requirements, as per Commission Regulations §803.42 and §803.44.

Water supplied to the irrigation system initially was withdrawn from Fishing Creek and directly applied to the golf course through the irrigation system, as described in the docket. To satisfy a requirement of the docket to address limitations in water supply, the project sponsor

constructed two off-stream, lined storage ponds (Ponds A and B) in November 2004. The storage ponds have a combined holding capacity of 3.6 million gallons and a usable capacity of 3.2 million gallons. Pond A has a holding capacity of 2.6 million gallons and a surface area of 1.106 acres. Pond B has a holding capacity of 1.0 million gallons and a surface area of 0.605 acres.

All water evaporated from the 1.711 acres of two storage ponds, as well as water previously approved for golf course irrigation, is considered to be used consumptively. Water evaporated from the storage ponds will be calculated by the project sponsor, employing a methodology acceptable to the Commission.

The existing surface water intake can convey water into the storage ponds or pump directly into the irrigation system. The intake is equipped with a totalizing flow meter that measures the water withdrawn from Fishing Creek and delivered to Pond A or, if needed, directly into the double-row irrigation system. A new, fully automated pump house was constructed adjacent to Pond B and has the ability to transfer water between the two ponds or move water onto the course. The existing surface water intake also provides the flow for the facility's fire hydrants. The fire line is fed from a tap in the main irrigation line.

With the addition of Well 2, the project sponsor can convey water from multiple sources to its ponds, as well as move water between the ponds. Commission staff recommends that the project sponsor submit a metering plan for review and approval by Commission staff that accurately quantifies the daily consumptive water use at the facility. The plan should contain metering, accurate to within five percent. 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 continue to make quarterly payments to the Commission in lieu of providing actual compensation water.

The project sponsor had requested the increase in consumptive water use to account for the increase in evaporation related to the storage ponds, and the increased withdrawal from Fishing Creek to fill the new storage ponds.

Commission staff recommends denial of the requested increase in stream withdrawal and consumptive water use. The currently approved peak day consumptive water use will accommodate increases in evaporative loss from the new storage ponds. Under provisions in the docket, the project sponsor already must limit its surface water withdrawal to allow a passby

flow in Fishing Creek to protect aquatic resources. At the withdrawal rate of 637 gallons per minute (gpm), the docket directs the project sponsor to allow a passby flow downstream from the intake of not less than 20 percent of annual average daily flow, which equals 4.96 cubic feet per second (cfs) or 2,226 gpm, and to cease all withdrawals when streamflow drops below 4.96 cfs. When this docket condition becomes effective upon the expiration in June 2006 of the current interim passby flow, Commission staff estimates that withdrawals from Fishing Creek will not be permitted a significant percentage of the time.

To provide additional irrigation water for the golf course, the project sponsor requested approval for the withdrawal (30-day average) of 0.065 mgd from Well 2. Commission staff recommends approval of a reduced quantity, based on the sustainable groundwater recharge.

Well 2 is located in a small valley that is the headwaters for an unnamed tributary. The well is an open-rock well, drilled to a total depth of 650 feet, and constructed with 8-inch-diameter steel casing to a depth of 38 feet. Well 2 penetrates approximately 35 feet of unconsolidated overburden materials, and is completed in siltstones, sandstones, and shales of the Irish Valley Member of the Catskill Formation. Major water-bearing zones in the well are stratigraphically controlled, based on the strongly directional drawdown exhibited during the pumping test. The near-vertical bedding and the low-angle faulting appear to be the primary source of water.

The project sponsor conducted a 48-hour, constant-rate pumping test at Well 2, pre-approved by Commission staff, starting on January 22, 2004, and ending on January 24, 2004. The average pumping rate was 64 gpm. Four surface water features (two weirs and two staff gages) and seven groundwater locations were monitored. During the testing period, pumping-induced drawdown was observed at a nearby domestic well. At the conclusion of the test, the net drawdown in Well 2 was approximately 212 feet.

Commission staff reviewed the groundwater availability analysis, pumping test results, and supporting information submitted by the project sponsor. Pumping test results indicate that Well 2 draws water from a semi-confined, moderately transmissive fractured rock aquifer, with near-vertical bedding and low-angle faulting. Recharge is strongly structure controlled, and thus limited. Commission staff recommends approval (30-day average) of 0.037 mgd from Well 2 (which is less than the requested quantity of 0.065 mgd). Should the project's groundwater withdrawal exceed or be expected to exceed the approved amount, the project sponsor must apply for a modification to this docket at that time.

Commission staff recommends that the maximum instantaneous rate of production from Well 2 not exceed 45 gpm. The project sponsor should install appropriate metering on Well 2, monitor withdrawals daily, and report these data quarterly.

The project is subject to 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 2005-03. The project sponsor has provided 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 June 12, 2027. Commission staff recommends the duration of the docket approved be consistent with the prior docket approval. The project is physically feasible, does not conflict with or adversely affect the Commission's Comprehensive Plan, and does not adversely influence the present or future use and development of the water resources of the basin.

Decision

1. Commission Docket No. 20020616, as approved June 12, 2002, is hereby modified to approve a groundwater withdrawal (30-day average) of 0.037 mgd from Well 2 and include consumptive water use related to evaporation from two storage ponds (Ponds A and B).

2. The project's requested surface water withdrawal from Fishing Creek of up to 0.482 mgd, and an increased consumptive use of water of up to 0.482 mgd are denied pursuant to Article 3, Section 3.10, of the Compact.

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

4. Conditions "b," "g," and "k" of Commission Docket No. 20020616, as approved June 12, 2002, are hereby rescinded.

5. The project sponsor shall comply with all Commission regulations, including groundwater withdrawal reporting requirements, as per Commission Regulation §803.43.

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 Fishing Creek, its groundwater source, and the total consumptive water use at the facility. 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 project sponsor shall keep daily records of the project's consumptive water use, and shall report the data to the Commission quarterly, and as otherwise required. Quarterly monitoring reports are due within thirty (30) days after the close of the preceding quarter. The daily quantity of water consumptively used shall be the quantity pumped to the irrigation system, plus evaporative losses from the storage ponds. The project sponsor shall maintain metering on the irrigation system, accurate to within five (5) percent. Commission staff shall review and approve the method of calculation of evaporative loss from the ponds.

8. To satisfy the Commission's current compensation requirements for consumptive water use set forth in Commission Regulation §803.42, the project sponsor shall make quarterly payments to the Commission based on the rate of \$0.14 per 1,000 gallons of water consumptively used by the project in excess of the grandfathered quantity. The daily quantity of water consumptively used shall be the quantity of evaporative loss from the storage ponds, plus the quantity pumped to the irrigation system. Payment amounts shall be calculated by applying this rate to the daily amount of water used consumptively by the project, less the grandfathered quantity of 0.081 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.

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

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

11. The maximum instantaneous rate of production from Well 2 shall not exceed 45 gpm.

12. 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 2. The project sponsor shall report its mitigation within ninety (90) days of the date of this approval.

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

14. 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.

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

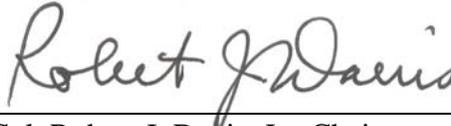
constructed, operated, or maintained in accordance with the terms and conditions of this approval or any other rule, regulation, or order of the Commission.

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 penalties, regardless of the period of noncompliance.

17. All other conditions in Commission Docket No. 20020616, not inconsistent herewith, shall remain effective.

18. Based on Commission Regulation §803.30(a), this approval is effective until June 12, 2027. 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 December 12, 2026, and obtain Commission approval prior to continuing operation beyond June 12, 2027.

By the Commission:



Col. Robert J. Davis, Jr., Chair
U.S. Commissioner

Dated: March 15, 2006



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. 19800205-1

Approval Date: February 14, 1980

Modification Date: March 15, 2006

EPHRATA AREA JOINT AUTHORITY

Groundwater Withdrawal (30-Day Average) of 1.210 mgd from Well 1,
and a Total System Limit Withdrawal (30-Day Average)
of 2.220 mgd, for Public Water Supply,
Borough of Ephrata, 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 §803.43, relating to groundwater withdrawals. The Commission received the application on October 5, 2005.

Description

Purpose. The Commission originally approved the project on February 14, 1980, as Docket No. 19800205. As approved, the project sponsor was authorized to withdraw up to 0.700 million gallons per day (mgd) for use in the public water supply system. The project sponsor has requested approval for an increase in its groundwater withdrawal from Well 1 from 0.700 mgd to 2.000 mgd, as a 30-day average.

Location. The project is located in the Lower Susquehanna River Subbasin, HUC 02050306, Conestoga River Watershed, Manheim/Lititz/Ephrata Valley potentially stressed area, Borough of Ephrata, Lancaster County, Pennsylvania.

Project Features. The project sponsor has requested approval for the withdrawal (30-day average) of 2.000 mgd of water from Well 1. Commission staff is recommending approval of less than the requested quantity, based on the findings below. The well will be used as a source to supply water to a municipal water supply system that currently relies on three groundwater sources and two surface water sources. Well 1 is the subject of this docket modification, Well 2 (Commission Docket No. 19940706) is approved at 0.260 mgd, Well 4 (Commission Docket No. 20040905) is approved at 1.080 mgd. The project sponsor currently is approved to withdraw up to 2.000 mgd from Cocalico Creek and 0.150 mgd from the Mountain Home Springs. The existing Pennsylvania Department of Environmental Protection (PADEP)

permit (PWS No. 7360045) limits the taking from Cocalico Creek to 1.000 mgd due to treatment limitations (contact time). Commission Docket No. 19890305 lists single, source-approved withdrawals and a surface water withdrawal of 2.000 mgd.

In response to a recent Notice of Violation (dated July 6, 2005), Ephrata Area Joint Authority (EAJA) applied for the docket modification.

Well 1 is located on the southern side of the Borough of Ephrata, approximately 200 feet east-northeast of East Fulton Street, and between Lake Street and South Maple Street, immediately adjacent to Gross Run.

Well 1 was drilled in July 1977, to a depth of 205 feet. The well is drilled through the Cocalico Formation (phyllitic shale and siltstone) into carbonate bedrock (Buffalo Springs Formation). The dominant water-yielding zones in Well 1 are in the carbonate bedrock. The well encountered 2 voids at 140 to 148 feet and 155 to 166 feet, and a fractured zone at 181 to 182 feet. The estimated blown yield of the well upon completion was approximately 3,000 gallons per minute (gpm).

Well 1 is constructed with a 12-inch-diameter inner steel casing to a depth of 130 feet, a 16-inch-diameter outer casing to a depth of 35.5 feet, and a 8-inch-diameter open-rock borehole to a completion depth of 205 feet.

The initial water quality testing in 1977 documented elevated levels of manganese and coliform; both were above the secondary drinking water standards. Between 1977 and 1979, the project sponsor conducted an investigation to determine the source of the coliform contamination and correct the problem. In 1979, a private residence that was not connected to the public sewer system was identified and connected; shortly after completion, Well 1 was retested. The second 48-hour, constant-rate pumping test (1979) documented acceptable levels of coliform.

The public water supply system has an existing average daily demand of 1.786 mgd and an existing maximum daily demand of 1.998 mgd. The average daily demand is projected to grow to 2.220 mgd by 2010. The project sponsor serves potable water to the Borough of Ephrata, Ephrata Township, and Clay Township.

The wastewater generated throughout the water system distribution area is discharged to the sanitary sewer system and treated at Ephrata Wastewater Treatment Facilities 1 and 2, which discharge to the Cocalico Creek.

Pumping Test. The project sponsor requested the waiver of a pumping test for Well 1, based on 13 years of operational data (1992 – 2004), and the findings from the 1977 and 1979 48-hour, constant-rate pumping tests. A 48-hour, constant-rate pumping test for Well 1 was initially conducted in September 1977, with a follow-up 48-hour, constant-rate pumping test conducted from November 14-16, 1979. The reported constant pumping rate was 1,500 gpm, and at the conclusion of the test, the net drawdown was 34 feet below the point of reference. The project sponsor has supplied Commission staff with operational data from Well 1, and has

requested a waiver of the Commission's well testing requirements. Commission staff recommends waiving the constant-rate pumping test requirements.

Coordination. The project sponsor received approval from PADEP (Permit No. 3680502A). Commission staff has coordinated with the PADEP's Southcentral Region Office during review of the project, and 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 indicate that Well 1 draws water from the Manheim-Lititz-Ephrata carbonate aquifer in the large valley to the west-northwest of Well 1. Pumping at an average rate of 1,500 gpm, total drawdown in Well 1 was approximately 34 feet. The immediate area is currently serviced by public water and sewer and, therefore, no wells are anticipated to be impacted. Furthermore, Well 1 has been operated in this fashion since 1980 and no adverse impacts to wells have been reported.

Commission staff recommends waiving the constant-rate pumping test requirements, provided the withdrawal is limited to EAJA's established historical withdrawal rate.

The Borough of Akron (Akron) expressed concerns about possible adverse effects to the regional groundwater system from the proposed increase withdrawal from EAJA's Well 1. Well 1 is located on the edge of a carbonate aquifer flow system, bounded to the south by shale hills and to the north by Cocalico Creek. Based on the groundwater availability analysis performed by the project sponsor and other data reviewed by the Commission, Commission staff finds that the resource is sufficient to support a withdrawal at the reduced rate of 1.210 mgd without adverse impacts to the regional aquifer or lowering the local water table. Further, the project sponsor's wastewater treatment plant outfall returns water to Cocalico Creek downstream from the potential area of contribution to Well 1. Commission staff concludes that the Well 1 withdrawal will not adversely impact flow or habitat in Cocalico Creek.

Previous testing conducted at EAJA's Well 4 indicated that test-induced drawdown occurred only in wells to the west and north of Well 4, and no drawdown was observed in wells drilled in the Cocalico Formation or New Oxford Formation to the south and east. These results indicate that the phyllitic shales and siltstones of the Cocalico Formation form a low permeability barrier. The Cocalico Formation is one of the lowest permeability aquifers in the Susquehanna River Basin, so this result is not unexpected. The carbonate aquifers (Buffalo Springs) do not adversely impact the wells in the surrounding less permeable shales.

In order to confirm that the operation of Well 1 does not adversely impact surface water, Commission staff recommends EAJA submit a surface water monitoring plan for review and approval by Commission staff.

Commission staff recommends approval of a 30-day average withdrawal of 1.210 mgd from Well 1. Commission staff recommends approval of a peak instantaneous pumping rate of 1,500 gpm for Well 1, the current pump capacity.

Commission staff recommends that the project sponsor keep daily records of the metered withdrawal and weekly recording of the water level, and report these data to the Commission annually.

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 16 percent in 2004, 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 2005-03. The project sponsor has provided all proofs of notification, as required by Commission Regulation §803.25.

No adverse impacts on other area groundwater withdrawals and on the environment 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.

The project sponsor has submitted its monitoring data as required in Commission Docket Nos. 19800205 and 19940706, and self reported exceeding of the approved groundwater withdrawal. The project sponsor, when notified of the exceedences by the Commission, submitted a request to increase its approved quantity, 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 exceeding the approved groundwater withdrawal limits. Commission staff recommends acceptance of the project sponsor's proposed settlement of \$41,441.

Decision

1. The project's groundwater withdrawal of 1.210 mgd (30-day average) from Well 1 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 Well 1, accurate to within five (5) percent, to measure its groundwater

withdrawal. The project sponsor shall keep daily records of the metered withdrawal and weekly water levels from Well 1, and the metered withdrawals from all other sources. 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. The Commission reserves the right to inspect all measurement equipment and audit all measurement records.

5. The maximum instantaneous rate of production from Well 1 shall not exceed 1,500 gpm.

6. Within sixty (60) days from the date of this approval, the project sponsor shall submit a surface water monitoring plan with a proposed executable timeline for review and approval.

7. The project sponsor has offered a settlement by agreement pursuant to Commission Regulation §805.27 in the amount of \$41,441 for its groundwater withdrawal found to be in noncompliance with Commission Docket Nos. 19800205 and 19940706, 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.

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

9. The project sponsor shall notify the Commission of any impacts or alleged impacts identified by or reported to the project.

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

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 fines and penalties, regardless of the period of noncompliance.

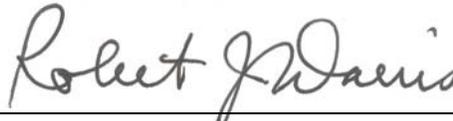
15. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment.

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 February 14, 2010. The project sponsor shall submit a renewal application by August 8, 2009, and obtain Commission approval prior to continuing operation beyond February 14, 2010.

18. 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. Robert J. Davis, Jr., Chair
U.S. Commissioner

Dated: March 15, 2006



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. 20060306

Approval Date: March 15, 2006

NEWVILLE BOROUGH WATER AND SEWER AUTHORITY

Surface Water Withdrawal of 0.500 mgd
from Big Spring Creek, for Public Water Supply,
and a Total System Withdrawal Limit of 0.500 mgd from All Sources,
Newville Borough, 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 §803.44, relating to surface water withdrawals. The Commission received the application on January 25, 2005, and supplemental information on February 15, 2006.

Description

Purpose. The purpose of the application is to request approval for a new surface water withdrawal to supplement an existing source of supply and to provide operational flexibility for the public water supply system.

Project Location. The project is located in the Lower Susquehanna Subbasin, HUC 02050305, Big Spring Creek Watershed, Newville Borough, Cumberland County Pennsylvania.

Project Features. The project sponsor has requested approval for a maximum daily withdrawal of 0.500 million gallons per day (mgd) of water from Big Spring Creek. The project sponsor currently obtains all of its water for public water supply from Cool Spring in Newville Borough (Commission Docket No. 19901107). The project sponsor has applied to the Commission for an increased withdrawal from Cool Spring that is being addressed in a modification to that docket.

The project sponsor plans to locate an intake on Big Spring Creek, approximately 10 feet upstream of the confluence with Cool Spring. Water withdrawn from Big Spring Creek will be directed to the same pumping station that is currently used for Cool Spring. The withdrawal from Cool Spring flows by gravity to a pumping station and is then lifted to the Newville Borough Water and Sewer Authority (NBWSA) filtration plant. The pumping station has

3 individual pumps rated at 190 gallons per minute (gpm), 250 gpm, and 325 gpm. According to the project sponsor, NBWSA typically operates the 190-gpm pump as primary and the 250-gpm pump as secondary. The 325-gpm pump serves as backup only, to either the primary or secondary pumps.

Considering operation of the system, the combined maximum instantaneous pumping capacity is 440 gpm. NBWSA's filter plant has a permitted capacity of 500,000 gallons per day (gpd). NBWSA currently has a 50,000-gallon elevated storage tank and a 250,000-gallon elevated storage tank for finished water storage, in addition to a 100,000-gallon clear well.

According to information provided by the Pennsylvania Department of Environmental Protection (PADEP), unaccounted for water presently is approximately 27 percent.

NBWSA serves the Borough of Newville and parts of North Newton and West Pennsboro Townships. The water supply system has an existing average demand of 0.250 mgd and an existing maximum daily demand of 0.337 mgd. The average and maximum daily demands are projected to be 0.305 and 0.412 mgd, respectively, by 2030.

Wastewater from the system is discharged approximately 800 feet downstream of the proposed point of taking.

Coordination. Commission staff has coordinated with the PADEP Southcentral Region Office during review of the project. The project sponsor has submitted an allocation request to the PADEP in December 2004, in conjunction with this application. PADEP staff has reviewed this docket for consistency with its requirements. PADEP has issued draft permit WA 21-419B and is withholding issuance of the final permit pending Commission action.

Findings

The project is subject to Commission approval and reporting requirements, as per Commission Regulation §803.44.

The project sponsor has requested approval for a maximum 30-day average surface water withdrawal of 0.500 mgd and a peak day of 0.500 mgd from Big Spring Creek.

Commission staff recommends approval of the requested quantity from Big Spring Creek. Commission staff recommends that this withdrawal be separately metered from the taking from Cool Spring.

The project sponsor proposes to locate the intake in Big Spring Creek immediately upstream from the point Cool Spring discharges to Big Spring Creek. Water withdrawn from Cool Spring and Big Spring Creek flows by gravity to a pump station, where it is lifted to the NBWSA filtration plant. Commission staff has determined the maximum instantaneous pumping capacity of NBWSA to be 440 gpm. Commission staff recommends that the proposed withdrawal from Big Spring Creek be limited to a maximum instantaneous pumping rate equal to

440 gpm. The pumping station should be equipped with a totalizing flow meter capable of measuring the instantaneous pumping rate.

At the proposed intake, Big Spring Creek is classified as a class C/D cold-water fishery (CWF) (Title 25, Chapter 93, Pennsylvania Code). Big Spring Creek is an ungaged stream situated in a karst carbonate terrain. The stream begins at Big Spring, a large karst spring that emerges from collapsed conduits that were erosionally truncated by incision of the stream, and has no perennial tributaries along its 7.75-mile length.

Based on the stream's classification, its geologic and geographic setting, and analysis of limited low flow data for Big Spring, Commission staff has determined that the proposed withdrawal of 440 gpm is less than 10 percent of the estimated 7-day, 10-year low flow (Q7-10) at the point of taking. Therefore, a passby flow is not required.

The withdrawal is subject to the Commission's water conservation requirements, as per Commission Regulation §804.20(a). The water system is 100 percent metered; however, system losses reported for 2003 are approximately 27 percent. The unaccounted for water loss of greater than 20 percent exceeds the maximum specified in Commission Regulation §804.20(a)(1). Commission staff recommends that the project sponsor achieve 100 percent compliance with the requirements by March 15, 2011. The project sponsor should report to the Commission annually on the progress made pursuant to this requirement, and must petition the Commission for an extension should unforeseen events occur that preclude compliance with the March 15, 2011, deadline.

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

The project 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.

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 surface water withdrawal from Big Spring Creek of 0.500 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 surface water withdrawal reporting requirements, as per Commission Regulation §803.44.

4. The project sponsor shall install and then maintain a meter on the withdrawal from Big Spring Creek, accurate to within five (5) percent. The project sponsor shall notify the Commission, in writing, when the meter is installed.

5. The project sponsor shall keep daily records of the project's surface water withdrawal from Big Spring Creek, and shall report the data to the Commission annually, and as otherwise required. Annual monitoring reports are due within sixty (60) days after the close of the preceding year.

6. The maximum instantaneous rate of withdrawal from the Big Spring Creek shall not exceed 440 gpm.

7. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §804.20(a). The project sponsor shall have reduced system losses and achieved 100 percent compliance with the requirements by March 15, 2011. The project sponsor shall report to the Commission annually on the progress made pursuant to this requirement. The project sponsor must petition the Commission for an extension should unforeseen events occur that preclude compliance with the March 15, 2011, deadline.

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

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

10. Commission approval shall not be construed to exempt the project sponsor from obtaining all necessary permits and/or approvals required for the project from other federal, state, or local government agencies having jurisdiction over the project. The Commission reserves the right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.

11. The Commission reserves the right to inspect or investigate the project facility, and the project sponsor shall allow authorized employees or agents of the Commission, without advance notice or a search warrant, at any reasonable time and upon presentation of appropriate credentials, and without delay, to have access to and to inspect all areas where the project is being constructed, operated, or maintained. Such employees or agents shall be authorized to conduct tests or sampling; to take photographs; to perform measurements, surveys, and other tests; to inspect the methods of construction, operation, or maintenance; to inspect all

measurement equipment; to audit, examine, and copy books, papers, and records pertinent to any matter under investigation; and to take any other action necessary to assure that the project is constructed, operated, or maintained in accordance with the terms and conditions of this approval or any other rule, regulation, or order of the Commission.

12. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the Commission may suspend, modify, or revoke its approval of same, and may impose appropriate penalties. Upon written notice by the Commission, the project sponsor shall have thirty (30) days to correct such noncompliance, unless an alternate period is specified in the notice. Nothing herein shall preclude the Commission from exercising its authority to immediately modify, suspend, or revoke this approval where it determines exigent circumstances warrant such action, or from imposing fines and penalties, regardless of the period of noncompliance.

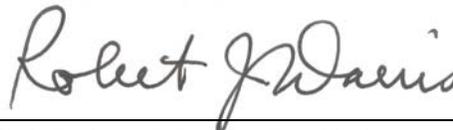
13. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment.

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

15. This approval is effective until March 15, 2031. The project sponsor shall submit a renewal application by September 15, 2030, and obtain Commission approval prior to continuing operation beyond March 15, 2031.

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. Robert J. Davis, Jr., Chair
U.S. Commissioner

Dated: March 15, 2006



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. 19901107-1

Approval Date: November 8, 1990

Modification Date: March 15, 2006

NEWVILLE BOROUGH WATER AND SEWER AUTHORITY

Surface Water Withdrawal of 0.500 mgd (Peak Day)
from Cool Spring, for Public Water Supply,
Newville Borough, 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 §803.44, relating to surface water withdrawals. The Commission received the current modification request on January 25, 2005.

Description

Purpose. The purpose of the application is to request approval for an increase in the withdrawal of surface water from Cool Spring for distribution in a municipal water supply system. The original Commission approval for the withdrawal from Cool Spring was issued on November 8, 1990, as Docket No. 19901107 (docket). In the docket, the project was approved for a surface water withdrawal of 0.500 million gallons per day (mgd), for a period of 5 years, at which time the approval was reduced to 0.350 mgd, subject to conditions enumerated in the docket. This docket modification rescinds certain provisions and increases the withdrawal quantity from 0.350 mgd to 0.500 mgd.

Findings

The project sponsor utilizes Cool Spring as a source of supply to a municipal water supply system. The project's approved quantity of 0.350 mgd was established to meet the projected demand of the system through the year 2010, and to provide incentive for the project sponsor to implement water conservation measures on the system. The peak day demand projection for the year 2030 is 0.412 mgd.

This modification is being done in conjunction with an action to approve a new withdrawal of 0.500 mgd from Big Spring Creek (Commission Docket No. 20060306). The

requested quantity of 0.500 mgd matches the capacity of the Newville Borough Water and Sewer Authority (NBWSA) treatment plant.

The withdrawal from Cool Spring flows by gravity to a pumping station and is then lifted to the NBWSA filtration plant. The pumping station has 3 individual pumps rated at 190 gallons per minute (gpm), 250 gpm, and 325 gpm. According to the project sponsor, NBWSA typically operates the 190-gpm pump as primary and the 250-gpm pump as secondary. The 325-gpm pump serves as backup only, to either the primary or secondary pumps.

Commission staff has determined the maximum instantaneous pumping capacity of NBWSA to be 440 gpm. Commission staff recommends that the proposed withdrawal from both sources be limited to a maximum instantaneous pumping rate equal to 440 gpm. The pumping station should be equipped with a totalizing flow meter capable of measuring the instantaneous pumping rate.

Based on the stream's classification, its geologic and geographic setting, and analysis of limited low flow data for Cool Spring, Commission staff has determined that the proposed withdrawal of 440 gpm is less than 10 percent of the estimated 7-day, 10-year low flow (Q7-10) at the point of taking. Therefore, a passby flow is not required.

Commission staff recommends the withdrawal from Cool Spring be individually metered.

The withdrawal is subject to the Commission's water conservation requirements, as per Commission Regulation §804.20(a). The water system is 100 percent metered; however, system losses reported for 2003 are approximately 27 percent. The unaccounted for water loss of greater than 20 percent exceeds the maximum specified in Commission Regulation §804.20(a)(1). Commission staff recommends that the project sponsor achieve 100 percent compliance with the requirements by March 15, 2011. The project sponsor should report to the Commission annually on the progress made pursuant to this requirement, and must petition the Commission for an extension should unforeseen events occur that preclude compliance with the March 15, 2011, deadline.

In accordance with the Memorandum of Understanding with the Pennsylvania Department of Environmental Protection (PADEP), Commission staff recommends that this approval not become effective until such time as the project sponsor can certify to the Commission that it has received an approval from PADEP for the use of 0.500 mgd from Cool Spring.

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 November 16, 2015. Commission staff recommends the duration of the docket approved be consistent with the prior docket approval. The project is physically feasible, does not conflict

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

Coordination. Commission staff has coordinated with the PADEP Southcentral Region Office during review of the project. The project sponsor has submitted an allocation request to the PADEP in December 2004, in conjunction with this application. PADEP staff has reviewed this docket for consistency with its requirements. PADEP has issued draft permit WA 21-419B and is withholding issuance of the final permit pending Commission action.

Decision

1. Commission Docket No. 19901107, as approved November 8, 1990, is hereby modified to approve a withdrawal of 0.500 mgd (peak day) from Cool Spring.

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

3. Conditions "a," "b," "c," and "d" of Commission Docket No. 19901107, as approved November 8, 1990, are hereby rescinded.

4. The maximum instantaneous rate of withdrawal from Cool Spring shall not exceed 440 gpm.

5. The project sponsor shall comply with all Commission regulations, including surface water withdrawal reporting requirements, as per Commission Regulation §803.44.

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

7. The project sponsor shall keep daily records of the project's surface water withdrawal from Cool Spring, and shall report the data to the Commission annually, and as otherwise required. Annual monitoring reports are due within sixty (60) days after the close of the preceding year.

8. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §804.20(a). The project sponsor shall have reduced system losses and achieved 100 percent compliance with the requirements by March 15, 2011. The project sponsor shall report to the Commission annually on the progress made pursuant to this requirement. The project sponsor must petition the Commission for an extension should unforeseen events occur that preclude compliance with the March 15, 2011, deadline.

9. This approval shall not become effective until the project sponsor certifies to the Commission that it has received a permit from PADEP authorizing the increased taking of water from Cool Spring.

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

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.

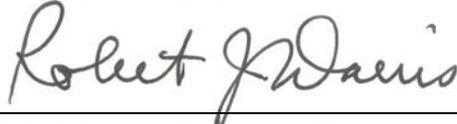
14. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the Commission may suspend, modify, or revoke its approval of same, and may impose appropriate penalties. Upon written notice by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

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. All other conditions in Commission Docket No. 19901107 not inconsistent herewith shall remain effective.

17. Based on Commission Regulation §803.30(a), this approval is effective until November 16, 2015. 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 May 16, 2015, and obtain Commission approval prior to continuing operation beyond November 8, 2020.

By the Commission:



Dated: March 15, 2006

Col. Robert J. Davis, Jr., Chair
U.S. Commissioner



SUSQUEHANNA RIVER BASIN COMMISSION

1721 North Front Street • Harrisburg, Pennsylvania 17102-2391

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Docket No. 20060307

Approval Date: March 15, 2006

ARENDSVILLE MUNICIPAL AUTHORITY

Groundwater Withdrawal (30-Day Average) of 0.122 mgd from Well 5,
and a Total System Withdrawal Limit (30-Day Average) of 0.200 mgd,
for Public Water Supply,
Arendtsville Borough, Adams 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 July 6, 2004.

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 02050305, West Conewago Creek Watershed, Arendtsville Borough, Adams County, Pennsylvania.

Project Features. The project sponsor has requested approval for the withdrawal (30-day average) of 0.230 million gallons per day (mgd) from Well 5. Arendtsville Municipal Authority (AMA) will use the well as a source for the public water supply system that currently relies on three wells: Wells 1, 2, and 3. The Commission previously approved Well 3 as Docket No. 19880903 on September 8, 1988. Wells 1 and 2 predate Commission Regulation §803.43, relating to groundwater withdrawal. Commission staff recommends approval of an average daily withdrawal of less than the requested amount in consideration of: (1) the yield of existing sources; (2) the probable sustainable yield of Well 5; and (3) projected needs, as described below.

Well 5 was drilled in the dominant shale member of the Gettysburg Formation, which consists predominantly of poorly bedded shale with interbedded fine-to-medium-grained sandstone. Bedding strikes northeast-southwest and dips moderately to the northwest. The well is cased with 10-inch steel casing to a depth of 70 feet, and has an open-rock borehole from a depth of 70 feet to the bottom of the well at 250 feet.

Well 5 is located approximately one-half mile southeast of the center of Arendtsville Borough, approximately 1,400 feet south-southeast of PA Route 234, and approximately 1,000 feet west-southwest of Conewago Creek. AMA developed Well 5 for redundancy on the eastern side of Arendtsville Borough, removed from the site of Wells 1 and 2, which are located on the west side of Arendtsville Borough, and Well 3, which is located northeast of Arendtsville Borough. Wells 1 and 2 are located in close proximity to one another, and if both were lost to a single contamination incident, AMA could not meet its system demand with Well 3.

AMA's service area consists of Arendtsville Borough and part of adjacent Butler Township. Current average daily withdrawals at Wells 1, 2, and 3 are 0.026, 0.026, and 0.034 mgd, respectively. The current system average daily demand is 0.086 mgd, and projected average daily demand through 2030 is 0.200 mgd.

Pumping Test. A 48-hour constant-rate pumping test of Well 5 was conducted on May 18-20, 2004, with prior Commission approval. In addition to the pumping well, 6 observation wells were monitored during the test, including Wells 1 and 2, a well at AMA's wastewater treatment plant, and 3 off-site residential wells located 1,730 feet to the southwest, 1,525 feet to the south-southeast, and 1,962 feet to the north-northeast. Ten other points monitored surface water stage or flow, and shallow groundwater levels within wetlands or along stream corridors.

Precipitation in the amount of 0.6 inches occurred on the first day of the pumping test.

Pumping at a rate of 160 gallons per minute (gpm), drawdown at the end of the 48-hour test in the pumping well was approximately 162 feet below ground surface (bgs). During testing, the water level in Well 5 was drawn down below the water-bearing zones at 90-91 feet and 145-147 feet, and to the level of the water-bearing zone at 165-170 feet. Following cessation of pumping, the water level at the pumping well recovered quickly, reaching its pre-test static level within five hours, indicating that either recharge or leakage occurred during the test.

Pumping of Well 5 caused drawdown at one observation well (5.3 feet at the residential well located along bedding strike, 1,730 feet from Well 5) and several wetland piezometers. However, the precipitation event caused some recharge and complicated interpretation of the test results, particularly at the shallow observation points.

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.

Commission staff reviewed the groundwater availability analysis, pumping test results, and supporting information submitted by the project sponsor. Pumping test results indicate that

Well 5 draws water from a moderately transmissive fractured rock aquifer. Pumping at the tested rate of 160 gpm will likely result in the dewatering of some of the water-bearing zones in Well 5, with resultant increased drawdown and drawdown in the wetlands. Commission staff finds that prolonged pumping at a rate of 160 gpm would likely diminish the well's yield and adversely affect nearby wetlands. Therefore, Commission staff recommends approval of a peak instantaneous pumping rate of 85 gpm from Well 5.

At the reduced rate of withdrawal, Commission staff has concluded that the withdrawal should not have a significant adverse impact on private water supply wells in the area or on wetlands, spring flow, or streamflow. Commission staff recommends that the project sponsor monitor wetland piezometer MP 16 and wetland piezometers MP 14S or MP 14D during the first year of operation of Well 5. The project sponsor should submit a monitoring plan for review and approval by Commission staff prior to operation of Well 5.

The projected average daily demand through 2030 is 0.200 mgd. Commission staff recommends approval of a total system withdrawal of 0.200 mgd, which is consistent with the sustainable yields of existing sources and will satisfy the projected system demand through 2030.

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 in 2004, the system had an unaccounted for water loss of 15 percent, 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 0.122 mgd (30-day average) from Well 5, and a total system withdrawal limit (30-day average) of 0.200 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 weekly records of the metered withdrawal and weekly water levels in Well 5. 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 5. The project sponsor shall notify the Commission in writing when the meter is installed.

6. The maximum instantaneous rate of production from Well 5 shall not exceed 85 gpm.

7. Within sixty (60) days from the date of this approval and prior to operating Well 5, the project sponsor shall develop a plan for monitoring the wetlands. This plan shall include a schedule for implementation of the plan and a description of the proposed monitoring, including locations and instrumentation. Water level measurements shall be recorded hourly in the monitoring points and at Well 5. The overall monitoring period shall include a 30-day period prior to the initiation of operation of Well 5, and the period spanning the first year of operation of Well 5. Upon approval of the monitoring plan, the project sponsor shall implement the monitoring plan and, at the conclusion of the monitoring period, supply the results of the monitoring to the Commission. The monitoring results shall be documented in an interpretive report, including the monitoring data in digital and graphical form, due sixty (60) days after the one-year monitoring period, or otherwise as directed by Commission staff. Should the monitoring prove to be inconclusive, the Commission reserves the right to require additional monitoring, as necessary.

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

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

10. 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 penalties, regardless of the period of noncompliance.

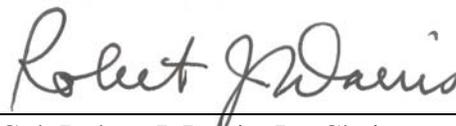
14. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment.

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 March 15, 2031. The project sponsor shall submit a renewal application by September 15, 2030, and obtain Commission approval prior to continuing operation beyond March 15, 2031.

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. Robert J. Davis, Jr., Chair
U.S. Commissioner

Dated: March 15, 2006



Exhibit B12

SUSQUEHANNA RIVER BASIN COMMISSION

1721 North Front Street • Harrisburg, Pennsylvania 17102-2391

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

Docket No. 20060308

Approval Date: March 15, 2006

CONECTIV MID MERIT, LLC DELTA POWER PLANT PROJECT

Surface Water Withdrawal of Up to 19.010 mgd, from Susquehanna River,
and Consumptive Water Use of Up to 8.720 mgd, for Electricity Generation,
Drumore and Peach Bottom Townships, Lancaster and York Counties, 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 consumptive use of water; and §803.44, relating to surface water withdrawals. The Commission received the application on May 21, 2001, followed by additional information submitted by the project sponsor on January 20, 2006.

Description

Purpose. The purpose of the application is to request approval for the surface water withdrawal and consumptive use of water for electricity generation.

Location. The project is located in the Lower Susquehanna Subbasin, HUC 02050306. The surface water withdrawal is located in Drumore Township, Lancaster County, and the consumptive water use is located in Peach Bottom Township, York County, Pennsylvania.

Project Features. The project sponsor has requested approval for the surface water withdrawal of up to 19.010 million gallons per day (mgd), and the consumptive use of water of up to 8.720 mgd. The withdrawal and consumptive use of water are intended to support operation of a proposed new combined-cycle electric generation facility nominally rated at 1,100 megawatts.

The facility will consist of six combustion turbines, six heat recovery steam generators, two steam turbine/generators, and two multi-cell wet mechanical draft cooling towers. There will also be water treatment equipment, wastewater treatment equipment, and a stormwater management system. The facility is expected to run year-round as a “mid-merit” generation plant and will operate approximately 4,000 hours per year in response to demand for electricity.

The primary fuel will be natural gas. Low sulfur fuel oil will be used as a backup fuel on a limited basis, primarily during natural gas curtailments. The plant will be constructed to allow for the operation of the simple-cycle combustion turbines exclusively, as well as with the combined-cycle configuration. The primary operation of the plant will be in the combined-cycle mode.

Water demand for the proposed project includes cooling tower makeup water, makeup water for condensate blowdown, process water for emissions control and combustion enhancement, fire protection water, and potable/sanitary water. The Conowingo Reservoir of the Susquehanna River will be the source for makeup and process water, and the Borough of Delta's public water system will be the source of potable water.

Water will be withdrawn through a new surface water intake extending into the Susquehanna River in the Conowingo Reservoir. Plant makeup water will undergo pretreatment to reduce the suspended solids, control pH, and prevent bio-fouling. A process water treatment system will produce process grade (demineralized) water for use in emissions control, combustion enhancement, and boiler makeup. Fire protection and other plant services that do not require demineralized process grade water will be served by pretreated makeup water.

The facility's potable water supply requirements will be satisfied through an interconnection to the public water supply of the Borough of Delta. All sanitary wastes will be discharged to a sewer for treatment at the Borough of Delta's sewage treatment plant.

Site runoff will be collected in three stormwater detention basins and discharged in accordance with a National Pollutant Discharge Elimination System (NPDES) permit to an unnamed tributary to the Susquehanna River.

Coordination. Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP) Southcentral Region Office and the Pennsylvania Fish and Boat Commission (PFBC) during review of the project.

Findings

The project is subject to Commission approval and reporting requirements, as per Commission Regulations §803.42 and §803.44.

The project proposes to supply most of its water needs by withdrawing water from the Susquehanna River. Commission staff recommends that the withdrawal be metered and monitored on a daily basis.

The project sponsor proposes to construct a new surface water intake comprised of a submerged passive wedge-wire screen intake system designed to minimize potential aquatic impacts associated with impingement and entrainment through the use of technology consistent with standards defined in the Clean Water Act. The maximum instantaneous withdrawal rate at the intake is estimated to be 13,200 gallons per minute (gpm).

Any water withdrawn from the Conowingo Reservoir that is not returned to the reservoir is consumed through evaporation. The consumptive loss of cooling tower makeup water will result from evaporation and drift in the cooling towers. The water that is not consumed will be returned to the river as cooling tower blowdown. During plant operation, the cooling towers will have a continuous blowdown stream to control the build up of concentration of solids in the circulating water.

Consumptive loss of process water will result from combustion turbine intake air fogging and nitrous oxide control. Intake air fogging will increase turbine power output when ambient air temperatures become high, and injection of water into the turbines will reduce nitrous oxide gases generated by fuel combustion. Both processes will completely consume all process water through evaporation.

Under continuous operation at peak heat rate, the maximum 30-day average withdrawal will be approximately 14.730 mgd. Under average operation, the facility will withdraw up to approximately 6.070 mgd. The total available pumping capacity is 19.010 mgd.

Under continuous operation at peak heat rate and emissions control, the total maximum 30-day average and peak consumptive water use will be approximately 8.720 mgd. Under typical operation, the facility will consumptively use a total of approximately 3.650 mgd on an average annual basis. Of those totals, evaporative loss from the cooling tower system is estimated to average 2.420 mgd annually, with maximum monthly and peak day estimates both expected to be 6.010 mgd. Consumptive loss of process water is expected to average 1.230 mgd on an annual basis and 2.710 mgd as a maximum monthly average and peak day total.

The approximate median flow in the vicinity of the intake is about 22,300 cubic feet per second (cfs), based on measurements of streamflow made by the U.S. Geological Survey at the gage near Marietta, Pennsylvania, which is 24 miles upstream of the proposed intake location. The records also showed that the 7-day, 10-year low flow (Q7-10) at Marietta is approximately 2,695 cfs. The project's proposed maximum instantaneous withdrawal rate of 13,200 gpm (29.3 cfs) is less than 10 percent of the Q7-10. Therefore, Commission staff finds that a passby flow is not required at the point of withdrawal to protect aquatic resources and downstream users.

Best available technology will be used in the design of the intake and discharge structures. The intake water will be filtered through wedge-wire screens that are designed to protect aquatic life and meet the standards proposed by the United States Environmental Protection Agency for implementing Section 316(b) of the Clean Water Act. Diffusers will enhance mixing and diffusion of cooling tower blowdown in the Conowingo Reservoir to minimize thermal impacts of the plant discharge.

In order to minimize consumptive water use, a number of suitable small process flows will be recycled from plant systems and combined with the river water intake flow prior to entry into the cooling tower basins. In addition, small intermittent flows of filtrate, concentrate, and membrane cleaning waters from a new process water treatment system, as well as quenched heat

recovery steam generator blowdown and treated process water drainage, will be routed to the cooling towers for reuse as cooling water.

To achieve water conservation, plans will be implemented to conserve water and reduce wasteful usage. In addition, Conectiv Mid Merit, LLC will develop contingency plans to be implemented in the event of a water shortage emergency.

Stormwater runoff from the impermeable areas of the project site will be collected and conveyed to three detention basins and discharged under the terms of a NPDES permit. Stormwater discharges will be to an unnamed tributary of the Susquehanna River that flows to the Conowingo Reservoir downstream of the proposed intake structure.

Water supply requirements for potable water applications will amount to approximately 3,000 gallons per day. The Delta Borough Council has approved a new permanent water connection from the water main to the site for this amount.

In addition to maximizing reuse of water to minimize water withdrawal as much as practicable, the project sponsor also considered other sources of water and alternate cooling technologies. The proposed surface water withdrawal from the Susquehanna River proved to be the most viable, reliable, and economical source for process water.

Neither the use of on-site wells nor tapping into local municipal distribution systems were determined to be technically viable options to meet the process water needs of the facility. The project sponsor is proposing the installation of mechanical draft cooling towers for heat dissipation needs because the technology requires 95 percent smaller water withdrawals than once-through cooling techniques, and poses lesser threats of thermal impacts to the receiving stream. The additional consumptive water use associated with mechanical draft cooling towers is not expected to adversely impact the Susquehanna River. As an alternate to mechanical draft cooling towers, the project sponsor investigated the use of an air-cooled condenser for facility cooling. The air-cooled condenser was rejected based on several factors, including the potential decrease in the plant's electric generation in hot weather when demand for electricity is commonly the greatest, economic impacts, higher profile site structures, equipment noise impacts, and the need for a larger facility footprint.

All water used for heat dissipation and fuel conditioning is considered to be consumptively used. Commission staff recommends that the project's total daily consumptive water use be calculated as the difference between inflow and discharge. Commission staff recommends that the project sponsor install sufficient metering at all the input and discharge points to accurately measure the many various uses, reuses, and losses of water related to the complex operations at the electrical generating facility.

The project sponsor has requested a withdrawal and consumptive water use of up to 19.010 mgd and 8.720 mgd, respectively. To reduce overall water withdrawals, the facility will recycle and reuse internally generated waste streams to the maximum extent practicable. Commission staff is recommending approval of the requested amounts. Should the project's

future consumptive water use exceed or be expected to exceed 8.720 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 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. 2005-03. The project sponsor has provided all proofs of notification, as required by Commission Regulation §803.25.

No adverse impacts to other area surface water 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 surface water withdrawal from the Susquehanna River of up to 19.010 mgd, and the consumptive use of water of up to 8.720 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 surface water withdrawal reporting requirements, as per Commission Regulation §803.44.

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 water system. The project sponsor shall notify the Commission when meters have been installed. 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 input to the system from the Susquehanna River intake, and the quantity of wastewater discharged through the river outfall.

6. The project sponsor shall install and maintain metering on the surface water withdrawal, accurate to within five (5) percent, and keep daily records of the project's surface water withdrawal. The project sponsor shall report the data to the Commission quarterly, and as otherwise required. Quarterly monitoring reports are due within thirty (30) days after the close of the preceding quarter.

7. The maximum instantaneous rate of withdrawal from the Susquehanna River shall not exceed 13,200 gpm (29.3 cfs).

8. 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 in quantity of water input to the system from the Susquehanna River intake, and the quantity of wastewater discharged through the river outfall. 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.

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

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 fines and

penalties. Upon written notice by the Commission, the project sponsor shall have thirty (30) days to correct such noncompliance, unless an alternate period is specified in the notice. Nothing herein shall preclude the Commission from exercising its authority to immediately modify, suspend, or revoke this approval where it determines exigent circumstances warrant such action, or from imposing fines and penalties, regardless of the period of noncompliance.

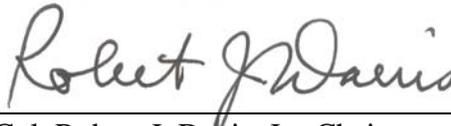
13. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment.

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

15. This approval is effective until March 15, 2031. The project sponsor shall submit a renewal application by September 15, 2030, and obtain Commission approval prior to continuing operation beyond March 15, 2031.

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

By the Commission:



Col. Robert J. Davis, Jr., Chair
U.S. Commissioner

Dated: March 15, 2006