

Susquehanna River Basin Commission

a water management agency serving the Susquehanna River Watershed



May 14, 2007

TO ALL CONCERNED:

At the March 14, 2007 meeting, the draft minutes of the December 5, 2006 Commission meeting were approved as written. Please attach this notice to your copy of the December 5, 2006 minutes.

- DRAFT -

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

**MINUTES OF THE
SUSQUEHANNA RIVER BASIN COMMISSION
March 14, 2007
#2007-01**

The meeting was held at the Ramada Conference Center Altoona, 1 Sheraton Dr., Altoona, Pennsylvania.

ROLL CALL

Commissioners Present

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

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

Mr. Herbert Sachs, Program Manager, Water
Policy and Security Div., MDE

Col. Peter W. Mueller, District Engineer, USACE,
Baltimore District accompanied by U.S. Member

**Alternate Commissioners
and Advisors Present**

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

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

Staff Present

Mr. Paul O. Swartz, Executive Director

Mr. Thomas W. Beauduy, Deputy Director

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

Ms. Susan S. Obleski, Director of Communications

Mr. David W. Heicher, Chief, Watershed
Assessment & Protection Division

Mr. Duane A. Friends, Chief Admin. Officer

Mr. Richard A. Cairo, General Counsel

Ms. Deborah J. Dickey, Secretary to the Comm.

Also Attending

Mr. Gary Obleski, Science & Technology Advisor,
PADEP

Ms. Pamela G. Bishop, Assistant Counsel, Bureau
of Regulatory Counsel, PADEP

INTRODUCTION/WELCOME

Chairman Lynch introduced himself as New York Governor Elliot Spitzer's representative to the Commission and welcomed the audience to the Commission meeting. He commented on the value of meeting in various parts of this large and diverse river basin to obtain a first hand view of local water resources concerns. It also helps to reinforce the Commission's goal of having the member jurisdictions work together to address the water needs of the entire river basin.

Commissioner Myers introduced herself as Pennsylvania Governor Rendell's and PADEP Secretary McGinty's representative to the Commission. She mentioned the Governor's Flood Preparedness and Flood Mitigation Initiative under which \$2.5 million is designated in the Governor's current budget proposal for local government flood planning assistance and establishment of an interagency task force to coordinate federal, state and local efforts. Other water management efforts underway in Pennsylvania include storm water management training and update of the State Water Plan. Finally, she noted that the Commonwealth recently prevailed in an important public water rights case that confirmed the right of public access to the Little Juniata River.

Commissioner Mueller introduced himself as the U.S. representative and mentioned how well the Commission's jurisdictional area matches up with the jurisdictional area of the Baltimore District – U.S. Army Corps of Engineers. This allows the Baltimore District to coordinate very effectively with other water management agencies through the SRBC. Therefore, the Corps of Engineers is very pleased to be involved in the Commission's activities.

Commissioner Sachs introduced himself as representing the State of Maryland and MDE Deputy Secretary Bob Summers. Though Maryland has only about 1% of the Susquehanna basin's land area, it was very active in the movement to form the Commission some 36 years ago. Commissioner Sachs was himself a member of the drafting committee for the Susquehanna Compact, knows the history of the Commission very well, and has followed the progress of the Commission over these many years.

Of course, the importance of the Susquehanna to the living resources and water quality of the Chesapeake Bay was a large factor in Maryland's support for the Compact. There was also the realization that the river would be an important future source of water supply for the growing Baltimore metropolitan area. He concluded with a reference to Maryland's current efforts to integrate water resources planning into local land use planning and how water quantity issues would almost certainly become more and more prominent in this planning process.

The Executive Director noted that the Commission was pleased to be meeting today in the Juniata Subbasin and went on to provide several pieces of information about the subbasin, including the fact that it is the second largest in land area of the six subbasins comprising the Susquehanna River Basin. The subbasin's population is about 350,000, and industry, power generation and municipal supply account for 90% of its water use. He went on with other facts and figures such as stream mileage, numbers of flood control structures, flood forecast points, miles of stream impairment, and land use. He also mentioned local watershed organizations and

the Juniata Clean Water Partnership, an umbrella organization that has developed a river conservation plan. He concluded by pointing out several reports and publications that the Commission has produced relating to the Juniata Subbasin and an historical book about the Juniata entitled *Juniata: River of Sorrows* by Dennis P. McIlnay.

PRESENTATIONS

1. Frederick L. Zimmermann Award

The Commission presented its 6th Frederick L. Zimmermann Award to Pennsylvania State Representative Jerry Stern of Blair County, Pennsylvania. The award recognizes elected officials who demonstrate excellence in water resources management by promoting and advancing watershed management and interstate cooperation. Rep. Stern not only demonstrated his devotion to protecting the waters of his home district, but also his concern for the entire river through his support for such projects as the Barnes and Tucker AMD Treatment Project in the West Branch Subbasin.

2. William Jeanes Award

The Commission presented its 5th William W. Jeanes, Sr. Award to Mr. John Dawes, the Administrator of the Western Pennsylvania Watershed Program in Huntingdon County, Pennsylvania. This award was created by the Commission in 1999 to honor organizations and individuals who have contributed to the improvement of the basin's water quality.

Mr. Dawes led the efforts of a coalition of watershed and mine restoration organizations that resulted in the reauthorization of the Surface Mining Conservation & Reclamation Act by the U.S. Congress in late 2006. This was a remarkable accomplishment during a lame duck session of Congress. The Act renews the authorization of a special fund to finance abandoned mine reclamation. This funding will be crucial to the completion of reclamation projects in Pennsylvania. Mr. Dawes has also been a strong supporter of several Commission outreach efforts on watershed protection, including the Streamside Cleanup Program and watershed and riverfront conferences.

3. Recognition of Kendl Philbrick, Former Maryland Member

The Commission recognized and honored former Maryland Member and Secretary of the Environment Kendl Philbrick for his excellent record of service to the Commission. The Executive Director described Mr. Philbrick as personable, knowledgeable, and direct. For those reasons and many more, the staff very much enjoyed working with him. Commissioner Sachs accepted on behalf of Secretary Philbrick, who is now retired and living in Williamsburg, Virginia. He noted how much the Secretary had enjoyed his time with the Commission and that the Secretary firmly believed in the mission of the Commission. He would therefore be very pleased with today's presentation.

4. SPECIAL SESSION – Morrison Cove: A Watershed Under Stress

The Commission convened a special panel session to discuss the water resource challenges in Morrison Cove, an agricultural valley located in the Juniata River Subbasin, Blair County, Pennsylvania. The panelists included Pennsylvania State Rep. Jerry Stern, Republican Caucus Secretary, Pennsylvania House of Representatives; Jerry Green, President Blair County Chapter, Trout Unlimited; Randy Stolz, Manager, Martinsburg Borough; and Jason Wert, Senior Project Manager, Herbert Rowland & Grubic, Engineering Consultants, State College, Pa. Commissioner Myers moderated.

Before the panel began its discussions, Mike Brownell, SRBC Water Management Division Chief and Dave Heicher, SRBC Watershed Protection and Assessment Division Chief, presented information on current conditions in the Morrison Cove Watershed.

Mr. Brownell noted that the Morrison Cove Watershed was identified by the Commission as potentially stressed in its 2005 Groundwater Management Plan. A combination of factors such as the geology of the area and substantial demands from industrial, mining, agricultural and municipal users have combined to bring about this potential despite relatively abundant sources of water such as Roaring Spring.

The purpose of labeling Morrison Cove as potentially stressed was to focus attention on the watershed's problems. The Commission staff feels that it is appropriate to move forward with a comprehensive study of the Cove's problems and the creation of an action plan for management of its water resources. The study would include an inventory of surface and groundwater resources to assess their safe yield, and would also integrate water quality assessment into the study process. The main objective of the study would be to provide management information to local government planners and elected officials and to water managers to guide future use and development of water resources in order to avoid conflicts among users. This would all be accomplished in close concert with the water using stakeholders of the area.

Mr. Heicher focused on water quality in Morrison Cove. Land use in the Cove is about 55% agricultural. A number of streams in the upper and lower part of the watershed have been listed by the USEPA as impaired due to nutrients, sedimentation, urban influences and stream bank degradation. He then proceeded with a photographic tour of streams throughout the Cove, some of which have also been classified as Class A wild trout waters.

For the streams where problems were found, it appears that many of the problems stem from lack of riparian cover and bank disturbance, much of which could be corrected by stream bank plantings and fencing. Ten springs were also sampled by SRBC, five of which were found to exceed nitrate concentration standards for drinking water. The sources of these nitrates include rainfall, decomposition of organic matter in soil, fertilizers, animal waste and septic systems. Elevated nitrates are, by far, the chief cause of water quality standard exceedences, particularly in the streams and springs located in the carbonate valley.

Commissioner Myers welcomed the panel and told them of her own familiarity with the water problems in Morrison Cove. She had met with legislators and stakeholders from the area on these problems and Morrison Cove has been kept prominently on the Department's radar screen. SRBC was encouraged to do some general baseline surveys on the problems of the Cove to find out what could be done to sustain economic development while preserving the environmental amenities associated with the Cove's water resources.

Representative Stern thanked the Commission for focusing its efforts on improving water management and planning in Morrison Cove. As a longtime resident of the Cove, he could attest to the fact that nothing is more imperative to the community than safeguarding its local water supply. Planning must be done now to ensure a bright economic and environmental future. He then touched on how various sectors in the community such as industry depend on a reliable and clean supply of water to sustain their operations. Without the ready availability of water, industries might relocate to other areas of the country or to foreign nations, taking local jobs with them in the process.

Agriculture is yet another important activity, with over 25,000 dairy animals located in the pristine Clover Creek Watershed. Nitrate pollution from agricultural activities has been recognized as a threat to the area's drinking water, and the Cove Area Regional Digester Project has now been initiated to deal with this problem. The facility will provide treatment for the manure from about 8,000 dairy animals and will produce an effluent that meets all applicable water quality standards. It will also reduce ammonia gas loadings to the atmosphere and phosphorus loadings to ground water and surface water, significantly benefiting the Chesapeake Bay Watershed.

Public water supply is near critical levels in Morrison Cove due to nitrate contamination from agricultural activities. He mentioned the efforts that are now underway to address the problem through such programs as ACRE and the Pennsylvania Resources Enhancement and Protection Tax Credit Program (REAP). REAP is geared toward providing incentives for farmers to install best management practices (BMPs) on their land such as improvements to barnyards, pastures, and riparian corridors.

Randy Stolz gave a short history of the Borough of Martinsburg, which is the oldest continuously incorporated borough in Blair County. He then turned to the wells and water supply system for the borough. The chief threat to that system is nitrates; therefore the main challenge is to prevent and reduce further nitrate contamination of the Cove's waters, and to treat the water that is already contaminated. For that reason, Martinsburg is supporting the Cove Area Regional Digester Project. The digester would help reduce the need for farmers to spread manure on their fields at less than ideal times, such as when the ground is frozen and nutrient runoff is more likely.

He reviewed previous studies that have been conducted on the water problems of the area, including one commissioned by the Borough. He hoped that the comprehensive study being considered by the Commission would produce a plan of action that would present concrete solutions. Commissioner Myers gave assurances that any study undertaken by SRBC would take into account all of the information gathered in previous studies, integrate that information and

produce a clear plan of action for mitigating the water quantity and water quality problems of the Cove.

Jerry Green indicated that the problems of the Cove are twofold: quantity and quality. The quantity of water is being reduced and this, in turn, is also affecting the quality of water in the Cove. He noted that the Cove does have some very high value limestone streams that are highly productive and need to be protected. The need for protection is not only related to the desire to protect the trout fishery, but also because of the stability and consistency that these high quality streams lend to the Cove's water resources.

Working with landowners, Trout Unlimited has concentrated its efforts on improvements to Piney Creek and Clover Creek that would help preserve their high quality status. These have included such efforts as manure management and, in cooperation with the Blair County Conservation District, no-till planting. Now that certain portions of Plum Creek and Halter Creek have been upgraded to Class A Wild Trout status, Trout Unlimited is anxious to commence similar work in these watersheds to address the problems uncovered in the Commission's subbasin survey report.

Jason Wert described the \$20 million Cove Area Regional Digester Project, a regional manure handling, treatment and disposal system. Preliminary design is complete and pilot testing on a smaller scale will be done in the late spring to verify the benefits and cost efficiency of the project. The liquid manure from about 7,000 to 8,000 dairy animals will be transported to the facility from farms within a 10 to 15 mile radius of the facility.

The facility will handle the incoming manure, digest it, control its odor, provide dewatering and disposal of the dried material as a soil amendment product, remove the nutrients, produce energy for onsite and offsite use, and provide a clean and stable discharge for any remaining water. This will be the equivalent of treating 42 million gallons of human sanitary waste per day. That represents the combined municipal wastewater outputs of State College, Tyrone, Altoona, and Holidaysburg. Commitments have been obtained from nearby farmers for covering 7,300 animals or roughly one-third of the dairy animal population of the Morrison Cove area. The facility will have the capability of expanding as needed.

This digester will be unique among the other 2,000 to 3,000 digesters in the United States because it will use denitrification technology at the back end of the treatment process to remove nitrogen that could otherwise be readily absorbed into the environment. The digester will also reduce 40,000 tons per year of carbon dioxide (a greenhouse gas) that would otherwise enter the atmosphere.

Mr. Wert predicted that this type of facility will be an important tool in helping farmers meet more stringent environmental regulations in the future without reducing the size or production of their operations. It will also be an important component in the effort to protect Chesapeake Bay, perhaps even coming into play in the nutrient trading aspect of that program. The \$20 million spent on this project is far less than the expenditures that would be necessary to build a comparable sanitary waste treatment facility. This makes the project very cost effective in terms of its overall impact on reducing nutrient pollution.

The panel then fielded questions from the audience on subjects such as public outreach efforts and stakeholders who need to be involved in the Commission's study efforts. Discussion continued at length on how the problems associated with water quantity in Morrison Cove might hamper economic development.

ACTION ITEMS

1. Action to Convene Morrison Cove Stakeholders

In a follow-up to the panel session, the Executive Director presented a resolution (Exhibit A) to the Commission directing that Morrison Cove stakeholders be convened for the purpose of gathering information leading to the initiation of a Commission-led comprehensive water resources study and the development of an accompanying action plan. The plan would integrate all of the previously gathered data on Morrison Cove from prior studies and formulate alternatives for addressing both quantitative and qualitative water resource issues. On a motion by Commissioner Myers, seconded by Commissioner Sachs, the Commission unanimously adopted the resolution.

2. Minutes of the December 5, 2006 Commission Meeting

On a motion by Commissioner Sachs, seconded by Commissioner Myers, the minutes of the regular business meeting of December 5, 2006 were unanimously adopted as written.

3. Hydrologic Conditions Report

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

Overall, the basin's rainfall is slightly above normal, due to a fairly wet October 2006. However, there are locations in the lower and upper basin with deficits of as much as 2 inches. Up until January, it had been a dry snow season, with a water weight equivalent of less than an inch over most of the basin. This was reflected in some of the drought watch and warning conditions that existed in both stream flow and ground water levels in several basin counties. This was quickly rectified by the Valentine's Day snow/ice event and there is now a 6 to 8 inch water equivalent across much of the upper reaches of the basin.

Ice jam flooding became a concern, as streams and rivers began to ice over in the second half of the winter. Mr. Brownell used photos to illustrate the ice build up on segments of the Susquehanna's main stem at Harrisburg. The ICEJAMS monitoring procedure was therefore initiated at Level 3, a high state of alert. Fortunately, the ice did break up and move out of the basin over a relatively short time, posing no serious threat.

He concluded by mentioning the observance of National Flood Awareness Week beginning March 19, 2006. SRBC staff would be working with the National Weather Service Office in Binghamton in a host of activities that week to raise flood awareness.

4. 2007 Water Resources Program

The Executive Director presented a resolution (Exhibit B) for adoption of the 2007 SRBC Water Resources Program.

Adoption of an annual water resources program is a requirement of the Susquehanna River Basin Compact. It is based upon the Comprehensive Plan and consists of the projects and facilities that the Commission proposes to be undertaken by the Commission and other governmental and private entities over the ensuing six-year period. Consequently, input was sought directly from each of the Commission's member jurisdictions. Through the special efforts of Ms. Amy Guise of the Corps' Baltimore District staff, about a dozen federal agencies had weighed in with their priorities.

The program is structured around a set of stated water resource needs. These stated needs include intergovernmental coordination; flood damage reduction and recovery; improved water quality; adequate water supply; economic development; restoration of aquatic ecosystems; restoration of migratory fish runs; sediment management; preservation of cultural and scenic amenities; enhancement of recreation; and facilitation of data management and use.

The Director explained the important components of each need. He then thanked all those who took the time to provide input for the development of the 2007 Program, which is much improved from past years. The staff is planning to widely distribute copies of the program to legislators, policy makers, planners and the public.

On a motion by Commissioner Sachs, seconded by Commissioner Myers, the resolution presented by the Executive Director was unanimously adopted.

5. Public Hearing

The Commission convened a public hearing covering three topics: 1) action on project applications, 2) action on the rescission of certain project applications, and 3) consideration of an enforcement action against South Slope Development Corporation. A stenographic transcript was made of this hearing and is part of the Commission's record.

a. Project Applications

Michael Brownell first provided some background information on the Commission's review authority and its consumptive use and water withdrawal regulations. The main purpose of these regulations is to avoid adverse environmental impacts and conflicts among users, particularly during periods of drought and low flow. Cumulative impacts are also considered. He explained the methods available for compliance with the consumptive use regulation,

including discontinuance of use, provision of storage water, and payment into the SRBC Water Management Fund to enable purchase of water storage for release during low flow periods.

Mr. Brownell listed the standard requirements for each project sponsor, including: 1) notice of application, 2) coordination with member jurisdictions, 3) aquifer tests for groundwater withdrawals, 4) metering, monitoring, and reporting of water use, 5) mitigation or other special conditions where there is a potential for adverse impacts, 6) a right of inspection to ensure compliance, 7) water conservation standards, and 8) docket reopening authority.

The dockets recommended for action included the following eight projects¹:

- Osram Sylvania, Inc. (Exhibit C1)
- Conyngham Borough Authority (Exhibit C2)
- County of Lycoming (Exhibit C3)
- Mount Union Municipal Authority. (Exhibit C4)
- Commonwealth Environmental Systems, L.P. (Exhibit C5)
- Shippensburg Borough Authority C6)
- Lancaster County Solid Waste Authority – Frey Farm and Creswell Landfills (Modification)(Exhibit C7)
- Delta Borough (Exhibit C8)

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

The Executive Director added that the Lycoming County docket also includes a settlement by agreement in the amount of \$15,300.00 regarding an allegation of non-compliance with Commission Regulation 806.4.

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

b. Rescission Actions

Mr. Brownell explained the staff's recommendation that three project approvals be rescinded. The first, Frito-Lay, Inc. of Binghamton, N.Y., had been approved during the Commission's Compliance Incentive Program (CIP). Through commendable water conservation efforts, the company has now lowered its water use to below 20,000 gallons per day for over a year and a half, thus removing the necessity for Commission approval and for any monitoring requirements.

With respect to the second docket, Corning, Inc.'s Erwin Park Photonics, the project is not moving forward and therefore the company has asked that its approval be rescinded. Third, the Union Township Municipal Authority is now obtaining its water directly from the City of Dubois and no longer needs a diversion approval of its own.

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

On a motion by Commissioner Myers, seconded by Commissioner Mueller, the Commission unanimously approved the staff recommendations for rescission of the above listed approvals.

c. Enforcement Action – South Slope Development Corporation, Song Mountain Ski Resort

Mr. Brownell explained that Song Mountain Ski Resort had been issued a “Notice to Appear and Show Cause” on February 21, 2007 related to certain alleged violations of its SRBC docket approval conditions. Under terms of that notice, the project sponsor was supposed to appear at today’s hearing and show cause why a civil penalty should not be levied on it for certain docket violations. Mr. Brownell entered a copy of the notice on the record.

Staff has been in active communication with the project sponsor and its counsel in an attempt to settle this matter. The project sponsor did proffer a settlement proposal, but staff does not believe that the proposed settlement is in the best interest of the Commission. This has been communicated to Song Mountain’s counsel. Staff, nevertheless, believes that a fair settlement is possible and will continue to negotiate in good faith with the project sponsor to reach a solution. Therefore, the staff was not requesting that the Commission take any definitive action on the settlement offer at today’s hearing.

On March 5, 2007, counsel also requested that the Commission continue the “Show Cause” proceeding until the June 2007 meeting to allow more time for the preparation of evidence or for reaching a mutually agreeable settlement. Counsel reiterated its request for a tabling of the “Show Cause” proceeding in a letter dated March 9, 2007, alleging procedural defects in the notice and further indicating that its written position precludes the need for a personal appearance before the Commission. Counsel further indicated that its written communication should serve as a request for an administrative appeal under the Commission’s practice rules if any action was taken by the Commission other than a tabling of the “Show Cause” proceeding.

Mr. Brownell indicated that staff was prepared to support the project sponsor’s request for tabling the “Show Cause” proceeding subject to the following conditions:

1. To ensure compliance with SRBC regulations, the Executive Director would order the project sponsor to submit an application for an unapproved surface water withdrawal prior to April 30, 2007. This order would further inform the project sponsor that failure to comply would subject it to additional penalties, result in the issuance of a cessation order, and jeopardize the completion of action prior to the fall 2007 snow making season.

2. To avoid future violations of withdrawal limitations such as those that had occurred in January 2007, the Executive Director would issue a notice directing the project sponsor to apply for an increase in its peak day consumptive use approval to meet the daily demands of the facility. Again, the deadline for this application would be April 30, 2007.

3. The project sponsor indicated a desire to begin using a ground-water withdrawal (Well No. 3) approved by the Commission in 1999 but never used. This withdrawal would normally be considered abandoned under Commission Regulation 806.31. The Executive Director would therefore issue a notice directing the project sponsor to submit a request for a waiver of the abandonment provisions that would: 1) contain a justification for continuing the existing approval; 2) note any development or well installation that has occurred in the vicinity of Well No. 3 since SRBC approval; and 3) be submitted by April 30, 2007.

4. The Commission will, in accordance with its regulations, issue a "Notice to Appear and Show Cause" to the project sponsor for the June 2007 meeting of the Commission in Maryland.

Mr. Brownell commented that pursuing a comprehensive solution to all of these outstanding enforcement issues is in the best interest of the project sponsor, the Commission and the public it services.

Commissioner Myers moved to table the "Show Cause" action for South Slope Development Corporation, operators of the Song Mountain Ski Resort, and to reschedule that proceeding for the June 2007 meeting of the Commission in accordance with Commission Regulation 18 CFR Section 808.15. She added that this would be the last continuance of the matter that she would be prepared to support.

This motion was seconded by Commissioner Sachs who also asked whether it was normal for violations to have continued for so long prior to Commission action. The Director responded that this was not the norm and that the Commission, while trying to give the benefit of any doubt to this applicant, had probably been too patient.

Col. Mueller added that, if the Commission does agree to table the matter, it would be doing so with the strong expectation that the conditions outlined by Mr. Brownell would be met by the project sponsor as a sign of good faith moving forward.

Chairman Lynch said that he had talked to both the project sponsor and its counsel and had indicated his strong preference that they move quickly to modify its current approval and settle the enforcement issue. It is important that this docket be fashioned to protect both the ground-water and the surface water resources of the area so that the rights of other users and the environment are protected and this important business can continue to operate.

Mr. Brownell mentioned that a site meeting was scheduled for March 27, 2007 with the project sponsor. Staff was therefore hopeful that the applications can be completed well in advance of the April 30, 2007 deadline. Without further discussion, the motion made by Commissioner Myers to table the "Show Cause" proceeding was unanimously adopted.

5. FY-08 Budget Revisions

The Chief Administrative Officer presented revisions to the FY-08 Budget that had been originally approved by the Commission in June 2006 and would cover the period July 1, 2007 to

June 30, 2008. The revisions include an overall increase in the budget from about \$4.2 million to \$4.6 million to accommodate some extra costs that are anticipated in the Project Review and Consumptive Use Management Plan Programs. The revenues making up the budget include \$2,927,000 from the member jurisdictions and grants and transfers of \$1,673,000.

Commissioner Mueller moved approval of the budget revisions as presented. This motion was seconded by Commissioner Myers and unanimously adopted by the Commission.

6. Grant Approvals

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

a. Collection of Discharge Monitoring Reports (DMRs) in the Ohio River Basin Grant

This work is to assist Pennsylvania in completing its State Water Plan, which is required under the terms of the Pennsylvania Water Resources Planning Act 220 of 2002. The entire grant amount of \$46,145 will come from the PADEP. The grant scored 6 out of 10 under SRBC grant evaluation criteria.

b. Surface Water Assessments in the Susquehanna River Basin Grant

This is a grant to allow the SRBC to continue assisting the PADEP in performing surface water assessments in the basin. The SRBC has been performing such assessments since 1997. This year the Commission will be collecting additional information on the Conodoguinet Creek Watershed near Harrisburg, Pa. using the PADEP comprehensive evaluation protocols. The total amount of this grant is \$21,128, all of which is being provided by the PADEP. This grant scored 9 out of 10 under SRBC grant evaluation criteria.

c. Pa. TMDL AMD Grant

The third grant is for the Commission staff to prepare TMDLs on streams where the cause of degradation is abandoned mine drainage. Staff will also be supporting PADEP in the selection of analysis methods, use of water quality models, public participation, and submission of the TMDLs to the U.S. Environmental Protection Agency. The contract provides that the Commission will prepare TMDLs for the West Branch Susquehanna River, Clearfield Creek, a major West Branch tributary, and Wiconisco Creek, which is in northern Dauphin and Schuylkill Counties, Pennsylvania. The total amount of the grant is \$175,000, all of which will be provided by PADEP. This grant scored 9 out of 10 under the grant evaluation criteria.

Commissioner Sachs asked about the purpose of the scoring process for grants. Mr. Heicher explained that the scoring is used to determine how much SRBC matching funds should be used for a grant. Higher scores warrant more matching money from the Commission. Several of the grant evaluation criteria relate to impact on the Chesapeake Bay.

Commissioner Sachs moved ratification of grant Items a-c as presented by Mr. Heicher. Commissioner Mueller seconded the motion, which was then unanimously approved by the Commission.

7. Retention of Outside Counsel

The General Counsel requested that the Commission ratify the retention of outside counsel to assist the Commission in the defense of a civil action filed in Federal District Court by Pennsy Supply, Inc. challenging procedural and substantive elements of the Commission’s final rule making action of December 5, 2006. He further asked that the Commission authorize the payment of associated legal fees.

On a motion by Commissioner Myers, seconded by Commissioner Sachs, the Commission unanimously ratified the retention of outside counsel and authorized payment of associated legal fees.

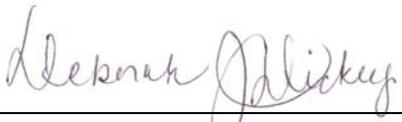
PUBLIC COMMENTS

No public comments were offered.

ADJOURNMENT

There being no further business before the Commission, the Chairman adjourned the meeting at 4:15 p.m. The next regular meeting of the Commission is scheduled for June 13, 2007 in Cecil County, Maryland.

Date Adopted



Deborah J. Dickey
Secretary to the Commission

RESOLUTION NO. 2007-01

A RESOLUTION of the Susquehanna River Basin Commission directing staff to convene a Morrison Cove stakeholder's group for the purpose of identifying local concerns and issues relating to the Commission's initiation of a comprehensive water resources study and action plan.

WHEREAS, Morrison Cove is a 186-square-mile valley located in the Ridge and Valley physiographic province area of the Juniata River Subbasin of the Susquehanna River Basin; and

WHEREAS, the Susquehanna River Basin Commission (SRBC) has conducted preliminary evaluations of both the water quality and water quantity conditions in Morrison Cove; and

WHEREAS, the said evaluations indicate that portions of Morrison Cove are beset with serious water quality problems such as high nitrate levels in surface water, groundwater and springs that pose a risk to human health and the environment; and

WHEREAS, loss of habitat attributable to channel alteration, sedimentation, and a lack of riparian zone and vegetative bank cover affects several reaches of stream in Morrison Cove; and

WHEREAS, the Commission has identified the Roaring Springs area of Morrison Cove as a "Potentially Stressed Area" where demand for water threatens to exceed supply, especially during periods of drought and low flow; and

WHEREAS, the Commission wishes to initiate a comprehensive water resources study in Morrison Cove that will utilize modeling tools and study techniques developed by the Commission in several other water resources studies conducted throughout the Susquehanna River Basin; and

WHEREAS, the Commission wishes to assemble a stakeholders group consisting of farmers, business persons, local government officials, environmental advocates, and other members of the public having a special interest in the proper management of the water resources of Morrison Cove; and

WHEREAS, the Commission desires to work closely with such a stakeholders group to help identify the water management needs of Morrison Cove in connection with a Commission-led comprehensive water resources study.

NOW THEREFORE BE IT RESOLVED THAT:

1. The Commission directs its staff to convene a stakeholders group for the purpose of identifying local concerns and issues, and providing input into the development and initiation of a comprehensive water resources management study and action plan for the Morrison Cove area.

2. The stakeholders group shall also review the findings of the said study as it progresses in order to provide ongoing input to the study process and to ensure a better understanding of the study results as they become available.

3. The staff shall keep the Commission apprised of the work of the stakeholders group and the progress of the study.

4. This Resolution shall be effective immediately.

Date: March 14, 2007



Kenneth P. Lynch, Chairman

RESOLUTION NO. 2007-02

A RESOLUTION of the Susquehanna River Basin Commission adopting an Annual Water Resources Program for 2007.

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.

NOW THEREFORE BE IT RESOLVED THAT:

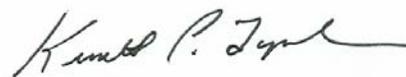
1. The accompanying document titled, “2007 Annual Water Resources Program, Susquehanna River Basin Commission” is hereby adopted by the Commission in accordance with Section 14.3 of the Compact.

2. The 2007 Annual Water Resources Program shall be updated as the need appears, and therefore the Executive Director is hereby authorized to add programs and projects as may be submitted by the member jurisdictions through its Commission representative during the ensuing one year period.

3. The staff is instructed to widely distribute its 2007 Annual Water Resources Program to legislators, policy makers and the public as a clear statement of Susquehanna River Basin needs and priorities, and as a mechanism for coordinating the efforts of water managers at all levels.

4. This Resolution shall be effective immediately.

Date: March 14, 2007



Kenneth P. Lynch, Chairman



SUSQUEHANNA RIVER BASIN COMMISSION

1721 North Front Street • Harrisburg, Pennsylvania 17102-2391

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

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

Docket No. 19970502-2

Approval Date: May 15, 1997

Modification Date: November 13, 1997

Modification Date: March 14, 2007

OSRAM SYLVANIA, INC.

Groundwater Withdrawal (30-Day Average) of 1.656 mgd from Wells 11 and 12, and a Total System Withdrawal Limit (30-Day Average) from Wells 1, 2, 6, 7, 8, 9, 10, 11, and 12 of 6.615 mgd, and Consumptive Water Use of up to 0.170 mgd, for Industrial Supply and Use, North Towanda Township and Towanda Borough, Bradford County, Pennsylvania

Review Authority

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission originally approved the project on May 15, 1997 (Docket No. 19970502) for a groundwater withdrawal (30-day average) of 1.656 million gallons per day (mgd) from Wells 11 and 12, and a total system withdrawal (30-day average) limited to 6.615 mgd. That docket was subsequently modified on November 13, 1997, to approve the requested consumptive water use at the facility, subject to conditions enumerated in the docket. One such condition provided for Commission review of the project's consumptive water use when changes in consumption occur or at five-year intervals. This corrective modification recognizes a revised accounting methodology for consumptive water use (based on metering rather than estimates), approves a requested increase in consumptive water use, and revises certain project features and rescinds certain conditions in the previous dockets.

Description

Purpose. The purpose of the modification is to approve a requested increase in consumptive water use for industrial water use. This modification will not require an increase in the previously approved groundwater withdrawal (30-day average) of 1.656 mgd from Wells 11 and 12, or the total system withdrawal limit of 6.615 mgd.

Location. The project is located in the Middle Susquehanna Subbasin, HUC 02050106, North Towanda Township and Towanda Borough, Bradford County, Pennsylvania.

Project Features. The project sponsor has requested approval for an increase in consumptive water use (peak day) from 0.128 mgd to 0.170 mgd, related to a change in the basis

of consumptive water use monitoring at the facility. The proposed modification will not require an increase in the facility's approved groundwater use.

The project sponsor's factory in Towanda produces the widest variety of tungsten and molybdenum materials and inorganic phosphors in the world. Along with being the global headquarters for OSRAM Sylvania, Inc.'s Tungsten and Powders operations, the facility also houses an R & D facility and a laboratory devoted to high temperature metallurgy and inorganic chemistry.

The facility is served by public water, primarily for fire suppression and also uses water from nine wells, primarily for drinking water, non-contact cooling water, tower makeup, and industrial process water. Water obtained from the public water supplier is not consumptively used at the facility. Wastewater (primarily process wastes, blowdown, and contact cooling water) from the facility is polished and discharged via a National Pollutant Discharge Elimination System (NPDES)-permitted outfall. Sanitary waste is discharged to the Towanda Borough Publicly Owned Treatment Works (POTW), and non-contact cooling water, steam condensate and stormwater runoff is discharged to three stormwater conveyances through metered outfall lines.

All of the facility's wells are located within the Appalachian Plateau Physiographic Province in the glacial outwash (lake and stream deposits) adjacent to the Susquehanna River. The typical depth to bedrock (Devonian-Aged Lock Haven Formation) at the site is 100 feet below ground surface. All of the on-site wells are screened and completed in the unconsolidated sediments (comprised of clays, silts, sands and gravels). The total withdrawal from all nine wells is 6.615 mgd. Well construction and use details are summarized in Table 1.

Table 1. Well Construction Information

Well No.	Year Drilled	Well Depth (feet)	Cased Depth (feet)	Screened Interval (feet to feet)	Pump Setting (feet)	Pump Capacity (gpm)
1	1952	95	84	83 to 95	93	500
2	1952	95	84	83 to 95	93	500
6	1967	118	83	82 to 108	114	750
7	1970	102	75	72 to 92	100	1,000
8	1973	91	53	53 to 86	88	1,000
9	1973	92	59	60 to 82	86	1,000
10	1974	106	74	74 to 96	103	1,000
11	1978	108	73	73 to 95	105	1,000
12	1995	80	62	62 to 77	65	600

gpm – gallons per minute

The docket indicates that water is consumptively used for cooling purposes, and that the facility's first cooling tower was constructed in 1978. During its 2006 review of the project, Commission staff collected up-to-date information on cooling towers at the facility, which is contained in Table 2.

Table 2. Cooling Tower Information

SRBC Cooling Tower ID	Tower Location by Building Number	Year Installed	Chiller Make	Chiller Model	Chiller Typical Capacity (gpd)
1	Building 20, Roof	1996	Marley	NC 6122	2,667,000*
2	Building 28, East Wall	2005	Thermal Care	FC 740	980,640
3	Building 15A, Roof	1986	Marley	NC 88	1,333,000*
4	Building 22, East Wall	1978	Marley	NC 89	1,901,000*
5	Building 9, West Wall	1996	Marley	NC 51	1,576,000*
6	Building 9, Near North Wall	1990	Marley	NC 1-2077	727,000*
7	Building 10, Roof	2005	Thermal Care	FC 640	648,000
9	Building 26, East Wall	2005	Marley	NC 8306	1,152,000
11	Building 8, Roof	2002	Marley	NC 2201	864,000
12	Building 25, North Wall	1991	Marley	NC Class	485,000*
13	Building 25, Roof	1986	Marley	NC 83	1,333,000*
14	Building 25A, Roof	1993	Marley	NC 4001	1,333,000*
All cooling towers are metered at inflow (makeup) and outflow (blowdown).					
* Chiller typical capacity (gpd) – estimated value.					
gpd – gallons per day					

In addition to the recent information about the cooling towers, the project sponsor also identified the following additional minor consumptive water uses: sludge removal, boiler deaerator vents, ammonia recovery system (flash tanks), and condensate receiver vents; these uses were not listed in the prior docket (or its first modification).

Findings

The project is subject to Commission review and approval standards, including Commission Regulations §806.21 and §806.22.

All water evaporated from the facility's cooling towers, and lost through sludge removal, at boiler deaerator vents, in the ammonia recovery system (flash tanks), and at condensate receiver vents is considered to be used consumptively.

Consumptive water use at the facility currently is calculated to be a "fixed" quantity using the estimated maximum evaporative loss from the facility's cooling towers. The consumptive water use calculations currently do not include sludge removal and losses related to boiler deaerator vents, ammonia recovery system (flash tanks), and condensate receiver vents.

The estimated monitoring and accounting was previously approved due to the complexity of metering the cooling towers, but considers consumptive water use to be a constant, maximum amount every day the facility is operating.

Commission staff recommends the consumptive water use of the facility be the sum of the metered quantity evaporated from the facility's cooling towers, plus the quantity lost through sludge removal, at boiler deaerator vents, in the ammonia recovery system (flash tanks), and at condensate receiver vents.

The project sponsor has installed inflow and outflow meters at its 12 cooling towers, and has proposed a methodology to calculate the consumptive loss associated with sludge removal, boiler deaerator vents, ammonia recovery system (flash tanks), and condensate receiver vents, to account for all consumptive water use at the facility. The project sponsor has submitted a plan that accounts for its consumptive water use based on primarily metering, rather than estimation, and Commission staff has provided comments on the plan back to the project sponsor.

Commission staff recommends that a revised metering and monitoring plan be developed by the project sponsor and submitted to Commission staff for review and approval. The project sponsor may propose an alternative to metering for Commission staff review and approval.

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

The project's consumptive use of water is subject to mitigation requirements, as per Commission Regulation §806.22(b). To satisfy these requirements, the project sponsor proposes to make quarterly payments to the Commission in lieu of providing actual compensation water.

The project sponsor has requested an increase in its consumptive water use approval of up to 0.170 mgd. Based on an analysis of water use by the project sponsor, Commission staff is recommending approval of the requested amount. Should the project's future consumptive water use be expected to exceed 0.170 mgd, the project sponsor must apply for a modification to this docket at that time.

The increased consumptive water use will not result in an increase in the groundwater withdrawal. The project sponsor has installed meters at each well and should monitor the daily quantity of water withdrawn.

Commission staff recommends that conditions in Commission Docket Nos. 19970502 and 19970502-1, issued on May 15, 1997, and subsequently modified on November 13, 1997, that are not inconsistent with this docket action should remain effective.

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

A waiver of the application fee requirement contained in Commission Regulation §806.13 and in accordance with Commission Resolution 2005-03, is recommended. A waiver of the notification requirements contained in Commission Regulation §806.15 also is recommended.

The docket approval is effective until May 15, 2022. Commission staff recommends the term of this docket modification be consistent with this term.

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 Nos. 19970502 and 19970502-1, issued May 15, 1997, and subsequently modified on November 13, 1997, are hereby modified to approve a maximum daily consumptive water use of up to 0.170 mgd pursuant to Article 3, Section 3.10, of the Compact.

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

3. Conditions a and b of Commission Docket No. 19970502, issued May 15, 1997, and Conditions a, b, and d of Commission Docket No. 19970502-1, issued on November 13, 1997, are hereby rescinded.

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

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 cooling tower makeup plus the calculated water loss associated with sludge removal, boiler deaerator vents, ammonia recovery system (flash tanks), and condensate receiver vents.

6. Within sixty (60) days from the date of this approval, the project sponsor shall submit a revised metering plan to the Commission, for review and approval by Commission staff, which accounts for all water withdrawn from the groundwater sources, and the total consumptive water use at the facility. The project sponsor shall propose a methodology to account for its consumptive water use primarily based on metering, rather than estimation. The project sponsor may propose an alternative to metering for Commission staff review and approval. Following approval, the project sponsor shall execute the plan and complete any installation of any 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 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.

8. The project's groundwater withdrawal (30-day average) of 1.656 mgd from Wells 11 and 12, and a total system withdrawal limit (30-day average) of 6.615 mgd from all wells listed in Table 1 are approved pursuant to Article 3, Section 3.10, of the Compact.

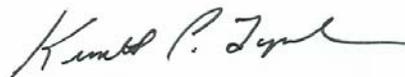
9. To satisfy the Commission's current mitigation requirements for consumptive water use set forth in Commission Regulation §806.22, the project sponsor shall make quarterly payments to the Commission based on the rate of \$0.14 per 1,000 gallons of water consumptively used by the project. The daily quantity of water consumptively used shall be the quantity of cooling tower makeup, the calculated water loss associated with sludge removal, boiler deaerator vents, ammonia recovery system (flash tanks), and condensate receiver vents. Payment amounts shall be calculated by applying this rate to the daily amount of water used consumptively by the project. Quarterly payments are due and payable within thirty (30) days after the close of the preceding quarter. The rate of payment, after appropriate notice to consumptive users of water using this method of compliance, is subject to change at the Commission's discretion.

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

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

12. This approval is effective until May 15, 2022. The term of this docket modification is in accordance with the term of the prior docket approval. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than November 15, 2021, the existing approval shall be deemed extended until such time as the Commission renders a decision on the application.

By the Commission:



Dated: March 14, 2007

Kenneth P. Lynch, Chair
New York Commissioner



SUSQUEHANNA RIVER BASIN COMMISSION

1721 North Front Street • Harrisburg, Pennsylvania 17102-2391

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

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

Docket No. 20070301

Approval Date: March 14, 2007

CONYNGHAM BOROUGH AUTHORITY

Groundwater Withdrawals (30-Day Averages) of 0.023 mgd from Well 1, 0.006 mgd from Well 2, 0.078 mgd from Well 3, and 0.216 mgd from Well 7, and a Total System Withdrawal Limit (30-Day Average) of 0.351 mgd, for Public Water Supply, Conyngham Borough, Luzerne County, Pennsylvania

Review Authority

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the application on January 20, 2006, and amendments to the application on August 15, 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 Middle Susquehanna Subbasin, HUC 02050107, Little Nescopeck Creek Watershed, Conyngham Borough, Luzerne County, Pennsylvania.

Project Features. The project sponsor has requested approval for the withdrawal (30-day average) of 0.216 million gallons per day (mgd) from Well 7. Conyngham Borough Authority (CBA) will use the well as a source for the public water supply system that currently relies on five wells: Wells 1, 2, 3, 5, and 6. The use of Wells 1, 2, and 3 predates July 13, 1978, and did not previously require approval by the Commission. Wells 5 and 6 were drilled and began operation in 1990 and 1993, respectively, but have not been approved by the Commission. The project sponsor is in the process of preparing applications for Wells 5 and 6; these wells will be scheduled for separate docket action.

All of CBA's wells tap the Mauch Chunk Formation aquifer. Wells 1, 2, 3, and 5 are clustered in a well field located between 3,300 and 4,300 feet to the south of the new well (Well 7). The well field is reportedly susceptible to drought and is used on a limited basis, particularly during the summer months. Well 6 is the primary water supply well for Conyngham

Borough, and is located approximately 4,600 feet to the west-southwest along strike from Well 7.

Below is a table that identifies all of the CBA wells, the date of their initial service, their pump capacity, and their reported average daily withdrawals.

Well Identification	Date of Initial Service	Pump Capacity (gpm)	Reported Average Daily Withdrawal in 2004 (mgd)
Well 1	1941	35	0.023
Well 2	1959	24	0.006
Well 3	1964	35	0.078
Well 5	1990	80	0.036
Well 6	1996	150	0.130
TOTALS	N/A	324	0.273
gpm - gallons per minute			

Well 4, formerly located in the center of the well field, has been abandoned due to Source Water Identification Protocol (SWIP) concerns.

Well 7, located within 300 feet of Little Nescopeck Creek, was sited at the intersection of two fracture traces. The well is drilled in the Mauch Chunk Formation, which consists predominantly of cyclic sequences of red, fine-grained sandstone, siltstone, and shale above 156 feet below ground surface (bgs). Below 156 feet, the formation is reportedly dominated by massive sandstone beds. Bedding strikes northeast-southwest and dips moderately to the northwest. The well is cased with 8-inch steel casing to a depth of 80 feet bgs, and has an open-rock borehole from a depth of 80 feet to the bottom of the well at 500 feet. Well 7 began to flow artesian at a rate of approximately 10 gpm immediately following well completion.

CBA provides water service to Conyngham Borough and adjacent parts of Sugarloaf Township. The current average daily demand of the CBA system is approximately 0.273 mgd, and projected average daily demand through 2030 is 0.461 mgd.

Wastewater is treated at the CBA wastewater treatment plant and discharged to Little Nescopeck Creek, approximately 3,000 feet downgradient from the Well 7 site.

Pumping Test. A 48-hour, constant-rate pumping test of Well 7 was conducted on February 5-9, 2005, with prior Commission approval. In addition to the pumping well, four domestic wells, Well 6, and two streamside piezometers were monitored during the test. The four private wells are located 350 feet to the southwest, 1,130 feet to the northeast, 2,200 feet to the southeast, and 1,730 feet to the northeast.

Well 7 was pumped at constant rate of 150 gpm. A total of approximately 30 feet of drawdown (to 30 feet bgs) was recorded within the pumping well at the end of the 48-hour test.

Based on water level measurement data from the pumping well, a recharge boundary was encountered after 700 minutes of pumping. An additional two feet of drawdown was measured within Well 7 throughout the remainder of the test. Following cessation of pumping, the water level recovered quickly, reaching its pretest static level within five hours, indicating that either recharge or leakage had occurred during the test.

Pumping of Well 7 caused drawdown at three of the private wells (a maximum drawdown of 10.97 feet at the residential well located 1,130 feet from Well 7 along bedding strike). This residential well also lost its artesian head during the testing, reportedly flowing at a continuous rate of approximately 15 gpm prior to testing. The well is used to fill a pond that is used for watering livestock.

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

Findings

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

Commission staff reviewed the groundwater availability analysis, pumping test results, and supporting information submitted by the project sponsor. Based on this information, Commission staff concludes that Well 7 likely draws water from a semi-confined fractured rock aquifer with its dominant permeability likely developed along bedding plane partings (fractures).

Although the well is 500 feet deep, casing extends only 80 feet bgs and three nearby domestic wells drilled into the upper Mauch Chunk Formation were impacted during pumping. In particular, the residential well located 1,230 feet northeast of Well 7 experienced greater than 10 feet of drawdown and lost its artesian flow into a pond that is used for livestock watering. Commission staff recommends and the project sponsor has agreed to mitigate the use of this private well prior to any operation of Well 7. The project sponsor should submit documentation that the mitigation has been completed within 60 days of the date of this approval. The project sponsor should report to the Commission all future complaints of homeowners and must resolve those that can be traced to pumping Well 7.

Projecting along bedding dip, the aquifer's uppermost water-bearing zone would intersect Little Nescopeck Creek approximately 1,500 to 1,700 feet upgradient of Well 7. Thus, the recharge boundary encountered after 700 minutes of pumping may represent the uppermost water-bearing zone intercepting the stream. If this is the case, long-term pumping of Well 7 at the tested rate of 150 gpm may result in inducing flow from Little Nescopeck Creek.

Little Nescopeck Creek is heavily impacted in the area by acid mine drainage from the Jeddo Mine Tunnel discharge. The Jeddo Mine Tunnel is linked to an expansive system of under drains for the abandoned underground coal mines in the Hazleton area. The average discharge rate from the tunnel is between 40,000 and 50,000 gpm (89 to 111 cubic feet per second [cfs]).

Commission staff is concerned that if prolonged pumping induces contaminated water from Little Nescopeck Creek toward the production well, the resultant adverse impacts to water quality would pose a serious risk to the aquifer and local groundwater users. Not only could the quality of water from Well 7 be impaired, but also the quality of water from the approximately 20 private wells within the identified zone of influence.

Following discussions among Commission staff, PADEP staff, and CBA's consultant, there was agreement that the potential for adverse impacts can be managed through the implementation of a focused monitoring plan. Commission staff's recommendations for elements of the plan are described below.

The monitoring plan should include installation of three dedicated monitoring points: two stream bank piezometers and an observation well. The two piezometers should be installed to monitor water levels and water quality within the channel lag sediments along the floodplain of Little Nescopeck Creek, at the locations where the uppermost water-bearing zones (observed in Well 7 at 96-97 feet bgs and 193-194 feet bgs) likely intersect the floodplain. The final locations should be based on local measurements of the structure and approved by Commission staff. Commission staff recommends that a test boring be completed prior to piezometer installation to determine the depth to the channel lag, total depth desired, and appropriate open (screened) interval.

The monitoring well should be installed adjacent to Little Nescopeck Creek, along strike and two-thirds of the distance between Well 7 and Little Nescopeck Creek. The well should be constructed in a similar fashion to Well 7, having an open borehole interval that is in connection to the two water-bearing zones observed in Well 7 (observed at 96-97 feet bgs and 193-194 feet bgs).

The piezometers and monitoring well should have automated water level monitoring instrumentation so that any changes in gradient within the shallow aquifer related to pumping can be established. Water level monitoring should be measured at a frequency of at least once every 10 minutes. In addition, water chemistry should be monitored, including analyses for sulfates, total iron, manganese, aluminum, pH, and specific conductance. During background monitoring, water chemistry should be tested once each week and the sampling frequency should increase to daily during the initial start-up of Well 7. After the first several weeks, the schedule may be relaxed.

The project sponsor should submit a monitoring plan to the Commission for approval and implementation prior to operation of Well 7. The plan should propose a monitoring schedule for background and operational monitoring. Commission staff recommends that the pumping phase of monitoring be performed during the period July through October, not during the spring months. The analyses from all sampling should be provided to the Commission with a brief interpretive report.

If a shift in chemistry or gradient reversal is identified in the monitoring data, the monitoring will allow for further determination of potential safeguards that may be required in the use of Well 7, such as a reduction in pumping rate, a limitation in the amount of drawdown in Well 7, and additional future water level and water quality monitoring.

With the protective measures described above, Commission staff recommends approval of the requested withdrawal of 0.216 mgd (30-day average) and pumping rate of 150 gpm.

In addition to monitoring related to the plan previously described, the project is subject to Commission monitoring and reporting requirements, as per Commission Regulation §806.30. The project sponsor should install appropriate metering on Well 7 to monitor withdrawals daily. The project sponsor should report these data to the Commission quarterly unless otherwise required in the approved monitoring plan.

During the review of this application, Commission staff identified that the withdrawals from Wells 1, 2, 3, 5, and 6 are subject to review and approval under Commission Regulations §806.4(a)(2)(i) and §806.4(a)(2)(iv). Based on the limited data available, current usage, and in consideration that there are no known negative impacts due to the operation of the wells, Commission staff recommends approval of the withdrawals from Wells 1, 2, and 3 at the current rates of 0.023 mgd, 0.006 mgd, and 0.078 mgd, respectively. The maximum instantaneous withdrawal rates at the wells should be limited to the current pump capacities of 35 gpm, 24 gpm, and 35 gpm, respectively. The project sponsor should install the appropriate metering to provide to the Commission documentation of the separate daily withdrawal at each well and the systems' combined usage from all sources. The project sponsor has agreed to submit applications for the withdrawals from Wells 5 and 6, and the Commission will act upon these applications in the future.

The projected maximum daily water demand through 2011 is 0.461 mgd. Commission staff recommends approval of a total system average withdrawal of 0.350 mgd, which is consistent with the sustainable yields of existing sources and will satisfy the projected system demand through 2011. The difference between the projected maximum daily demand and the approvable system capacity is an indication that additional water resources will need to be developed in the near future for CBA.

The project is subject to the Commission's water conservation requirements, as per Commission Regulation §806.25(a). The water system is 100 percent metered, which is in compliance with this regulation, and in 2004, the system had an unaccounted for water loss of 5 percent, which is less than the 20 percent maximum set forth in Commission Regulation §806.25(a)(1).

The project sponsor has paid the appropriate application fee pursuant to Commission Regulation §806.13, and in accordance with Commission Resolution 2005-03. The project sponsor has provided all proofs of notification as required by Commission Regulation §806.15.

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

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

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

Decision

1. The project's groundwater withdrawal of 0.216 mgd (30-day average) from Well 7, and a total system withdrawal limit (30-day average) of 0.351 mgd, are approved pursuant to Article 3, Section 3.10, of the Compact.

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

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

4. The project sponsor shall install a meter, accurate to within five (5) percent, on Well 7. The project sponsor shall notify the Commission, in writing, when the meter is installed.

5. Except as provided for in Condition 7 below, the project sponsor shall keep daily records of the metered withdrawal from Well 7. 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.

6. The maximum instantaneous rate of production from Well 7 shall not exceed 150 gpm.

7. Within sixty (60) days from the date of this approval and prior to operating Well 7, the project sponsor shall develop a detailed monitoring plan to manage the potential for adverse impacts related to the acid mine drainage-impacted water of Little Nescopeck Creek. This plan shall include a schedule for implementation of the plan and a description of the proposed monitoring, including locations and instrumentation, as well as a contingency plan. Automated water levels and manually collected water quality samples should be collected from all of the proposed monitoring points during background monitoring and through the entire monitoring period. A detailed schedule for sampling frequency, length of testing, frequency of reporting, etc. should be provided. Upon approval of the monitoring plan by Commission staff, the project sponsor shall implement the monitoring plan and provided updates to the Commission on the monitoring program on a monthly basis. At the conclusion of the monitoring period, the final results of the monitoring should be documented in an interpretive report and supplied to the Commission. The report shall include the monitoring data in digital and graphical form, along with interpretative text and conclusions, due sixty (60) days after the end of the 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. Within sixty (60) days from the date of this approval and prior to operating Well 7, the project sponsor shall submit documentation that the mitigation has been completed for the use of the private well that fills a pond used for watering livestock.

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

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

11. The maximum instantaneous rate of production and the maximum withdrawal (30-day average) from Well 1 shall not exceed 35 gpm and 0.023 mgd, respectively.

12. The maximum instantaneous rate of production and the maximum withdrawal (30-day average) from Well 2 shall not exceed 24 gpm and 0.006 mgd, respectively.

13. The maximum instantaneous rate of production and the maximum withdrawal (30-day average) from Well 3 shall not exceed 35 gpm and 0.078 mgd, respectively.

14. Within one hundred eighty (180) days from the date of this approval, the project sponsor shall submit applications for Wells 5 and 6.

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

16. 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.

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

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

19. 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.

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

21. 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.

22. 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.

23. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or water resources. The Commission, upon its own motion, may at any time reopen any project approval and make additional corrective modifications that may be necessary.

24. 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.

25. This approval is effective until March 14, 2022. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than September 14, 2021, the existing approval shall be deemed extended until such time as the Commission renders a decision on the application.

By the Commission:



Dated: March 14, 2007

Kenneth P. Lynch, Chair
New York Commissioner



SUSQUEHANNA RIVER BASIN COMMISSION

1721 North Front Street • Harrisburg, Pennsylvania 17102-2391

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Docket No. 20070302

Approval Date: March 14, 2007

COUNTY OF LYCOMING—LYCOMING COUNTY RESOURCE MANAGEMENT SERVICES

Consumptive Water Use of up to 0.110 mgd, for Landfill Operations,
Brady Township, Lycoming County, Pennsylvania

Review Authority

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the application on November 10, 2005.

Description

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

Location. The project is located in the West Branch Susquehanna Subbasin, HUC 02050206, West Branch Susquehanna River Watershed, Brady Township, Lycoming County, Pennsylvania.

Project Features. The project sponsor has requested approval for the consumptive use of water of up to 0.110 million gallons per day (mgd) from a storage pond (Sedimentation Pond 1) that collects stormwater runoff from the landfill. The project sponsor calculates the current maximum day consumptive water use to be approximately 0.105 mgd, and current 30-day average consumptive water use to be 0.026 mgd.

The landfill, owned and operated by the County of Lycoming, was permitted by the Pennsylvania Department of Environmental Protection (PADEP) and began operations in 1978. In 2003, the project sponsor constructed a 60,000-square-foot recycling center. In addition, the project sponsor operates a one-megawatt cogeneration plant that utilizes landfill gas as a fuel source for combustion. According to the project sponsor, there is no consumptive water use associated with the recycling center or the cogeneration plant.

Water for landfill operations is supplied from an on-site storage pond that collects stormwater runoff from the landfill. The storage pond has a capacity of 1.6 million gallons when full, and a surface area estimated to be 74,000 square feet.

The landfill is currently serviced by an on-site non-transient, non-community public water supply system operated under PADEP Public Water Supply Permit No. 4411014. The current permit allocation is less than 0.100 mgd from two groundwater sources (Wells TH10 and TW01). Pertinent data for the wells are described in the table below.

WELL CONSTRUCTION AND YIELD			
Well No.	Year	Depth Drilled (feet bgs)	Approximate Yield (gpm)
TH10	1997	340	8
TW01	2002	340	7
bgs - below ground surface gpm - gallons per minute			

All water from the public water supply system is collected and pre-treated at an on-site wastewater treatment facility, then discharged to the Montgomery Wastewater Treatment Plant.

The leachate collection system collects the leachate generated from water trapped in the waste and precipitation on the open (working) cell. The leachate is conveyed to an on-site treatment facility for pre-treating prior to transfer to the Montgomery Wastewater Treatment Plant. The landfill is lined and there is no appreciable consumptive loss associated with the treatment system. The leachate line is metered and, on a 30-day average, approximately 30,000 to 70,000 gallons per day (gpd) is transferred to the Montgomery Wastewater Treatment Plant. The on-site wastewater treatment facility includes a 1.6-million-gallon maximum leachate lagoon, which has an approximate surface area of 74,000 square feet, and a floating ball cover over 90 percent of the lagoon. Storage ponds are described below.

STORAGE POND CONSTRUCTION				
Pond Name	Year	Surface Area	Capacity (million gallons)	Average Depth
Leachate Pond	1977	10,324	1.1	8
Sedimentation Pond 1	1992	73,788	1.6	25

The project consumptively uses water for dust control, truck washing, and evaporation from the leachate lagoon and Sedimentation Pond 1. Water for dust control and the truck wash can be metered when it is withdrawn from Sedimentation Pond 1.

Coordination. Commission staff has coordinated with the PADEP, Bureau of Land Recycling and Waste Management, during review of the project. The project's landfill operation is approved by PADEP Permit No. 100963. PADEP staff has reviewed this docket for consistency with its permits.

Findings

The project is subject to Commission review and approval standards, including Commission Regulations §806.21 and §806.22.

All water used for dust suppression, truck and tire washing, and water evaporated from the leachate treatment lagoon and Sedimentation Pond 1 is considered to be used consumptively.

Commission staff recommends that the project sponsor install a meter to measure the daily quantity of water withdrawn from the Sedimentation Pond 1. The project sponsor may propose an alternative to metering for Commission staff review and approval.

Water evaporated from Sedimentation Pond 1 and from the leachate treatment lagoon will be calculated by the project sponsor employing a methodology acceptable to the Commission.

Commission staff recommends the consumptive water use of the facility be the sum of the metered quantity supplied for dust control and for makeup water for the truck wash, plus the quantity evaporated from the Sedimentation Pond 1 and the treated leachate lagoon.

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

The project's consumptive use of water is subject to mitigation requirements, as per Commission Regulation §806.22(b). To satisfy these requirements, the project sponsor proposes to make quarterly payments to the Commission in lieu of providing actual compensation water.

The project sponsor has requested a consumptive water use approval of up to 0.110 mgd. Based on an analysis of water use records supplied by the project sponsor, Commission staff is recommending approval of the requested amount. Should the project's future consumptive water use be expected to exceed 0.110 mgd, the project sponsor must apply for a modification to this docket at that time.

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

The project sponsor has paid the appropriate application fee, in accordance with Commission Regulation §806.35, and in accordance with Commission Resolution 2005-03. The

project sponsor has provided all proofs of notification, as required by Commission Regulation §806.15.

The project sponsor operated the project without prior Commission approval since July, 1 1993, when its consumptive water use exceeded the regulation threshold. The project sponsor voluntarily submitted its application to the Commission, complied with application procedures, and cooperated with Commission staff during its review of the project. The project sponsor has offered a \$15,300 settlement to the Commission for the noncompliance with Commission Regulation §806.4. Commission staff recommends acceptance of the proposed settlement.

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

Decision

1. The project's consumptive water use of up to 0.110 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 standards, monitoring, and reporting requirements as per Commission Regulations §806.22 and §806.30.

4. Within sixty (60) days from the date of this approval, the project sponsor shall install a meter on the withdrawal from the storage pond (Sedimentation Pond 1). The project sponsor shall install and maintain metering, accurate to within five (5) percent. The project sponsor shall notify the Commission, in writing, within thirty (30) days of when the meter is installed. The project sponsor may propose alternative accounting procedures to the Commission for staff review and approval.

5. The project sponsor shall keep daily records of the project's consumptive water use and shall report the data to the Commission quarterly, and as otherwise required. Quarterly monitoring reports are due within thirty (30) days after the close of the preceding quarter. The daily quantity of water consumptively used shall be the quantity used for dust control, evaporated during truck washing, and evaporated from the storage pond and the leachate treatment lagoon. Commission staff shall review and approve the method of calculation of evaporative loss from the storage pond and the leachate treatment lagoon.

6. To satisfy the Commission's current mitigation requirements for consumptive water use set forth in Commission Regulation §806.22, the project sponsor shall make quarterly payments to the Commission based on the rate of \$0.14 per 1,000 gallons of water consumptively used by the project. The daily quantity of water consumptively used shall be the quantity used for dust control, evaporated during truck washing, and evaporated from the storage

pond and the leachate treatment lagoon. Payments shall be made quarterly and shall be calculated by applying this rate to the daily amount of water consumptively used by the project during the preceding calendar quarter. Quarterly payments are due and payable within thirty (30) days after the close of the preceding quarter. The rate of payment, after appropriate notice to consumptive users of water using this method of compliance, is subject to change at the Commission's discretion.

7. The project sponsor has offered a settlement by agreement, pursuant to Commission Regulation §808.18, in the amount of \$15,300 for its consumptive water use found to be in noncompliance with Commission Regulation §806.4, and is hereby accepted. Except where the full amount of same has been tendered to the Commission in advance hereof, this action shall be contingent upon and shall not be effective until payment of the settlement amount is made to the Commission, or arrangements for such payment have been made that are acceptable to the Executive Director of the Commission. Failure to make such payment or payment arrangements with the Commission within forty-five (45) days hereof shall render this approval null and void.

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

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

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

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

15. This approval is effective until March 14, 2022. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than September 14, 2021, the existing approval shall be deemed extended until such time as the Commission renders a decision on the application.

By the Commission:



Dated: March 14, 2007

Kenneth P. Lynch, Chair
New York Commissioner



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20070303

Approval Date: March 14, 2007

MOUNT UNION MUNICIPAL AUTHORITY

Groundwater Withdrawal (30-Day Average) of 0.432 mgd from Well 3,
Surface Water Withdrawal (Peak Day) of 0.489 mgd from Singer's Gap Reservoir,
and a Total System Withdrawal Limit (Peak Day) of 0.980 mgd,
for Public Water Supply,
Wayne Township, Mifflin County, Pennsylvania

Review Authority

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the application on June 5, 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 Juniata Subbasin, HUC 02050303, Juniata River Watershed, Wayne Township, Mifflin County, Pennsylvania.

Project Features. The project sponsor has requested approval for the withdrawal (30-day average) of 0.432 million gallons per day (mgd) from Well 3 (also known as Lempkelde Test Well 1). Mount Union Municipal Authority (MUMA) will use the well as a source for the public water supply system that currently relies on Wells 1 and 2, comprising a well field located in an industrial park. Wells 1 and 2 currently are approved for a combined maximum (30-day average) withdrawal of up to 0.864 mgd, or 0.432 mgd from each well at a maximum instantaneous pumping rate of 300 gallons per minute (gpm) (Commission Docket No. 20021012).

Singer's Gap Reservoir has an estimated storage capacity of 19 million gallons (mg) and currently serves as a supplementary source to the well field. The use of this reservoir dates from the early 1900s.

Well 3 is located 3,400 feet north-northwest of Industrial Park Wells 1 and 2, approximately 6,000 feet east of Pennsylvania Route 522 and the center of Allenport, and approximately 8,000 feet southwest of the railroad bridge on the east side of Mount Union. Well 3 is completed in the Shriver limestone, constructed with 101 feet of 8-inch-diameter casing set approximately 65 feet into the top of the Ridgeley Formation, and is an open-rock borehole to a total depth of 320 feet below ground surface (bgs). The uppermost water-bearing zone within the Ridgeley sandstone was cased off due to an abundance of silt and fine sand. Three additional discrete water-bearing zones of highly fractured and weathered bedrock were encountered at depths of 111 to 115 feet bgs and 120 to 126 feet bgs within the Ridgeley Formation, and at 203 to 204 feet bgs within the Shriver Formation.

MUMA currently supplies Mount Union Borough and Shirley and Kistler Townships in Huntington County, and Wayne Township in Mifflin County. Based on 2006 data, the system has an average daily demand (30-day average) of 0.531 mgd from Wells 1 and 2 and 0.041 mgd from the reservoir, and a maximum demand (peak day) of 0.850 mgd. The current system capacity is 0.864 mgd. Average daily demand is projected to increase moderately, by approximately 15 percent, by 2031, to an average daily demand of 0.665 mgd and a maximum daily demand to 0.977 mgd.

All wastewater is discharged to the sanitary sewer system and treated at the Mount Union wastewater treatment facility, which discharges to the Juniata River approximately 12,000 feet upstream of Well 3 and the Industrial Park well field.

Pumping Test. A 50-hour, constant-rate pumping test of Well 3 was conducted with prior Commission approval on April 13-18, 2003, at an average rate of 300 gpm. Residences in the vicinity of the production well are served by public water, and no domestic wells or springs were identified. An observation well located approximately 500 feet west of the production well was monitored during the testing. In addition, two piezometers and a weir were installed along an unnamed tributary to the Juniata River, and a staff gage was constructed along the Juniata River for monitoring surface water elevations during testing.

Total drawdown within the pumping well after 50 hours was 9.01 feet. Drawdown stabilized at approximately 9 feet within only 1 minute of pumping. Drawdown within the observation well was measured at 2.14 feet.

No adverse impacts were observed at any of the surface water monitoring points.

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

Findings

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

Commission staff reviewed the groundwater availability analysis, pumping test results, and supporting information submitted by the project sponsor. Based on this information, Commission staff concludes that Well 3 draws water from a fractured bedrock aquifer under semi-confined conditions. Well 3 is located adjacent to a regional groundwater discharge area, the Juniata River. The site was selected at the intersection of two fracture traces and designed to intercept the potentially high yielding aquifers of the Ridgley and Shriver Formations at elevations that were below the base of the Juniata River. Because the well penetrates the Ridgley and Shriver Formations down-dip from the intersection of the formations' bedding planes and the river, the high yields from the well are likely to be sustained by the Juniata River and have minimal impact to the aquifers.

Commission staff recommends that the maximum instantaneous rate of production from Well 3 not exceed 300 gpm. Likewise, Commission staff recommends approval of a 30-day average withdrawal rate of 0.432 mgd, the requested quantity.

The project sponsor's withdrawal from Singer's Gap Reservoir has been in operation since the early 1900s and is currently used to supplement its groundwater withdrawals, when needed. The project sponsor reports that its use in 2006 was 0.041 mgd (30-day average). The peak day withdrawal was 0.489 mgd at a maximum instantaneous withdrawal rate of 340 gpm. At the present time, there are no known negative impacts due to the operation of the facility. The withdrawal is subject to review and approval under Commission Regulation §806.4(a)(2)(iv), which became effective after completion of staff's review and, based on the limited data available, Commission staff recommends approval of the withdrawal at the current rate of 0.489 mgd. The project sponsor should install the appropriate metering to provide to the Commission documentation of the reservoir withdrawal and the system's combined usage from all sources.

The projected average daily demand through 2031 is 0.665 mgd, and maximum daily demand is 0.977 mgd. Commission staff recommends approval of a total system withdrawal of 0.980 mgd (peak day) from all sources, which is consistent with sound operating practices and the sustainable yields of existing sources, and will satisfy the projected system demand through 2031.

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

The project is subject to the Commission's water conservation requirements, as per Commission Regulation §806.25(a). The water system is 100 percent metered, which is in compliance with this regulation. MUMA reports unaccounted for water losses of less than 13 percent, which is in compliance with Commission Regulation §806.25(a)(1).

The project sponsor has paid the appropriate application fee pursuant to Commission Regulation §806.13, and in accordance with Commission Resolution 2005-03. The project sponsor has provided all proofs of notification as required by Commission Regulation §806.15.

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

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

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

Decision

1. The project's requested withdrawals of 0.432 mgd (30-day average) from Well 3, 0.489 mgd (peak day) from Singer's Gap Reservoir, and a total system withdrawal limit from all sources of 0.980 mgd (peak day), are approved pursuant to Article 3, Section 3.10, of the Compact.

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

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

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

5. Within sixty (60) days from the date of this approval, the project sponsor shall install a totalizing flow meter, accurate to within five (5) percent, on Well 3. The project sponsor shall notify the Commission, in writing, within thirty (30) days of when the meter is installed.

6. The maximum instantaneous rate of production from Well 3 shall not exceed 300 gpm.

7. Within sixty (60) days from the date of this approval, the project sponsor shall install and maintain metering, accurate to within five (5) percent, on its withdrawal from Singer's Gap Reservoir. The project sponsor shall notify the Commission, in writing, when the meter is installed. The project sponsor may propose alternate monitoring to the Commission for staff review and approval.

8. The project sponsor shall keep daily records of the metered withdrawals from the Singer's Gap Reservoir. 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.

9. The maximum instantaneous withdrawal rate from Singer's Gap Reservoir shall not exceed 340 gpm.

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

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

12. 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.

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

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

15. 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.

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

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

18. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or water resources. The Commission, upon its own motion, may at any time reopen any project approval and make additional corrective modifications that may be necessary.

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

20. This approval is effective until March 14, 2022. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than September 14, 2021, the existing approval shall be deemed extended until such time as the Commission renders a decision on the application.

By the Commission:



Dated: March 14, 2007

Kenneth P. Lynch, Chair
New York Commissioner



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Docket No. 20070304

Approval Date: March 14, 2007

COMMONWEALTH ENVIRONMENTAL SYSTEMS, L.P.

Consumptive Water Use of up to 0.050 mgd, for Landfill Operations,
and Groundwater Withdrawal (30-Day Average) of 0.050 mgd from Well 1,
Foster, Frailey and Reilly Townships, Schuylkill County, Pennsylvania

Review Authority

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the application on August 7, 2006, and supplemental information on December 7, 2006.

Description

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

Location. The project is located in the Lower Susquehanna Subbasin, HUC 02050301, Middle Creek Watershed, Gebhard Run Watershed, and headwaters of the Swatara Creek Watershed; Foster, Frailey, and Reilly Townships, Schuylkill County, Pennsylvania.

Project Features. The project sponsor has requested approval for the consumptive use of water of up to 0.050 million gallons per day (mgd) from Well 1 for its operations at Commonwealth Environmental Systems, L.P. (CES) landfill facility. The project sponsor consumptively uses water for truck and tire washing, road washing, and dust suppression at the crushing and sorting facility. The project sponsor estimates the current maximum day consumptive water use to be approximately 0.035 mgd, and current 30-day average consumptive water use to be 0.032 mgd.

The CES landfill was permitted by the Pennsylvania Department of Environmental Protection (PADEP) in 1997 and has been in continuous operation since that time. The landfill is permitted to operate until June 2009, at which time a permit renewal application will be submitted to PADEP. The CES landfill is currently composed of eight permitted cells, with operations currently in Cell 5.

Water for landfill operations is supplied by withdrawals from Well 1. Well 1 is not currently metered, but the withdrawal is measured by the water truck capacity and the number of truckloads. The project sponsor currently maintains a log of the daily number of truckloads of water withdrawn from Well 1.

Water is withdrawn from Well 1 and conveyed by a 12,000-gallon tanker truck to the landfill, where it is directly applied from the truck to the haul roads or used at the crushing operations. The peak day use is approximately 25,000 gallons per day (gpd). Well 1 is also used for sanitary water for the Administration and the Maintenance Buildings and for the truck wash. The sanitary water is collected and discharged to the on-site leachate collection facility.

The leachate collection system collects leachate that is generated from water trapped in product and rainwater that is collected from the open (working) cell, and conveys it to the on-site leachate collection building. The leachate is pre-processed, then conveyed to the Schuylkill County Municipal Authority wastewater treatment plant in Gordon, Pennsylvania. The leachate treatment system is comprised of three closed-top tanks with a combined storage capacity of 4.0 million gallons (see table). Since the landfill is lined, it is anticipated that groundwater does not contribute to leachate production. The leachate line is metered, and on average (30-day), approximately 70,000 gpd is transferred to the Schuylkill County Municipal Authority.

Tank ID	Year Built	Material Held	Holding Capacity (million gallons)
Tank 1	1997	Raw Leachate	1.5
Tank 2	1997	Raw Leachate	1.5
Tank 3	1997	Treated Effluent	1.0

One additional on-site well (Well 2), located near the leachate collection facility, is utilized to supply water for sanitary services and other operational needs at rates of less than 1,000 gpd. Well 2 is metered. Water is collected, blended with the leachate, and discharged to Schuylkill County Municipal Authority.

The landfill currently has 14 groundwater monitoring wells located on the site. The perimeter wells are used for observation/groundwater quality monitoring wells and are not pumped. The table below contains pertinent data for the wells.

Well ID	Year	Total Depth (feet)	Static Water Level (feet BTOC)
MW-1D	1997	82.0	24.45
MW-2D	1997	88.0	23.58
MW-3D	1997	97.3	32.28
MW-4D	1997	56.0	5.57
MW-5D	1997	146.0	11.84

Well ID	Year	Total Depth (feet)	Static Water Level (feet BTOC)
MW-6D	1997	51.0	5.14
MW-7D	1997	106.5	27.37
MW-8D	1997	86.0	35.22
MW-11D	1997	172.0	27.51
MW-12D	1997	142.8	24.47
MW-13D	1997	142.0	18.10
MW-14D	1997	42.0	6.32
MW-1D	1997	82.0	24.45
MW-2D	1997	88.0	23.58
BTOC – below top of casing			

CES operates an on-site borrow pit (PADEP Permit No. 101615) located approximately 3,000 feet north of the Administration Building and 200 feet northwest of the leachate treatment facility. The borrow pit provides material for daily cover at the landfill and for material that is used for road base for the haul roads. The excavated materials are trucked from the on-site stone crusher/sorter. When the crusher is in operation, dust is controlled by spray bars mounted to the crusher. There are four spray bars on the crusher. Water for the spray bars is supplied by tanker truck (12,000 gallons) and pumped to the bars from the water truck to storage tanks at the crusher. On average, the crushing/sorter machine operates approximately 8 to 10 days per month. The crushing system is not metered but the water delivered to the crusher is recorded in the tanker truck log.

Coordination. Commission staff has coordinated with the PADEP, Bureau of Land Recycling and Waste Management, during review of the project. PADEP approved the project's landfill operation in 1997. PADEP staff has reviewed this docket for consistency with its permits.

Findings

The project is subject to Commission review and approval standards, including Commission Regulations §806.21, §806.22, and §806.23.

All water used for truck and tire washing, road washing, and dust suppression at the crushing and sorting facility is considered to be used consumptively. The daily quantity of water consumptively used shall be the daily quantity withdrawn from Well 1 for truck and tire washing, road washing, and dust suppression at the crushing and sorting facility.

The project sponsor currently maintains a log of the daily number of truckloads of water withdrawn from Well 1 for truck and tire washing, road washing, and dust suppression at the crushing and sorting facility. Commission staff recommends that the volume of the water trucks and number of truckloads of water withdrawn from Well 1 be recorded on a daily basis.

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

The project's consumptive use of water is subject to water mitigation requirements, as per Commission Regulation §806.22(b). To satisfy these requirements, the project sponsor proposes to make quarterly payments to the Commission in lieu of providing actual mitigation water.

The project sponsor has requested a consumptive water use approval of up to 0.050 mgd. Based on an analysis of water use records supplied by the project sponsor and the future plans at the landfill, Commission staff is recommending approval of the requested amount. Should the project's future consumptive water use be expected to exceed 0.050 mgd, the project sponsor must apply for a modification to this docket at that time.

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

The project sponsor has paid the appropriate application fee, in accordance with Commission Regulation §806.35, and in accordance with Commission Resolution 2005-03. The project sponsor has provided all proofs of notification, as required by Commission Regulation §806.15.

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

Decision

1. The project's groundwater withdrawal of 0.050 mgd (30-day average) from Well 1 and the consumptive water use of up to 0.050 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 and groundwater withdrawal standards, monitoring, and reporting requirements as per Commission Regulations §806.22, §806.23, and §806.30.
4. The project sponsor shall keep daily records of the project's consumptive water use and shall report the data to the Commission quarterly, and as otherwise required. Quarterly monitoring reports are due within thirty (30) days after the close of the preceding quarter. The

daily quantity of water consumptively used shall be the quantity used for truck and tire washing, road washing, and dust suppression at the crushing and sorting facility.

5. To satisfy the Commission's current mitigation requirements for consumptive water use set forth in Commission Regulation §806.22, the project sponsor shall make quarterly payments to the Commission based on the rate of \$0.14 per 1,000 gallons of water consumptively used by the project. The daily quantity of water consumptively used shall be the total volume of water trucks filled from Well 1. Payments shall be made quarterly and shall be calculated by applying this rate to the daily amount of water consumptively used by the project during the preceding calendar quarter. Quarterly payments are due and payable within thirty (30) days after the close of the preceding quarter. The rate of payment, after appropriate notice to consumptive users of water using this method of compliance, is subject to change at the Commission's discretion.

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

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

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

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

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 14, 2022. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than September 14, 2021, the existing approval shall be deemed extended until such time as the Commission renders a decision on the application.

By the Commission:



Dated: March 14, 2007

Kenneth P. Lynch, Chair
New York Commissioner



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20070305

Approval Date: March 14, 2007

SHIPPENSBURG BOROUGH AUTHORITY

Groundwater Withdrawal (30-Day Average) of 2.000 mgd from Well 3,
and a Total System Withdrawal Limit (30-Day Average) of 4.280 mgd,
for Public Water Supply,
Southampton Township, 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) Regulation §806.4, relating to projects requiring review and approval. The Commission received the application on May 11, 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 Subbasin, HUC 02050305, Conodoguinet Creek Watershed, Southampton Township, Cumberland County, Pennsylvania.

Project Features. The project sponsor has requested approval for the withdrawal (30-day average) of 2.000 million gallons per day (mgd) from Well 3. Shippensburg Borough Authority (SBA) will use the well as a source for the public water supply system that currently relies on two wells: Wells 1 and 2. The Commission previously approved withdrawals of 1.920 mgd from Well 1 and 1.900 mgd from Well 2 as Commission Docket Nos. 19900713 and 19940504, respectively. SBA also has approval to purchase an average (30-day maximum) of 0.650 mgd from the Franklin County General Authority (FCGA) and to treat the water at its Gunter Valley Treatment Plant.

Well 3 will replace withdrawals from two decommissioned water sources: the Gunter Valley Reservoir located on Trout Run and Dykeman Spring. Initially, SBA intends to use Well 3 as a backup supply well but, based on projected needs, will eventually use the well as a primary water source for the system.

Well 3 is located along the flank of South Mountain approximately 4,000 feet southwest of Well 1, 13,000 feet northeast of Well 2, and 16,000 feet southeast of Shippensburg. At the

well site, a considerable thickness of unconsolidated materials comprised of colluvial deposits of the Antietam and Harpers Formations and weathered Tomstown Formation overlies the competent bedrock. Bedrock strikes east-northeast and west-southwest. The well is completed in the Tomstown Formation, a carbonate aquifer, constructed with 12-inch-diameter steel casing set to a depth of 237 feet below ground surface (bgs), and is a 12-inch-diameter open-rock borehole to a total depth of 395 feet bgs. Water-bearing zones were encountered at depths of 250 to 253 feet bgs, 266 to 268.5 feet bgs, and 322 to 323 feet bgs.

SBA currently supplies the Boroughs of Shippensburg and Orrstown, and parts of Lurgan, Shippensburg, Southhampton, and Letterkenny, Townships, within Cumberland and Franklin Counties. The system has an average daily demand (30-day average) of 2.050 mgd, and a maximum demand (peak day) of 2.970 mgd. The current system capacity is 4.170 mgd. Average daily demand is projected to increase to 2.710 mgd and maximum daily demand to 4.280 mgd by 2030.

Wastewater is discharged either to on-lot septic systems or treated at SBA's regional wastewater treatment facility, which is located on Middle Spring Creek.

Pumping Test. A 60-hour, constant-rate pumping test of Well 3 was conducted with prior Commission approval on September 26-28, 2001, at an average rate of 1,503 gallons per minute (gpm). In addition to the pumping well, four residential wells were monitored throughout the aquifer testing. With respect to Well 3, the domestic wells were located approximately 2,700 feet east to the southeast, 1,900 feet to the west, 2,800 feet to the south, and 2,200 feet to the southwest.

Burd Run, Middle Spring Creek, and one of the numerous vernal ponds in the vicinity of the wellhead were monitored as part of the surface water monitoring network. Each stream was monitored using a weir; in addition, a streambank piezometer was installed along Burd Run approximately 2,900 feet upstream from the weir. A second piezometer was installed in a vernal pond adjacent to Well 3. Due to the thickness and composition of the overburden and the very deep static water level of the production well, and in consideration of the nature of the hydrogeologic setting, no impacts are anticipated in the wetlands near the well. Monitoring of these features was not required.

After 60 hours of pumping, drawdown within Well 3 was reported to be 43.5 feet bgs. Drawdowns of 2.6 feet and 4.5 feet were observed in two of the four residential wells. No drawdown was observed in any of the surface water monitoring points.

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

Findings

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

Commission staff reviewed the groundwater availability analysis, pumping test results, and supporting information submitted by the project sponsor. Based on this information, Commission staff concludes that Well 3 draws water from a carbonate aquifer with highly efficient, solution-enlarged fractures. The thick layer of colluvium overlying the carbonate unit acts as a natural buffer to prevent adverse impacts to the environment, while creating an expansive storage “bank” of groundwater for the underlying aquifer.

No boundary conditions (either recharge or confining) were observed during the testing, and drawdown is anticipated to expand to the west-southwest and to the east-northeast along strike. Commission staff finds that at its recommended quantity, withdrawal rate, and other operating conditions, the withdrawal from Well 3 will not cause significant adverse impacts to the water resources of the basin.

Commission staff recommends that the maximum instantaneous rate of production from Well 3 not exceed 1,500 gpm. Likewise, Commission staff recommends approval of a 30-day average withdrawal rate of 2.000 mgd, the requested quantity. The project sponsor should install appropriate metering on Well 3, monitor withdrawals daily, and report these data quarterly.

The projected average daily demand through 2030 is 2.710 mgd. Commission staff recommends approval of a total system withdrawal of 4.280 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 §806.25(a). The water system is 100 percent metered, which is in compliance with this regulation, and SBA reports unaccounted for water losses of less than 20 percent, which is in compliance with Commission Regulation §806.25(a)(1).

The project sponsor has paid the appropriate application fee pursuant to Commission Regulation §806.13, and in accordance with Commission Resolution 2005-03. The project sponsor has provided all proofs of notification as required by Commission Regulation §806.15.

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

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

Decision

1. The project’s groundwater withdrawal of 2.000 mgd (30-day average) from Well 3 and a total system withdrawal limit of 4.280 mgd (30-day average) are approved pursuant to Article 3, Section 3.10, of the Compact.

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

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

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

5. Within sixty (60) days from the date of this approval, the project sponsor shall install a meter, accurate to within five (5) percent, on Well 3. The project sponsor shall notify the Commission, in writing, when the meter is installed.

6. The maximum instantaneous rate of production from Well 3 shall not exceed 1,500 gpm.

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

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

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. 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.

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

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

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 14, 2022. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than September 14, 2021, the existing approval shall be deemed extended until such time as the Commission renders a decision on the application.

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:



Dated: March 14, 2007

Kenneth P. Lynch, Chair
New York Commissioner



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Docket No. 20061208-1

Approval Date: December 5, 2006

Modification Date: March 14, 2007

LANCASTER COUNTY SOLID WASTE MANAGEMENT AUTHORITY— FREY FARM AND CRESWELL LANDFILLS

Consumptive Water Use of up to 0.065 mgd for Landfill Operations,
and a Total Groundwater Withdrawal (30-Day Average) of 0.880 mgd,
for Leachate Collection and Treatment,
Manor Township, Lancaster County, Pennsylvania

Review Authority

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the original application on July 3, 2006, and approved the project on December 5, 2006. The project sponsor notified the Commission of several corrections regarding project features, and the Commission reissues the docket in its entirety with these corrective modifications. The term of the docket remains unchanged.

Description

Purpose. The purpose of the application is to request approval for the consumptive use of water for landfill operations, and the groundwater withdrawal for leachate collection and hydraulic control related to plume migration.

Location. The project is located in the Lower Susquehanna Subbasin, HUC 02050306, Manns Run Watershed, Manor Township, Lancaster County, Pennsylvania.

Project Features. The project sponsor has requested approval for the consumptive use of water of up to 0.065 million gallons per day (mgd) from treated leachate, runoff, and groundwater. The project sponsor calculates the current maximum day consumptive water use to be 0.037 mgd, and current 30-day average consumptive water use to be 0.030 mgd.

The project sponsor also has requested approval for the total withdrawal (30-day average) of 0.880 mgd from groundwater at Wells CWMP002W, CWMP003W, CWMP004W, CWOB004W, CWMP012W, CWOB051W, CWOB057W, CWOB091W, FFMP016W, FFPR001W, CWPRCBDW, the Shredder Pump Station, and a leachate interceptor trench. With the exception of Well FFMP016W and the Shredder Pump Station, the wells and inceptor trench

are used for collection of shallow groundwater and leachate from the unlined Creswell Landfill, which is treated using a series of seven lagoons. The project sponsor proposes to use Well FFMP016W as a future source of water for landfill operations.

Lancaster County Solid Waste Management Authority (LCSWMA) owns and operates the Frey Farm Landfill (FFLF) and the inactive (closed) Creswell Landfill (CWLF). LCSWMA began operation in 1968 at the CWLF, which is a predominantly unlined municipal and residual waste landfill (the Ravine Area is constructed using a single, 60-mil high density polyethylene liner covering approximately 21 acres). In 1989, LCSWMA closed CWLF and moved its operations to the newly constructed FFLF. The FFLF is permitted by the Pennsylvania Department of Environmental Protection (PADEP) until 2011, but the project sponsor has indicated that it intends to request the approval from PADEP be extended so it can continue to receive waste until 2020.

The project consumptively uses water for dust suppression, truck and tire washing, irrigation, evaporation from its leachate treatment lagoons, and the sump at the Shredder Pump Station.

Water for landfill operations currently is supplied by un-metered withdrawals from the leachate treatment lagoons. The project sponsor indicates that Well FFMP016W will be used to supply landfill operations in the future. Water is withdrawn from the lagoons and conveyed currently by a 2,280-gallon truck. The project sponsor currently maintains a log of the daily number of truckloads of water withdrawn from the lagoons. The on-site leachate treatment system is comprised of a series of 7 lined lagoons having a combined surface area of 3.28 acres and a combined storage capacity of 9.29 million gallons. The leachate lagoon system is metered (both inflow and outflow); however, because other sources discharge directly into the treatment lagoons and water is withdrawn for landfill operations, consumptive use for this part of the facility cannot be directly calculated as inflow minus outflow.

The withdrawal from all groundwater sources averages 0.356 mgd during a peak 30-day period and is strongly controlled by the precipitation received on-site. All groundwater withdrawn from the project sources is directed through the treatment lagoons and ultimately discharged to Manns Run, a tributary of the Susquehanna River. The discharge is regulated under National Pollutant Discharge Elimination System (NPDES) Permit No. PA0043486.

The wells are described in the following table.

WELL CONSTRUCTION INFORMATION				
Well No.	Year	Depth Drilled (feet bgs)	Pump Capacity (gpm)	Yield, as a 30-Day Average (mgd)
CWMP002W	1981, 2005	75, 100	10	0.012
CWMP003W	1987, 2005	75, 140	5	0.0072
CWMP004W	1981, 2003	75, 140	10	0.0144
CWOB004W	1974, 2005	80, 100	15	0.0216
CWMP012W	1981	75	5	0.00049
CWOB051W	1985, 2005	74	15	0.0216
CWOB057W	1985	74	5	0.00221
CWOB091W	1990	140	10	0.012
FFPR001W	1988	225	12	0.0001
CWPRCBDW	1991	348	6	0.0001
FFMP016W	1988	148	No Pump Installed	0.0504 (est.)
bgs - below ground surface		est. - estimated		
gpm - gallons per minute				

All of the wells in the leachate collection and treatment system are metered. The remediation system was based on a groundwater divide that was mapped along River Road. With the operation of certain wells, the groundwater divide can be shifted to maintain a hydraulic control in the immediate area and limit the potential off-site migration of groundwater.

Two additional on-site wells (Wells FFPR001W and CWPRCBDW) supply water for sanitary services at rates of less than 100 gallons per day (gpd).

FFLF has a separate leachate collection system that collects leachate generated from water trapped in the waste and precipitation on the open (working) cell. This leachate is conveyed to the Lancaster Area Sewer Authority for treatment, then discharged to Dry Run. FFLF is a lined landfill and there is no appreciable consumptive loss associated with the treatment system. The leachate line is metered and on a 30-day average, approximately 25,000 gpd are transferred to the Lancaster Area Sewer Authority.

Water for the truck wash is supplied from a 1,000-gallon storage tank that is refilled by water trucked from the lagoons. Although the facility currently collects the wash water and pumps it to the Lancaster Area Sewer Authority, the project sponsor has determined that this practice may change in the future and, therefore, agrees to consider the wash water to be 100 percent consumptive.

Coordination. Commission staff has coordinated with the PADEP, Bureau of Land Recycling and Waste Management, during review of the project. PADEP first approved the

project's landfill operation in 1968. PADEP staff has reviewed this docket for consistency with its permits.

Findings

The project is subject to Commission review and approval standards, including Commission Regulations §806.21 and §806.22.

All water used for dust suppression, truck and tire washing, irrigation, and water evaporated from the treatment lagoons and the sump at the Shredder Pump Station is considered to be used consumptively. The daily quantity of water consumptively used shall be the quantity withdrawn from the treatment lagoons and withdrawn from Well FFMP016W, plus the quantity evaporated from 3.28 acres of treatment lagoons and the Shredder Pump Station sump.

The project sponsor currently maintains a log of the daily number of truckloads of water withdrawn from the lagoons for dust suppression, truck and tire washing, and irrigation. Commission staff recommends that the volume of the water trucks and number of truckloads of water withdrawn from the lagoons be recorded on a daily basis.

Commission staff recommends that the project sponsor install a meter on Well FFMP016W prior to its use as a source of water to measure the daily quantity of water withdrawn for landfill operations. The project sponsor may propose an alternative to metering for Commission staff review and approval.

Water evaporated from the 3.28 acres of treatment lagoons and from the Shredder Pump Station sump will be calculated by the project sponsor, employing a methodology acceptable to the Commission.

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

The project sponsor has requested a consumptive water use approval of up to 0.065 mgd. Based on an analysis of water use records supplied by the project sponsor and the future plans of the landfill, Commission staff is recommending approval of the requested amount. Should the project's future consumptive water use be expected to exceed 0.065 mgd, the project sponsor must apply for a modification to this docket at that time.

The quantity of water that was consumptively used at the CWLF prior to January 23, 1971, is undocumented and is considered by the project sponsor to be de minimis due to landfill operating practices at the time. Therefore, Commission staff finds that the quantity of pre-Compact consumptive water use to be 0 gallons.

The project's consumptive use of water is subject to water mitigation requirements, as per Commission Regulation §806.22(b). To satisfy these requirements, the project sponsor proposes to make quarterly payments to the Commission in lieu of providing actual compensation water.

The project sponsor has paid the appropriate application fee, in accordance with Commission Regulation §806.13, and in accordance with Commission Resolution 2005-03. Commission staff recommends that notification of this modification, as required by Commission Regulation §806.15, be waived due to the nature of the changes.

The project sponsor operated the project without prior Commission approval since July 1994, when its consumptive water use exceeded the regulation threshold. The project sponsor voluntarily submitted its application to the Commission, complied with application procedures, and cooperated with Commission staff during its review of the project. The project sponsor has offered a \$26,442.80 settlement to the Commission for the noncompliance with Commission Regulation §803.4. (Note: This regulation was in effect in December 2006 when the settlement was accepted by the Commission.) Commission staff recommends acceptance of the project sponsor's proposed settlement.

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

Decision

1. The project's consumptive water use of up to 0.065 mgd and total groundwater withdrawal (30-day average) of 0.880 mgd from listed sources 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 monitoring and reporting requirements specified in Commission Regulation §806.22.

4. Sixty (60) days prior to its initial use, the project sponsor shall install a meter on Well FFMP016W. The project sponsor shall maintain metering, accurate to within five (5) percent. The project sponsor shall notify the Commission, in writing, when the meter is installed. The project sponsor may propose alternative accounting procedures to the Commission for staff review and approval.

5. The project sponsor shall keep daily records of the project's consumptive water use and shall report the data to the Commission quarterly, and as otherwise required. Quarterly monitoring reports are due within thirty (30) days after the close of the preceding quarter. The daily quantity of water consumptively used shall be the quantity used for dust suppression, truck and tire washing, irrigation, and water evaporated from the treatment lagoons and the Shredder

Pump Station sump. Commission staff shall review and approve the method of calculation of evaporative loss from the treatment lagoons and the Shredder Pump Station sump.

6. To satisfy the Commission's current compensation requirements for consumptive water use set forth in Commission Regulation §806.22, the project sponsor shall make quarterly payments to the Commission based on the rate of \$0.14 per 1,000 gallons of water consumptively used by the project. The daily quantity of water consumptively used shall be the total volume of water trucks filled from the treatment lagoons and metered usage from Well FFMP016W, and water evaporated from the treatment lagoons and the Shredder Pump Station sump. Payments shall be made quarterly and shall be calculated by applying this rate to the daily amount of water consumptively used by the project during the preceding calendar quarter. Quarterly payments are due and payable within thirty (30) days after the close of the preceding quarter. The rate of payment, after appropriate notice to consumptive users of water using this method of compliance, is subject to change at the Commission's discretion.

7. On December 5, 2006, a settlement was accepted by the Commission under the regulations in effect at that time, as described in the following. The project sponsor has offered a settlement by agreement, pursuant to Commission Regulation §805.27, in the amount of \$26,442.80 for its consumptive water use found to be in noncompliance with Commission Regulation §803.4, and is hereby accepted. Except where the full amount of same has been tendered to the Commission in advance hereof, this action shall be contingent upon and shall not be effective until payment of the settlement amount is made to the Commission, or arrangements for such payment have been made that are acceptable to the Executive Director of the Commission. Failure to make such payment or payment arrangements with the Commission within forty-five (45) days hereof shall render this approval null and void.

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

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

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

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

15. This approval is effective until December 5, 2031. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than June 5, 2031, the existing approval shall be deemed extended until such time as the Commission renders a decision on the application.

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

By the Commission:



Dated: March 14, 2007

Kenneth P. Lynch, Chair
New York Commissioner



SUSQUEHANNA RIVER BASIN COMMISSION

1721 North Front Street • Harrisburg, Pennsylvania 17102-2391

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Docket No. 20070306

Approval Date: March 14, 2007

DELTA BOROUGH

Groundwater Withdrawal (30-Day Average) of 0.032 mgd from Well DR-3,
for Public Water Supply,
Peach Bottom Township, York County, Pennsylvania

Review Authority

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the application on January 30, 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 Subbasin, HUC 02050306, Scott Creek Watershed, Peach Bottom Township, York County, Pennsylvania.

Project Features. The project sponsor has requested approval for the withdrawal (30-day average) of 0.032 million gallons per day (mgd) from Well DR-3. Further, the project sponsor has requested approval of a maximum instantaneous pumping rate of 45 gallons per minute (gpm) so that the desired daily withdrawal could be removed during a 12-hour pumping cycle. Delta Borough will use the well as a source for the public water supply system that currently relies on four wells: Wells 5, 6, 7, and 8. According to the project sponsor, Wells 5 and 6 are used as the primary sources and Well 7 is considered to be a backup or emergency well. The Commission approved Well 8 for a withdrawal (30-day average) of 0.065 mgd (Docket No. 19930303) on March 11, 1993. The approval of Well 8 was conditioned with the stipulation that Wells 7 and 8 would not be used in tandem due to their close proximity and substantial well interference. The other wells have not been reviewed and approved by the Commission.

Commission staff recommends approval of the requested quantity as a 30-day average withdrawal, at a maximum instantaneous pumping rate lower than the requested pumping rate, as described below.

Well DR-3 is located from 2,000 to 4,000 feet across strike from Wells 5, 6, 7, and 8. The well has 8-inch-diameter steel casing installed to a depth of 30 feet below ground surface (bgs) and is completed as an open borehole well to a total depth of 260 feet bgs. According to the drilling log, saprolite was encountered from 4 to 25 feet bgs and was underlain by green-gray chloritic schist, with localized milky-quartz veins, identified as the Peter's Creek Formation. Sixty-three percent of the reported blown yield of the well was obtained in the weathered/fractured bedrock water-bearing zone located immediately below the bottom of the casing at a depth of 34 feet bgs. The remainder of the yield is reported at a depth of 178 feet bgs from a fracture associated with quartz veining.

There is no discernable interference between Well DR-3 and the existing water supply wells. Information about Delta Borough's wells, their reported well depth, their reported pump capacity, and their reported average daily withdrawal is shown in the following table.

Well Identification	Total Depth (feet bgs)	Pump Capacity (gpm)	Reported Average Daily Withdrawal in 2004 (mgd)
Well 5	109	45	0.047
Well 6	281	30	0.009
Well 7	212	60	0.004
Well 8	300	60	0.004
TOTALS	N/A	195	0.064

The table highlights the low-yielding characteristics of the metamorphic rock units in the area. Shallow water-bearing zones illustrated by the limited well depths are also typical of this region.

Delta Borough provides water service to the Borough and adjacent parts of Peach Bottom Township. The current average daily demand of the system is reported to be 0.064 mgd.

Wastewater is treated at Delta Borough's wastewater treatment plant and discharged to Scott Creek, approximately 1,200 feet east of and downgradient from Well DR-3. The wastewater treatment plant also treats wastewater from Harford County, Maryland.

Pumping Test. A 48-hour, constant-rate pumping test of Well DR-3 was conducted on October 1-3, 2005, with prior Commission approval. In addition to the pumping well, one observation well (DR-2) and three piezometers were monitored during the test.

Pumping at a rate of 45 gpm, drawdown in the pumping well was approximately 27 feet bgs at the end of the 48-hour test. Drawdown in Well DR-2, an observation well located approximately 250 feet east of Well DR-3, was approximately 17 feet. The well's response to pumping was nearly identical to that of the production well. Piezometer PZ-2, installed near a

springhead that feeds an exceptional value (EV) wetland adjacent to the Scott Creek, had 0.85 feet of drawdown during the testing.

During the pumping test, water levels in Well DR-3 responded rapidly to a precipitation event (duration and amount unreported), confirming that the aquifer is unconfined.

Following cessation of pumping, water levels did not completely recover, even after 7,000 minutes. Approximately four feet of residual drawdown remained in the production well after two days of recovery, indicating that some water was “mined” from storage during pumping.

Two additional pumping tests were performed on Well DR-3 in December 2005. The second test at a pumping rate of 45 gpm was aborted after 24 hours due to observed impacts within the wetland complex. The third test was conducted at a reduced pumping rate of 22.5 gpm.

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

Findings

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

Commission staff reviewed the groundwater availability analysis, pumping test results, and supporting information submitted by the project sponsor. Based on this information, Commission staff concludes that Well DR-3 likely draws water from an unconfined shallow aquifer (the Peter’s Creek Formation) and the overlying saprolite. The most productive water-bearing zones in this hydrogeologic setting are commonly encountered directly above the top of the competent bedrock within the overlying, highly transmissive layer of weathered and fractured bedrock. Saprolite lies above this relatively thin layer of weathered and fractured rock, acting as storage for the fractured rock aquifer.

Although the project’s consultant asserts that additional water is obtained from a “deep” aquifer system, Commission staff finds that the information supplied is insufficient to support this claim. Further, it would be uncharacteristic of this aquifer and flow system. Any flow encountered at depth within quartz-rich zones, which are typically parallel to the schistosity in the bedrock (nearly vertical at this site), likely originates as recharge to the same area of influence as the uppermost water-bearing zone. Commission staff calculates groundwater availability to be approximately 0.0328 mgd during a 1-in-10-year drought.

However, considering the proposed development within the recharge area of the well, Commission staff are concerned that future recharge may be reduced and water availability limited. As development occurs, a significant part of the saprolite is irreversibly altered; either excavated (removed), compressed, or “capped” (by paving and construction of buildings). At the

same time, stormwater management systems remove precipitation from the “capped areas.” These changes will alter the natural abilities of the saprolite to store and transmit water to the thin water-bearing layer at the top of fractured bedrock.

The lack of a recharge boundary and the steepening drawdown trend as the water level declined during the aquifer testing indicates that there is not a strong hydraulic connection between Well DR-3 and Scott Creek. However, although Well DR-3 is not likely to draw water directly from Scott Creek, the well induces flow from the shallow aquifer that discharges to the creek and may capture groundwater that would emerge at springheads and then flow to Scott Creek. Commission staff concludes that during long-term pumping, Well DR-3 will likely impact the flow to Scott Creek on a one-to-one basis. Although there was no monitoring of Scott Creek during the testing, the consultant agrees that impact to the creek is inevitable.

Considering the results of the pumping test, including recovery data and drawdown at PZ-2 measured during the October 2005 testing, Commission staff finds that the proposed pumping rate of 45 gpm is not sustainable. At the tested rate, Commission staff notes the potential for adverse impacts to both the EV wetlands adjacent to Scott Creek and to the springheads that feed Scott Creek.

The project sponsor has requested a groundwater withdrawal of up to 0.032 mgd (30-day average) from Well DR-3, which is 220 feet from Scott Creek. With the protective measures described above, Commission staff recommends approval of the requested quantity at a maximum instantaneous pumping rate of 22.5 gpm. The well should be equipped with a meter capable of measuring the instantaneous pumping rate.

Scott Creek is classified as Class A trout stream (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 228 gpm, is required at the point of impact to prevent loss of aquatic habitat and adverse impact to downstream water users. Commission staff recommends that the project sponsor install a passive system that will allow a minimum passby flow of 228 gpm at all times during active pumping.

The project sponsor should submit its design and proposed construction schedule for the 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 Commission monitoring and reporting requirements, as per Commission Regulation §806.30. The project sponsor should install appropriate metering on Well DR-3 to monitor withdrawals daily. The project sponsor should report these data to the Commission quarterly unless otherwise required.

Review of this application was conducted under the former Commission Regulations 18 CFR §803, §804, and §805, removed and reserved as of February 20, 2007. Commission staff identified that the withdrawals from Wells 5, 6, and 7 are subject to review and approval

under Commission Regulations §806.4(a)(2)(i) and §806.4(a)(2)(iv). Commission staff recommends that the project sponsor submit applications for these wells. The Commission will act upon these withdrawals in the future.

The project is subject to the Commission's water conservation requirements, as per Commission Regulation §806.25(a). The water system is 99 percent metered, which is essentially in compliance with this regulation. In 2004, the system had a water loss of 38 percent, which is greater than the 20 percent maximum set forth in Commission Regulation §806.25(a)(1). Commission staff recommends that the project sponsor reduce system losses and achieve 100 percent compliance with the requirements by March 14, 2012. The project sponsor should report to the Commission annually on its progress in meeting this requirement.

The project sponsor has paid the appropriate application fee pursuant to Commission Regulation §806.13, and in accordance with Commission Resolution 2005-03. The project sponsor has provided all proofs of notification as required by Commission Regulation §806.15.

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

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

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

Decision

1. The project's groundwater withdrawal of 0.032 mgd (30-day average) from Well DR-3 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 monitoring and reporting requirements contained in Commission Regulation §806.30.

4. The project sponsor shall install a meter, accurate to within five (5) percent, on Well DR-3. The project sponsor shall notify the Commission, in writing, when the meter is installed.

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

6. The maximum instantaneous rate of production from Well DR-3 shall not exceed 22.5 gpm.

7. The project sponsor shall allow a flow to pass in Scott Creek directly below the point of impact from Well DR-3 of not less than 0.508 cubic feet per second (cfs) (228 gpm). When the streamflow below the point of withdrawal is less than this amount, the withdrawal shall be reduced to maintain 0.508 cfs (228 gpm) in the stream channel below the well. When the natural flow is equal to or less than 0.508 cfs (228 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. The project sponsor may propose alternative monitoring to the Commission for staff review and approval.

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

9. Within one hundred eighty (180) days from the date of this approval, the project sponsor shall submit applications for Wells 5, 6, and 7.

10. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §806.25(a). The project sponsor shall have reduced system losses and achieved 100 percent compliance with the requirements by March 14, 2012. The project sponsor shall report to the Commission annually on the progress made pursuant to these requirements. The project sponsor must petition the Commission for an extension should unforeseen events occur that preclude compliance with the March 14, 2012, deadline.

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

13. Commission approval shall not be construed to exempt the project sponsor from obtaining all necessary permits and/or approvals required for the project from other federal, state, or local government agencies having jurisdiction over the project. The Commission reserves the

right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.

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

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

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

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

18. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or water resources. The Commission, upon its own motion, may at any time reopen any project approval and make additional corrective modifications that may be necessary.

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

20. This approval is effective until March 14, 2022. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than September 14, 2021, the existing approval shall be deemed extended until such time as the Commission renders a decision on the application.

By the Commission:



Dated: March 14, 2007

Kenneth P. Lynch, Chair
New York Commissioner