DOCKET NO. D-1984-003 CP-4

DELAWARE RIVER BASIN COMMISSION

Special Protection Waters

Summit Hill Water Authority  
Ground Water Withdrawal  
Summit Hill Borough, Carbon County, Pennsylvania

PROCEEDINGS

This docket is issued in response to an Application submitted by Carbon Engineering, Inc. on behalf of Summit Hill Water Authority (SHWA) to the Delaware River Basin Commission (DRBC or Commission) on March 22, 2013 for renewal of an allocation of groundwater and review of a groundwater water withdrawal project (Application). The most recent Pennsylvania Department of Environmental Protection (PADEP) public water supply permit No. 3130013 was issued by PADEP to SHWA on December 14, 2011.

The Application was reviewed for continued inclusion in the Comprehensive Plan and for approval under Section 3.8 of the Delaware River Basin Compact. The Carbon County Planning Commission has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on December 3, 2013.

A. DESCRIPTION

1. **Purpose.** The purpose of this project is to renew the approval of an existing groundwater withdrawal project to supply up to 9.8 million gallons per month (mgm) of groundwater to the docket holder’s public water supply system from existing Wells Nos. 1, 2, 3 and 4. The total allocation approved by this docket is a reduction in the previous allocation of 13.8 mg/30 days (14.26 mgm) contained in its prior approval.

2. **Location.** The SHWA project wells are completed in the Mauch Chunk Formation and are located in the White Bear Creek Watershed in Summit Hill Borough, Carbon County, Pennsylvania. White Bear Creek near the project site is designated by the Pennsylvania Department of Environmental Protection (PADEP) as Exceptional Value (EV). White Bear Creek is a tributary to the Lehigh River.

   Specific location information has been withheld for security reasons.
3. **Area Served.** The SHWA serves water to portions of the Borough of Summit Hill as outlined on a map entitled “Location Map and Service Area Map Summit Hill Water Authority”, scale 1” = 2,000’ submitted with the Application. For the purpose of defining Area Served, the Application is incorporated herein by reference consistent with conditions contained in the DECISION section of this docket.

4. **Physical features.**

   a. **Design criteria.** The system currently serves water to approximately 2,780 customers on 1,209 domestic service connections, 10 commercial connections and 4 industrial connections and records an existing average and maximum water demand of 0.194 million gallons per day (mgd) and 0.271 mgd, respectively. SHWA projects the 10-year average and maximum water demand to increase to 0.202 mgd and 0.287 mgd, respectively. The allocation of 9.8 mgm should be sufficient to meet the future demands of SHWA.

   b. **Facilities.** The existing project wells have the following characteristics:

<table>
<thead>
<tr>
<th>WELL NO.</th>
<th>DEPTH</th>
<th>CASED DEPTH/ CASING DIAMETER</th>
<th>PUMP CAPACITY</th>
<th>YEAR DRILLED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>250’</td>
<td>60’ / 10”</td>
<td>194 gpm</td>
<td>1918</td>
</tr>
<tr>
<td>2</td>
<td>242’</td>
<td>60’ / 8”</td>
<td>315 gpm</td>
<td>1919</td>
</tr>
<tr>
<td>3</td>
<td>335’</td>
<td>unknown / 8”</td>
<td>168 gpm</td>
<td>1954</td>
</tr>
<tr>
<td>4</td>
<td>400’</td>
<td>55’ / 8”</td>
<td>292 gpm</td>
<td>1983</td>
</tr>
</tbody>
</table>

   All water service connections are metered.

   Withdrawals from Well No. 4 are metered. The combined flow of Wells Nos. 1, 2, and 4 are metered prior to entering the pump station. The total flow from the well field is metered leaving the pump station.

   The wells supply water to the Bloomingdale Pump Station where corrosion control and disinfection treatment are provided before the water is pumped to the distribution system.

   Wells Nos. 1, 2 and 3 are located outside of the 100-year floodplain. Well No. 4 has been constructed above the highest known flood level of White Bear Creek.

   The Lansford-Coaldale Water Authority public water supply system is interconnected to the SHWA water system. The 0.1 mgd capacity interconnection is used only to supply water from SHWA to Lansford-Coaldale Water Authority for emergency purposes.

   c. **Other.** Wastewater is conveyed to the Coaldale-Lansford-Summit Hill sewage treatment facility most recently approved by DRBC Docket No. D-64-27 CP on July 22, 1964. A renewal application for the sewage treatment facility has been received and is currently under review by the Commission. The PADEP issued its most recent NPDES Permit No. PA0026476
on January 28, 2013 for this treatment facility. The treatment facility has adequate capacity to receive wastewater from the proposed project.

d. Cost. There are no costs associated with this renewal project.

e. Relationship to the Comprehensive Plan. Wells Nos. 1, 2 and 3 were added to the Comprehensive Plan by Resolution No. R-62-14, and Well No. 4 by Docket No. D-84-3 CP.

B. FINDINGS

Special Protection Waters

In 1992, the DRBC adopted Special Protection Waters requirements, as part of the DRBC Water Quality Regulations (WQR), designed to protect existing high water quality in applicable areas of the Delaware River Basin. One hundred twenty miles of the Delaware River from Hancock, New York downstream to the Delaware Water Gap were classified by the DRBC as SPW. This stretch includes the sections of the river federally designated as "Wild and Scenic" in 1978 -- the Upper Delaware Scenic and Recreational River and the Delaware Water Gap National Recreation Area -- as well as an eight-mile reach between Milrift and Milford, Pennsylvania which is not federally designated. The SPW regulations apply to this 120-mile stretch of the river and its drainage area.

On July 16, 2008, the DRBC approved amendments to its Water Quality Regulations that provide increased protection for waters that the Commission classifies as Special Protection Waters. The portion of the Delaware River and its tributaries within the boundary of the Lower Delaware River Management Plan Area was approved for Special Protection Waters designation and clarity on definitions and terms were updated for the entire program.

Article 3.10.3A.2.e.1) and 2), of the Water Quality Regulations, Administrative Manual - Part III, states that projects subject to review under Section 3.8 of the Compact that are located in the drainage area of Special Protection Waters must submit for approval a Non-Point Source Pollution Control Plan that controls the new or increased non-point source loads generated within the portion of the docket holder’s service area which is also located within the drainage area of Special Protection Waters. The wells providing water supply to SHWA are located within in the drainage area to the Special Protection Waters. Since this project does not entail additional construction and expansion of facilities or service areas (i.e., there aren’t any new or increased non-point source loads associated with this approval), the non-point source pollution control plan requirement is not applicable at this time. Accordingly, Special Condition C.II.z has been included in the Decision section of this docket.

Water Audits for Public Water Supply Systems Serving Greater than 100,000 gpd

Section 2.1.8 of the Water Code states that it is the policy of the Commission to establish a standardized water audit methodology for owners of water supply systems serving the public to ensure accountability in the management of water resources. Voluntary Water Audits were encouraged for public water supply systems through December 31, 2011 (Section 2.1.8.B.). Effective January 1, 2012, the owners of each public water supply system are required to implement an annual calendar year water audit program conforming to IWA/AWWA Water
Audit Methodology (AWWA Water Loss Control Committee (WLCC) Water Audit Software) and corresponding AWWA guidance (Section 2.1.8.C). Water audits shall be submitted annually to the Commission by March 31 every year. The SHWA submitted their most recent Water Audit on June 12, 2013.

**Flood Plain Regulations**

Well No. 4 is an existing well that is located within the 100-year floodplain of White Bear Creek. Base flood elevations have not been determined by FEMA in this area. Information submitted by the docket holder in the original application indicates that the wellhead and associated infrastructure have been elevated above the highest known flood level. The project complies with the DRBC, *Administrative Manual – Part III, Basin Regulations – Floodplain Regulations.*

**Source Metering and Recording**

The docket holder’s wells are not metered separately. Before December 4, 2014 (12 months of the docket approval date), the docket holder shall install additional water meters necessary to begin metering and recording the withdrawals at each well source as described in Condition C.II.f. in the Decision Section of this docket.

**Other**

This project consists of an existing withdrawal of groundwater from Well Nos. 1, 2, 3, and 4. The docket holder has requested monthly allocations for the existing wells based on existing water use. These rates are provided in Decision Condition C.II.d. in the Decision Section of this docket. The instantaneous rates approved by this docket are based on the lesser of the current installed pumping capacity or the maximum permitted discharge rate as listed in the PADEP Public Water Supply Permit No. 3130013. As the existing water withdrawals have already been realized by the local hydrologic system, there should be no significant impacts from continued withdrawals from the existing system wells.

In its Application, SHWA requested an allocation of 13.8 mg/30 days (0.46 mgd). However, the estimated ten-year projected maximum water use as stated in the Application is 8.61 mg/30 days (0.287 mgd). As the Commission bases water allocations on ten-year projected maximum use estimates, with some minor flexibility for municipal public water purveyors, the allocation of 9.8 mgm (0.316 mgd) granted herein satisfies the docket holder’s ten year projected maximum use.

The project is designed to conform to the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.

The DRBC estimates that the project withdrawals, used for the purpose of public water supply, result in a consumptive use of 10 percent of the total water use. The DRBC definition of consumptive use is defined in Article 5.5.1.D of the *Administrative Manual – Part III – Basin Regulations – Water Supply Charges.*
The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

C. DECISION

I. Effective on the approval date for Docket No. D-1984-003 CP-4 below:

   a. The project described in Docket No. D-84-3 CP RENEWAL 2 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-1984-003 CP-4; and


   c. The project and the appurtenant facilities described in the Section A “Physical features” shall be added to the Comprehensive Plan.

II. The project and appurtenant facilities as described in the Section A “Physical features” are approved pursuant to Section 3.8 of the Compact, subject to the following conditions:

   a. Docket approval is subject to all conditions, requirements, and limitations imposed by the PADEP in its Public Water Supply permits, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission’s. The docket holder shall register with and report to the PADEP all surface and groundwater sources described in this docket in accordance with the Pennsylvania Regulations (Title 25 - Environmental Protection, [25 PA. CODE CH. 110], Water Resources Planning).

   b. The wells and operational records shall be available at all times for inspection by the DRBC.

   c. The wells shall be operated at all times to comply with the requirements of the Water Code and Water Quality Regulations of the DRBC.

   d. During any month, the combined withdrawal from all well sources shall not exceed 9.8 million gallons. No well shall be pumped above the maximum instantaneous rate and monthly allocation as indicated below:

<table>
<thead>
<tr>
<th>WELL NO.</th>
<th>MAXIMUM INSTANTANEOUS RATE</th>
<th>MONTHLY ALLOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>194 gpm</td>
<td>2.86</td>
</tr>
<tr>
<td>2</td>
<td>200 gpm</td>
<td>4.64</td>
</tr>
<tr>
<td>3</td>
<td>150 gpm</td>
<td>2.47</td>
</tr>
<tr>
<td>4</td>
<td>292 gpm</td>
<td>4.30</td>
</tr>
</tbody>
</table>
e. The wells shall be equipped with readily accessible capped ports and minimum ½ inch inner diameter (ID) drop pipes so that water levels may be measured under all conditions. Existing wells are to be similarly equipped, where possible, with readily accessible ports and ½ inch ID drop pipes as repairs or modifications are made at each existing well.

f. The project withdrawals shall be metered at each source with an automatic continuous recording device that measures to within 5 percent of actual flow. An exception to the 5 percent performance standard, but no greater than 10 percent, may be granted if maintenance of the 5 percent performance is not technically feasible or economically practicable. A record of daily withdrawals shall be maintained, and monthly totals shall be reported to the PADEP annually and shall be available at any time to the Commission if requested by the Executive Director. Before December 4, 2014 (12 months of the docket approval date), the docket holder shall install additional water meters necessary to begin metering and recording the withdrawals at each well source.

g. Each new water service connection shall include a water meter in accordance with the DRBC’s Resolution No. 87-7 (Revised).

h. In accordance with DRBC Resolutions No. 87-6 (Revised) and No. 2009-1, the docket holder shall continue to implement to the satisfaction of the PADEP, the systematic program to monitor and control leakage within the water supply system. The program shall at a minimum include: periodic surveys to monitor leakage, enumerate non-revenue water and determine the current status of system infrastructure; recommendations to monitor and control leakage; and a schedule for the implementation of such recommendations. The docket holder shall proceed expeditiously to correct leakages and unnecessary usage identified by the program.

i. In accordance with DRBC Resolution No. 2009-1 and Section 2.1.8 of the Water Code, the docket holder shall implement an annual calendar year water audit program conforming to IWA/AWWA Water Audit Methodology (AWWA Water Loss Control Committee (WLCC) Water Audit Software) and corresponding guidance. Water audits shall be submitted annually to the Commission by March 31 every year.

j. The docket holder shall implement to the satisfaction of the PADEP, the continuous program to encourage water conservation in all types of use within the facilities served by this docket approval. The docket holder will report to the PADEP on the actions taken pursuant to this program and the impact of those actions as requested by the PADEP.

k. No water service connections shall be made to newly constructed premises with plumbing fixtures and fittings that do not comply with water conservation performance standards contained in Resolution No. 88-2 (Revision 2).

l. The docket holder shall continue to implement its Water Conservation Plan as approved by PADEP, and shall report to the PADEP on actions taken pursuant to this program and the impact of those actions as requested by the PADEP.

m. The docket holder shall implement to the satisfaction of the PADEP, a drought or other water supply emergency plan.
n. Sound practices of excavation, backfill and reseeding shall be followed to minimize erosion and deposition of sediment in streams from any new facilities or repair related construction.

o. No new water service connections shall be made to premises connected to sewerage systems which are not in compliance with all applicable effluent limits contained in State permits and the Water Quality Regulations of the Commission.

p. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

q. The docket holder is permitted to provide the water approved in this docket to the areas included in Section A.3. Area Served of this docket. Any expansion beyond those included in Section A.3. Area Served is subject to DRBC review and approval in accordance with Section 3.8 of the Compact.

r. Unless an extension is requested and approved by the Commission in advance, in accordance with paragraph 11 of the Commission’s Project Review Fee schedule (Resolution No. 2009-2), the docket holder is responsible for timely submittal of a docket renewal application on the appropriate DRBC application form at least 12 months in advance of the docket expiration date set forth below. The docket holder will be subject to late charges in the event of untimely submittal of its renewal application, whether or not DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. In the event that a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below (or the later date established by an extension that has been timely requested and approved), the terms and conditions of the current docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

s. The issuance of this docket approval shall not create any private or proprietary rights in the water of the Basin, and the Commission reserves the rights to amend, alter or rescind any actions taken hereunder in order to insure the proper control, use and management of the water resources of the Basin.

t. If the monitoring required herein, or any other data or information demonstrates that the operation of this project significantly affects or interferes with any domestic or other existing uses of ground or surface water, or if the docket holder receives a complaint by any existing ground or surface water users within the zone of influence of the withdrawal, the docket holder shall immediately notify the Executive Director of any complaints by any ground or surface users within the zone of influence of the withdrawal, and unless excused by the Executive Director, shall investigate such complaints. The docket holder should direct phone call notifications of potential well or surface water interference or complaints of interference to the DRBC Project Review Section at 609-883-9500, extension 216. Oral notification must always be followed up in writing directed to the Executive Director. In addition, the docket holder shall provide written notification to all potentially impacted users of wells or surface water supplies of the docket holder's responsibilities under this condition. Any
ground or surface water user which is substantially adversely affected, rendered dry or otherwise diminished as a result of the docket holder’s project withdrawal, shall be repaired, replaced or otherwise mitigated at the expense of the docket holder. A report of investigation and/or mitigation plan prepared by a hydrologist shall be submitted to the Executive Director as soon as practicable. The Executive Director shall make the final determination regarding the validity of such complaints, the scope or sufficiency of such investigations, and the extent of appropriate mitigation measures, if required.

u. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

v. For the duration of any drought emergency declared by either Pennsylvania or the Commission, water service or use by the docket holder pursuant to this approval shall be subject to the prohibition of those nonessential uses specified by the Governor of Pennsylvania, the Pennsylvania Emergency Management Council, PADEP, or the Commonwealth Drought Coordinator to the extent that they may be applicable, and to any other emergency resolutions or orders adopted hereafter by the Commission.

w. Prior to allowing connections from any new service areas or any new developments, the docket holder shall either submit and have approved by the Executive Director of the DRBC a Non-Point Source Pollution Control Plan (NPSPCP) in accordance with Section 3.10.3.A.2.e, or receive written confirmation from the Executive Director of the DRBC that the new service area is in compliance with a DRBC approved NPSPCP.

x. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the Rules of Practice and Procedure. In accordance with Section 15.1(p) of the Delaware River Basin Compact, cases and controversies arising under the Compact are reviewable in the United States district courts.

**BY THE COMMISSION**

**APPROVAL DATE:** December 4, 2013

**EXPIRATION DATE:** December 4, 2023