

DOCKET NO. D-2001-015 CP-5

DELAWARE RIVER BASIN COMMISSION

**Southeastern Pennsylvania
Ground Water Protected Area**

**Aqua Pennsylvania, Inc., d/b/a Superior Water Company
Main, Center Point and Ivy Ridge Systems
Groundwater Withdrawal
Douglass, New Hanover, Upper Frederick and Worcester Townships,
Montgomery County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted by Entech Engineering, Inc. on behalf of Superior Water Company (SWC) to the Delaware River Basin Commission (DRBC or Commission) on November 30, 2015 (Application), for a renewal and approval of an allocation of groundwater and review of a groundwater withdrawal project in the Ground Water Protected Area of Southeastern Pennsylvania. The prior docket was approved by the Commission on June 11, 2014. The project wells were reviewed under the Pennsylvania Safe Drinking Water Act for public water supply permits and approved by the Pennsylvania Department of Environmental Protection (PADEP) as follows:

WELL NO.	PADEP PERMIT NO.	PADEP APPROVAL DATE
SWC-1	4697507	March 25, 2003
SWC-4, SWC-5 and SWC-11	4697514	March 25, 2003
SWC-2, SWC-8 and SWC-10	4614527	December 11, 2014
SWC-12	4614501	May 12, 2014
IR-1 and IR-2	4612508	April 25, 2012
CP-9	4607503	July 18, 2007
SWC-13	Pending	Pending

The Application was reviewed for continuation of the project in the Comprehensive Plan and approval under Section 3.8 and for a withdrawal permit under Section 10.3 of the *Delaware River Basin Compact*. The Montgomery County Planning Commission has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on May 11, 2016.

A. DESCRIPTION

1. **Purpose.** The purpose of this project is to approve an increase in withdrawal allocation from 36.82 million gallons per month (mgm) to 39.33 mgm of groundwater to the docket holder's public water supply distribution system from existing Wells SWC-1, SWC-2, SWC-4, SWC-5, SWC-8, SWC-10, SWC-11, SWC-12, CP-9, IR-1, IR-2 and new Well SWC-13. The increased allocation is requested in order to meet projected increases in demand within their service area.

2. **Location.** Well SWC-13 is located in the Swamp Creek Watershed in New Hanover Township, Montgomery County, Pennsylvania. The eleven (11) other project wells are located in the Swamp Creek, Minister Creek, Scioto Creek and Zacharias Creek Watersheds in New Hanover, Douglass, Upper Fredrick and Worcester Townships, Montgomery County, Pennsylvania. The SWC wells are completed in the Brunswick Formation. The exception to this is Well CP-9 which is completed in the mixed zone of the Brunswick and Lockatong Formations.

The creeks near the project site are designated by the PADEP as supporting the following:

CREEK	PADEP DESIGNATION
Swamp Creek	Trout Stocking Fishes, Migratory Fishes (TSF, MF)
Minister Creek	Trout Stocking Fishes, Migratory Fishes (TSF, MF)
Scioto Creek	Trout Stocking Fishes, Migratory Fishes (TSF, MF)
Zacharias Creek	Trout Stocking Fishes, Migratory Fishes (TSF, MF)

Specific location information has been withheld for security reasons.

3. **Area Served.** The docket holder's wells serve portions of Douglass, New Hanover, Upper Pottsgrove, Lower Pottsgrove, Upper Fredrick and Worcester Townships, Montgomery County as shown on a plan entitled "Superior Water Company (Main System)" 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.** This docket includes three separate SWC water distribution systems: The Main System, Ivy Ridge System and the Center Point System. The Main System serves customers in portions of Douglass, New Hanover, Upper Pottsgrove and Lower Pottsgrove Townships with groundwater from Wells SWC-1, SWC-2, SWC-4, SWC-5, SWC-8, SWC-10, SWC-11 and SWC-12. Historically, the main system was comprised of three separate subsystems (Lohmiller, Winding Creek and Hunters Run) all of which have been interconnected and are now collectively referred to the Main System. The Ivy Ridge System supplied by Wells IR-1 and IR-2 serves a 45-lot single family residential subdivision located in Upper Frederick Township, Montgomery County, PA. The Center Point System supplied by Well CP-9 serves a 177-unit townhome community located in Worcester Township, Montgomery County, Pennsylvania. These two small isolated systems are not interconnected to SWC's main system.

The SWC distribution systems serve an estimated population of 7,700 persons via 3,330 residential and 68 commercial service connections, with an average and maximum demand of 0.615 mgd and 0.982 mgd, respectively. The docket holder projects the 10-year average and maximum demand to increase to 0.769 mgd and 1.227 mgd as a result of an additional 833 residential and 17 commercial service connections. The allocation of 39.33 mgm should be sufficient to meet the future demands of the SWC systems.

b. Facilities. The docket holder's existing wells have the following characteristics:

WELL NO.	DEPTH (FEET)	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY (GPM)	YEAR DRILLED
SWC-1	215	38'/8"	200	1988
SWC-2	350	40'/8"	100	1989
SWC-4	311	53'/8"	300	1986
SWC-5	298	104'/10"	50	1991
SWC-8	300	55'/8"	280	1975
SWC-10	600	62'/8"	400	1997
SWC-11	385	101'/8"	135	2000
SWC-12	347	unknown / 8"	160	1974
CP-9	272	105'/8"	40	1996
IR-1	485	52'/6"	20	1997
IR-2	500	63'/6"	20	1997
SWC-13	481	50'/ 10"	80	2012

The wells and all water service connections are metered.

All well water is treated by chlorination prior to entering the distribution system. In addition, water from Wells Nos. SWC-2, 4, 5, 10 and CP-9 are treated for arsenic reduction.

The project facilities are above the 100-year flood elevation.

The Center Point System contains an emergency interconnection with North Penn Water Authority.

The SWC storage facilities total 0.964 mg, which is approximately 1.56 days of supply.

c. Other. Wastewater from the Main System is conveyed to the New Hanover Township Authority sewage treatment facility and the Berks-Montgomery Municipal Authority sewage treatment facility which received approval most recently under Section 3.8 of the Compact by DRBC Dockets Nos. D-99-40 CP-2 and D-00-70 CP on December 12, 2006 and February 28, 2001, respectively. The PADEP issued its most recent NPDES Permit No. PA0057819 on October 21, 2015 for the New Hanover Township Authority sewage treatment

facility. The PADEP issued its most recent NPDES Permit No. PA0024180 on June 18, 2014 for the Berks-Montgomery Municipal Authority sewage treatment facility. Both sewage treatment facilities have adequate capacity to receive wastewater from the project.

Wastewater originating from the Center Point distribution system (Well No. CP-9) is conveyed to the Worcester Township Valley Green sewage treatment facility which received approval most recently under Section 3.8 of the Compact by DRBC Docket No. D-92-36 CP on May 26, 1993. The PADEP issued its most recent NPDES Permit No. PA0050393 on September 14, 2011. The Worcester Township wastewater treatment facility has adequate capacity to receive wastewater from the project.

Wastewater from the Ivy Ridge distribution system is conveyed to the Upper Frederick Township - Ivy Ridge sewage treatment facility which has a design capacity of 0.0215 mgd. The PADEP issued its most recent NPDES Permit No. PA0057061 on January 12, 2012. The Upper Frederick Township – Ivy Ridge sewage treatment facility has adequate capacity to receive wastewater from the project.

d. Cost. The overall cost of this project is estimated to be \$400,000.

e. Relationship to the Comprehensive Plan. The existing project water facilities were previously included in the Comprehensive Plan by the following DRBC Dockets:

Docket No.	Date Approved	Approved Wells
D-89-83 CP	January 12, 1990	SWC-2 and SWC-3
D-90-37 CP	August 8, 1990	SWC-1
D-94-58 CP	February 22, 1995	SWC-1, SWC-2, SWC-3, SWC-4, SWC-8, and SWC-5
D-97-26 CP	December 17, 1997	SWC-1, SWC-2, SWC-4, SWC-5, SWC-8, and SWC-10
D-2001-15 CP	October 31, 2001	SWC-1, SWC-2, SWC-4, SWC-5, SWC-8, SWC-10, and SWC-11
D-2001-015 CP-2	July 14, 2010	SWC-1, SWC-2, SWC-4, SWC-5, SWC-8, SWC-10, SWC-11, CP-9, IR-1, and IR-2
D-2001-015 CP-3	March 2, 2011	SWC-1, SWC-2, SWC-4, SWC-5, SWC-8, SWC-10, SWC-11, CP-9, IR-1, and IR-2
D-2001-015 CP-4	June 11, 2014	SWC-1, SWC-2, SWC-4, SWC-5, SWC-8, SWC-10, SWC-11, CP-9, IR-1, IR-2 and SWC-12

Issuance of this docket will approve SWC-13 and continue the public water supply distribution system in the Comprehensive Plan.

B. FINDINGS

Aqua PA acquired Superior Water Company effective January 1, 2016, although the systems will still be run under the Superior Water Company name.

Well SWC-13 Hydrogeologic Evaluation

On July 10 through July 12, 2012, a 48-hour continuous-rate pumping test was conducted to assess withdrawal capabilities of Well No. SWC-13. The well was drilled 481 feet deep with 50 feet of casing was installed and grouted. The major water-bearing zones were encountered between 152 and 450 feet. The constant rate pumping test was also conducted to assess the underlying aquifer characteristics and potential impacts to the local hydrologic system. The average pumping rate of the test on Well SWC-13 was approximately 80 gallons per minute (gpm). Discharge from the pumping well was directed approximately 500 feet down gradient (east) of Well SWC-13, outside of the estimated area where recharge effects might be expected. Well SWC-13 was pumped for a total period of 2880 minutes.

Groundwater response monitoring was conducted in the pumping well (Well SWC-13), eight (8) monitoring wells (monitored manually) and a piezometer in the wetlands located adjacent to the pumping well by the direction of the PADEP. Monitoring wells MW-2 and MW-7 were also monitored with continuous dataloggers. Monitoring wells ranged in distance to the pumping well from approximately 670 feet (MW-1) to approximately 2,400 feet (MW-4). The piezometer in the wetlands was located approximately 550 feet from the pumping well.

Prior to the start of the pumping test, Well SWC-13 was overflowing. Maximum drawdown observed at the pumping well, after approximately 48 hours of pumping at a rate of 80 gpm, was 198.8 feet (water level of 198.8 feet btoc). Drawdown as a result of pumping was observed in four (4) monitoring wells, Monitoring wells MW-1, MW-2, MW-3 and MW-4 which had drawdowns of 22.17 feet, 11.12 feet, 6.91 feet and 2.16 feet, respectively. Drawdown as a result of the withdrawals from the Well SWC-13 were not discernable in the other monitoring wells or the wetland piezometer.

The observed drawdown data was used to calculate aquifer parameters to characterize the underlying aquifer. The transmissivity values for Well SWC-13 test data was 64.5 ft²/day (Theis log-log time versus drawdown) and 183 ft²/day (Theis log-log time versus recovery), at the test rate of 80 gpm. Including calculations from the monitoring wells the average transmissivity value for the pumping test was 204.73 ft²/day. An average Storativity of 1.31×10^{-4} was calculated from the drawdown data observed at monitoring wells MW-2 and MW-3 monitored during the pumping test. The storage coefficient is indicative of confined conditions.

The DRBC has reviewed the hydrogeologic report for Well SWC-13 pumping test. The hydrogeologist that conducted the pumping test recommended the maximum withdrawal rate of Well SWC-13 be limited to 2.3 million gallons per month (2.38 mgm). No adverse impacts are expected to occur to the local hydrologic system due to pumping from Well SWC-13.

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. 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. SWC submitted their most recent Water Audit on March 23, 2015.

Ground Water Protected Area

The project is located within the Southeastern Pennsylvania Ground Water Protected Area delineated by the DRBC pursuant to *Compact* Section 10.2. The project is designed to conform to the requirements of the *Water Code*, *Water Quality Regulations* and *Ground Water Protected Area Regulations (GWPAR)* of the DRBC.

Review and analysis of the application pursuant to Section 6.D. of the *GWPAR* result in the following:

1. The withdrawal is consistent with the Commission's Comprehensive Plan and the policies and purposes of these regulations.
2. Opportunities to satisfy water requirements on a timely basis from existing available supplies and facilities have been explored and found infeasible.
3. The withdrawal, in conjunction with other withdrawals in the applicable ground water basin, should not exceed withdrawal limits of the ground water basin, aquifer or aquifer system.
4. The withdrawal should not significantly impair or reduce the flow of perennial streams in the area.
5. Existing ground and surface water withdrawals should not be adversely impacted, or will be otherwise assured of adequate supplies in accordance with the requirements of Section 10 of the *GWPAR*.
6. The withdrawal should not cause substantial, permanent adverse impact to the overlying environment.
7. The docket holder adopted and will implement conservation and management programs as required by Section 7 of the *GWPAR*.

SWC Wells SWC-2, SWC-4, SWC-5, SWC-8, SWC-10 and SWC-13 are located in the Swamp - Minister Creeks subbasin (No. 18), where total net annual groundwater withdrawal (181 mgd) is less than the withdrawal limit set in Section 6.I of the *GWPAR* (729 mgd). The total annual groundwater allocation from these wells is limited to 405.48 mgd, a fraction of which will be returned to groundwater. However, even if no water from this project were returned to groundwater, the total net annual groundwater withdrawal from this subbasin would remain below the withdrawal limits set in Section 6.I of the *GWPAR*. Therefore, the withdrawals from Wells SWC-2, SWC-4, SWC-5, SWC-8, SWC-10 and SWC-13, in conjunction with other withdrawals in the subbasin, are in accordance with the requirements of Section 6.I of the *GWPAR*.

SWC Wells IR-1, IR-2 and SWC-11 are located in the Swamp – Scioto Creeks subbasin (No. 52), where total net annual groundwater withdrawal (71 mgd) is less than the withdrawal limit set in Section 6.I of the *GWPAR* (994 mgd). The total annual groundwater allocation from these three wells is 88.8 mgd, a fraction of which will be returned to groundwater. However, even if no water from this project were returned to groundwater, the total net annual groundwater withdrawal from this subbasin would remain below the withdrawal limits set in Section 6.I of the *GWPAR*. Therefore, the withdrawals from Wells IR-1, IR-2, and SWC-11, in conjunction with other withdrawals in the subbasin, are in accordance with the requirements of Section 6.I of the *GWPAR*.

Wells SWC-1 and SWC-12 are located in the Swamp – Middle Creeks subbasin (No. 15), where total net annual groundwater withdrawal (69 mgd) is less than the withdrawal limit set in Section 6.I of the *GWPAR* (1,898 mgd). The total annual groundwater allocation from these wells is 176 mgd, a fraction of which will be returned to groundwater. However, even if no water from this project were returned to groundwater, the total net annual groundwater withdrawal from this subbasin would remain below the withdrawal limits set in Section 6.I of the *GWPAR*. Therefore, the withdrawal from Wells SWC-1 and SWC-12, in conjunction with other withdrawals in the subbasin, is in accordance with the requirements of Section 6.I of the *GWPAR*.

The project Well CP-9 is located in the Lower Reach Skippack Creek subbasin (No. 60), where total net annual groundwater withdrawal (102 mgd) is less than the withdrawal limit set in Section 6.I of the *GWPAR* (1,426 mgd). The total annual groundwater allocation from this well is 16.8 mgd, a fraction of which will be returned to groundwater. However, even if no water from this project were returned to groundwater, the total net annual groundwater withdrawal from this subbasin would remain below the withdrawal limits set in Section 6.I of the *GWPAR*. Therefore, the withdrawal from Well CP-9, in conjunction with other withdrawals in the subbasin, is in accordance with the requirements of Section 6.I of the *GWPAR*.

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 to 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-2001-015 CP-5 below:

a. The project described in Docket No. D-2001-015 CP-4 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-2001-015 CP-5; and

b. Docket No. D-2001-015 CP-4 is rescinded and replaced by Docket No. D-2001-015 CP-5; and

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

II. The project as described in the Section A “Physical features” is approved pursuant to Section 3.8 of the *Compact* and is granted this withdrawal permit pursuant to Section 10.3 of the *Compact* and *GWPAR*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the PADEP, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission’s. The wells and operational records shall be available at all times for inspection by the DRBC.

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

c. During any month, the combined withdrawal from all well sources shall not exceed 39.33 mgm or 471.96 million gallons per year (mgy). No well shall be pumped above the maximum instantaneous rate and monthly allocation as indicated below:

WELL NO.	INSTANTANEOUS RATE (GPM)	MONTHLY ALLOCATION (MILLION GALLONS)
SWC-1	200	7.85
SWC-2	100	3.1
SWC-4	300	9.2
SWC-5	50	2.27
SWC-8	280	6.92
SWC-10	400	9.92
SWC-11	135	5.79
SWC-12	160	7.34
CP-9	40	1.45

IR-1	20	0.93
IR-2	20	0.93
SWC-13	80	2.38

Additionally, Wells SWC-1, 2, 4, 5, 8, 10 and 11 and 12 serving the Main System shall not exceed 33.66 mgm and Wells IR-1 and IR-2 serving the Ivy Ridge System shall not exceed 1.76 mgm. In addition, the total withdrawal from all wells shall not exceed 39.33 mgm and the total annual withdrawal from Wells SWC-2, 4, 5, 8, 10 and 13 located in Subbasin No. 18 shall not exceed 250 million gallons per year.

d. The wells shall be equipped with readily accessible capped ports and 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 drop pipes as repairs or modifications are made at each existing well.

e. The project withdrawals shall be metered 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 annually by March 31, to the PADEP. Withdrawal records shall be available at any time to the Commission if requested by the Executive Director.

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

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

h. 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).

i. The docket holder shall implement to the satisfaction of the PADEP, a drought or other water supply emergency plan.

j. 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.

k. 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.

1. A long-term monitoring program is required to obtain data on ground water and surface water hydrologic conditions in the project area. The docket holder shall continue to implement the long-term monitoring program as modified to include additional monitoring wells near Well No. SWC-12 as described in a letter dated April 8, 2014 and additional monitoring wells near SWC-13 as described in the Hydrogeologic Report Dated October 23, 2012 submitted by the docket holder's consultant with the application plus monitoring well MW-1. This program will include the following:

1. **Ground Water Level Monitoring** SWC shall monitor twenty-seven (27) wells identified in the above referenced letter and report to estimate annual ground water fluctuations caused by seasonal changes and/or production well pumping, and detect water level declines that may affect the performance of public and private wells in the area of the SWC production wells.
2. **Reports** All monitoring data, including records required in Conditions "e." and "l." herein shall be submitted to the Commission annually, due by April 1. The docket holder is encouraged to submit the annual report electronically. The report shall be prepared by a hydrogeologist and shall assess the effects of well withdrawals on hydrologic conditions in the area. This report shall include an evaluation of the monitoring data required by this docket approval and such information as deemed appropriate by the hydrogeologist or required by the Executive Director.
3. The Executive Director may modify the monitoring program or temporarily suspend or modify this docket at any time if review of the hydrologic data and/or any other information indicates such action is necessary or appropriate.

m. 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.

n. The docket holder shall implement to the satisfaction of the PADEP, a 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.

o. 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.

p. The area served by this project is limited to the service area as described above. Any expansion beyond this area is subject to review in accordance with Section 3.8 of the *Compact* and the *GWPAR*.

q. 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.

r. 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 right 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.

s. If the monitoring required herein or any other relevant data or information demonstrates that the operation of this project is interfering with or otherwise impairing existing uses of ground or surface water, or if the permit holder receives a complaint from an existing ground or surface water user within the zone of influence of the withdrawal alleging such interference or impairment, the permit holder shall immediately notify the Executive Director, and unless excused by the Executive Director, shall investigate the demonstrated or alleged impacts. For purposes of this condition, notification shall mean either (a) electronic transmittal of written notice to the Executive Director via email (using addresses posted on the DRBC website); or (b) written notice to the Executive Director and a telephone call to the Project Review Section at 609-883-9500, ext. 216. (Oral notification must always be accompanied by immediate written notification directed to the Executive Director.) In addition, the permit holder shall provide written notice to all potentially affected water users of the permit holder's responsibilities under this condition. **Any well or surface water supply that is impaired as a result of the permit holder's project withdrawal shall be repaired, replaced or mitigated at the permit holder's expense.** The scope of the options to consider for repair, replacement and/or mitigation shall not be limited solely to those that are owned, operated, or controlled by the project sponsor. An investigation report and/or mitigation plan prepared and certified by a licensed professional engineer and/or a licensed professional geologist shall be submitted to the Executive Director as soon as practicable following notice of the demonstrated or alleged impairment consistent with this paragraph. The Executive Director shall make the final determination regarding the scope and sufficiency of the investigation and the extent of any

mitigation measures that may be required. Where ground and surface waters are rendered unavailable, unusable, or unsuitable for the pre-existing use, the Executive Director may direct the permit holder to take interim actions to mitigate such impacts, pending completion of the investigative report and any long-term repair, replacement or mitigation.

t. 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.

u. 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.

v. 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: June 15, 2016

EXPIRATION DATE: June 15, 2026