

DOCKET NO. D-2001-030 CP-3

DELAWARE RIVER BASIN COMMISSION

**Muhlenberg Township Authority
Groundwater Withdrawal
Muhlenberg Township, Berks County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) on December 12, 2018 for renewal of an allocation of groundwater and review of a groundwater water withdrawal project (Application). The groundwater withdrawal project was most recently approved by the Commission by Docket No. D-2001-030 CP-2 on March 3, 2010 which included approval of two new sources (quarry boreholes PH-1 and PH-2) that were never placed into operation. By letter dated January 31, 2017, the DRBC Executive Director affirmed that the approval to construct and operate the quarry withdrawal expired and reverted the total system allocation to the former system allocation of 168.50 mg/30 days. The most recent operations permit for the active wells was issued by the Pennsylvania Department of Environmental Protection on March 15, 2013 (Public Water Supply Permit No. 3060038 MA).

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 Berks 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 15, 2019.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to renew the approval of a groundwater withdrawal from nine existing wells (Wells 1, 2, 6, 8, 9, 12, 13, 14 and 15) and decrease the total combined allocation from 168.50 million gallons per 30 days (mg/30 days) to 119.9 million gallons per month (mgm). Groundwater is used in the docket holder's public water system.

2. Location. The project wells are completed in the Leithsville, Allentown and Hardyston Formations and the Hamburg Sequence in the Laurel Run-Schuylkill River and Willow Creek Watersheds in Muhlenberg and Ontelaunee Townships and Laureldale Borough, Berks County, Pennsylvania. Laureldale Creek, Bernhart Creek and Schuylkill River near the project site are designated by the PADEP as supporting Warm Water Fishes (WWF) and Migratory Fishes (MF).

Willow Creek near the project site is designated by PADEP as High Quality (HQ) supporting Cold Water Fishes (CWF) and MF.

Specific location information has been withheld for security reasons.

3. Area Served. The project withdrawals supply water to Muhlenberg Township, Laureldale Borough and a portion of Alsace Township (Wedgewood Heights). A map entitled "Service Area, Muhlenberg Water Authority" was 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. Design criteria. The docket holder serves water to a population of approximately 22,442 via 8,951 residential, commercial, institutional and industrial connections with an average and maximum demand of 3.247 million gallons per day (mgd) and 3.744 mgd, respectively. The docket holder purchases an average of 0.0024 mgd from the Reading Area Water Authority (RAWA); however, the docket holder has a PADEP-approved regular interconnection capacity of 0.265 mgd and an additional 1.296 mgd on an emergency basis. The docket holder projects a population served of approximately 23,340 with an average and maximum daily demand of 3.712 and 3.900 mgd, respectively. The docket holder projects a peak monthly use of 119.90 million gallons per month and has requested approval of an allocation equal to this amount.

The docket holder's wells are currently permitted by the PADEP under Public Water Supply Permit No. 3060038 MA. Water supply interconnections with RAWA are approved by PADEP under Water Allocation Permit No. WA 06-1036, issued on July 22, 2014.

5. Facilities. The existing project wells have the following characteristics:

WELL NO.	DEPTH (FEET)	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY (GPM)	YEAR DRILLED
1	702'	Unknown	250	1909
2	650'	Unknown	115	1938
6	300'	61'	500	1951
8	540'	135'	400	1961
9	471'	52'	400	1963
12	400'	62'	1,000	1973
13	500'	137'	700	1980
14	225'	164'	1,500	1985
15	505'	132'	250	1985

All water service connections and all wells are metered.

Prior to entering the distribution system, all water is disinfected with gaseous chlorine or sodium hypochlorite and several wells are treated with air stripper mechanisms.

System storage is 4.6 mg, or approximately 0.59 days of supply.

The docket holder has five permitted interconnections with the RAWA. Two of the connections are regularly used to supply water to businesses along the border of the township. Three of the connections are used only on an emergency basis.

The project wells are not located in flood hazard areas.

6. Other. Waste water is conveyed to the City of Reading Fritz Island sewage treatment facility most recently approved by DRBC Docket No. D-1986-028 CP-3 on September 10, 2014. The PADEP issued its most recent NPDES Permit No. PA0026549 on March December 1, 2013 for this treatment facility. The City of Reading treatment facility is planning to undertake a facility upgrade that was approved by DRBC Docket No. D-1986-028 CP-3, but the upgrades are not yet complete. The treatment facility has adequate capacity to continue to receive wastewater from this Project.

7. Relationship to the Comprehensive Plan. The project was previously included in the Comprehensive Plan as follows:

Docket No.	Approval Date	Docket No.	Approval Date
D-69-122 CP	08-27-1969	D-87-58 CP	08-02-1989
D-72-097 CP	06-28-1972	D-87-58 CP Renewal	11-04-1992
D-74-114 CP	07-31-1974	D-2001-30 CP	02-06-2002
D-81-046 CP	07-30-1986		

B. FINDINGS

1. 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. The docket holder submitted its most recent water audit to the Commission on March 20, 2019.

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*.

2. Other Findings

The docket holder has registered its sources described in this docket and is reporting its usage in accordance with the Pennsylvania Regulations (Title 25 - Environmental Protection, [25 PA. CODE CH. 110], Water Resources Planning).

The docket holder has prepared and implemented a Drought Contingency Plan, dated July 2015; a Water Conservation Plan, dated July 2015 and a Leak Detection Program, dated January 2009.

The docket holder's sources have adequate capacity to meet future water demands. However, the wells would not have the capability to produce enough water to provide for the maximum daily demand if the largest well was out of service. Although there would be water within the system storage capability to handle this day if necessary, the docket holder has sited an additional well to provide redundancy should one or more wells be taken off line in the future.

This project consists of an existing groundwater withdrawal from Wells 1, 2, 6, 8, 9, 12, 12, 14, and 15. The docket holder has requested allocations for the existing wells based on previously approved rates. These rates are provided in Condition C.5. in the Decision Section of this docket. Continued withdrawals from the existing system wells are not expected to significantly impact the local hydrologic system.

The docket holder did not request allocations for previously approved Wells 3, 4, 10, 11, PH-1 and PH-2 in this docket renewal application. The docket holder must obtain Commission approval prior to any future use of these sources.

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

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

Effective on the approval date for Docket No. D-2001-030 CP-3 below, the project described in Docket No. D-2001-030 CP-2 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-2001-030 CP-3; Docket No. D-2001-030 CP-2 is terminated and replaced by Docket No. D-2001-030 CP-3; and the project and the appurtenant facilities described in in Section A.4. (Design Criteria) and A.5. (Facilities) shall be continued in the Comprehensive Plan. The project and appurtenant facilities as described in in Section A.4. (Design Criteria) and A.5. (Facilities) are approved subject to the following conditions, pursuant to Section 3.8 of the *Compact*:

Monitoring and Reporting

1. 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.

2. 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.

3. 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.

4. The docket holder is responsible for timely submittal to the DRBC of a docket renewal application on the appropriate application form including the appropriate docket application filing fee (see 18 CFR 401.43) at least 6 months in advance of the docket expiration date set forth below. The docket holder will be subject to late filed renewal surcharges 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, 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.

Other Conditions

5. During any month, the combined withdrawal from all well sources shall not exceed 119.90 million gallons. No well shall be pumped above the maximum rate and monthly allocation as indicated below:

WELL NO.	MAXIMUM RATE (GPM)	MONTHLY ALLOCATION (MGM)
1	250	11.160
2	190	8.480
6	500	22.320
8	500	22.320
9	350	15.620
12	1000	44.640
13	350	15.620
14	1500	66.960
15	250	11.160

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

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

8. The wells shall be equipped, where possible, with readily accessible capped ports and minimum ½ inch inner diameter (ID) drop pipes as repairs or modifications are made at each existing well so that water levels may be measured under all conditions.

9. The project withdrawals shall be metered by means of an automatic continuous recording device, flow meter, or other method, and shall be measured to within 5 percent of actual flow. Meters or other methods of measurement shall be subject to approval and inspection by the PADEP as to the type, method, installation, maintenance, calibration, reading and accuracy. 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.

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

11. 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).

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

13. 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.

14. 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.

15. 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*.

16. The docket holder shall be subject to applicable DRBC regulatory program fees, in accordance with duly adopted DRBC resolutions and/or regulations. (see 18 CFR 401.43).

17. This approval is transferable by request to the DRBC Executive Director provided that the project purpose and area served approved by the Commission in this docket will not be materially altered because of the change in project ownership. The request shall be submitted on the appropriate form and be accompanied by the appropriate fee (see 18 CFR 401.35).

18. The docket holder shall request a name change of the entity to which this approval is issued if the name of the entity to which this approval is issued changes its name. The request for name change shall be submitted on the appropriate form and be accompanied by the appropriate fee (see 18 CFR 401.35).

19. 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.

20. 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 docket 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 docket holder shall provide written notice to all potentially affected water users of the docket holder's responsibilities under this condition. **Any well or surface water supply that is impaired as a result of the docket holder's project withdrawal shall be repaired, replaced or mitigated at the docket 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 docket holder to take interim actions to mitigate such impacts, pending completion of the investigative report and any long-term repair, replacement or mitigation.

21. 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.

22. 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.

23. 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 12, 2019

EXPIRATION DATE: March 3, 2030