

**DOCKET NO. D-2022-001-1**

**DELAWARE RIVER BASIN COMMISSION**

**Carpenter Technology Corporation  
Groundwater Withdrawal**

**City of Reading and 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 April 22, 2022, revised on May 8, 2023 for the approval of an allocation of groundwater and review of an existing groundwater water withdrawal project (Application).

The Application was reviewed 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 August 9, 2023

**A. DESCRIPTION**

**1. Purpose.** The purpose of this docket is to approve an existing groundwater withdrawal of up to 43.4 million gallons per month (mgm) from existing wells 2, 3, 4, 5, 6 and 7 for industrial cooling at the docket holder's steel manufacturing facility. The allocation approved by this docket is based on historical use. The docket also approves a separate existing withdrawal from five wells for groundwater remediation purposes.

**2. Location.** The project wells are completed in the Allentown Formation and are located in the Schuylkill River Watershed in the City of Reading, Berks County, Pennsylvania. The Schuylkill River at the project site is designated by the Pennsylvania Department of Environmental Protection (PADEP) as supporting Warm Water Fishes (WWF) and Migratory Fishes.

Specific location information has been withheld for security reasons.

**3. Area Served.** The project wells serve the docket holder's steel manufacturing facility in the City of Reading and Muhlenberg Township, Berks County, Pennsylvania. For the purpose of defining Area Served, the Application is incorporated herein by reference consistent with conditions contained in Section C. DECISION of this docket.

**4. Design Criteria.** The facility uses groundwater withdrawn from Wells 2, 3, 4, 5, 6 and 7 for industrial contact and non-contact cooling purposes in steel manufacturing. The average and peak daily demands are reported to be 1.00 million gallons per day (mgd) and 1.74 mgd, respectively. The docket holder expects the 10-year average and peak daily demand to increase to 1.10 mgd and 1.91 mgd, respectively. The docket holder’s requested allocation of 43.4 mgm is based on historic use and is equal to the peak combined withdrawals over the last three years.

Groundwater is also withdrawn from five existing recovery wells (Wells 85-03, 85-05, 89-02, 89-03, and 89-04) under the terms of an EPA approved corrective action groundwater program (RCRA Corrective Action Permit No. PAD002344315, approved October 1998). The water withdrawn from the recovery wells is treated at the docket holder’s industrial wastewater treatment plant which is designed to treat Volatile Organic Compounds and metals. Based on information from the EPA clean up status webpage, the most recent monitoring data demonstrates that the remediation system has been effective in reducing contaminant concentrations below or near maximum contaminant levels (MCLs). Based on PADEP Chapter 110 water use reporting data from July through December 2022, the monthly withdrawals from the recovery wells range from 0.543 to 0.961 million gallons.

**5. Facilities.** The existing project wells used for industrial cooling have the following characteristics:

<b>WELL NO.</b>	<b>DEPTH (FEET)</b>	<b>CASED DEPTH/ CASING DIAMETER</b>	<b>PUMP CAPACITY (GPM)</b>	<b>YEAR DRILLED</b>
2	345	101’ / 8”	775	1945
3	319	11’ / 8”	215	1945
4	340	33’ / 12”	350	1946
5	300	21’ / 12”	570	1965
6	352	42’ / 10”	680	1968
7	500	41’ /	300	2011

The existing recovery wells for groundwater remediation purposes have the following characteristics:

<b>WELL NO.</b>	<b>DEPTH (FEET)</b>	<b>SCREENED INTERVAL DEPTH (BGS)</b>	<b>PUMP CAPACITY (GPM)</b>	<b>YEAR DRILLED</b>
85-03	35	10’ – 35’	15	1985
85-05	38	13’ – 38’	15	1985
89-02	45	21’ – 41’	15	1989
89-03	38	15’ – 35’	15	1989
89-04	40	15’ -35’	15	1989

All wells are metered.

Water from the production wells is not treated prior to use.

Water from the groundwater recovery wells is treated at the docket holder's industrial wastewater treatment plant (IWTP)

The project wells are not located in a flood hazard area. The existing recovery wells are located in the flood fringe of the Schuylkill River.

The facility purchases water from the Reading Area Water Authority and Muhlenberg Township Authority for potable and industrial use.

**6. Other.** Industrial process wastewater and remediated groundwater is treated at the docket holder's IWTP and discharged to the Schuylkill River. The IWTP and its discharges were most recently approved by DRBC Docket No. D-75-69 on June 17, 1975. The PADEP has issued NPDES Permit No. PA0013129 for this treatment facility. The treatment facility has adequate capacity to continue to receive wastewater from the existing project.

## **B. FINDINGS**

### **1. Allocations**

This project consists of an existing withdrawal of groundwater from Well Nos. 2, 3, 4, 5, 6 and 7. The docket holder has requested allocations for the existing wells based on existing water use. These rates are provided in Section C. Decision condition C.4 in the Decision Section of this docket. 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.

### **2. Other Findings**

The docket holder currently utilizes strategic localized high-rate cooling water recirculation systems throughout the plant to minimize the amount of water utilized for process cooling. These systems have design water recirculation rates greater than 97 percent, which equates to an average of 33 mgd conserved through recirculation.

The docket holder estimates that the project withdrawals, used for the purpose of industrial cooling, result in a consumptive use of 18 percent of the total water use. The consumptive use estimate is based on total municipal and self-supplied water less the industrial and sanitary discharges. The DRBC definition of consumptive use is defined in Basin Regulations-Water Supply Charges 18 C.F.R. 420.1(d).

The project is designed to conform to the requirements of the *Water Code (WC)* and *Water Quality Regulations (WQR)* 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-2022-001-1 below, the project and appurtenant facilities as described 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. The docket holder shall continue to 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).

2. 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 biweekly 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.

3. 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.

**Other Conditions**

4. During any month, the combined withdrawal from all well sources shall not exceed 43.4 million gallons. No well shall be pumped above the maximum rate and monthly allocation as indicated below:

<b>WELL NO.</b>	<b>MAXIMUM RATE (GPM)*</b>	<b>MONTHLY ALLOCATION (MGM)</b>
2	775	18.5
3	215	9.0
4	350	3.4
5	570	8.1
6	680	16.8
7	280	11.1

\* Based on a 24-Hour Average

5. Section 2.3.10 of the Commission’s Rules of Practice and Procedure (18 C.F.R. 401.41), limiting the Commission’s approval to three years in the absence of an expenditure of substantial funds by the project sponsor in reliance on the approval, is hereby waived for good cause shown in accordance with Section 2.9.3 (18 C.F.R. 401.123) of the same regulations. This approval shall expire on the expiration date set forth below unless prior thereto the docket holder has applied to the Commission to renew or extend this approval.

6. 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 C.F.R. 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 DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. If 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 pending the grant or denial of the application for docket approval.

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

8. The wells shall be operated at all times to comply with the requirements of the WC and WQR of the DRBC.

9. 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.

10. 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).

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

12. 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.

13. 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.

14. 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*.

15. 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).

16. 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 401.43).

17. 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 C.F.R. 401.43).

18. 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 to ensure the proper control, use and management of the water resources of the Basin.

19. 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.

20. 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.

21. 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.

22. 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: September 7, 2023**

**EXPIRATION DATE: September 7, 2032**