

DOCKET NO. D-1996-013-3

DELAWARE RIVER BASIN COMMISSION

**Southeastern Pennsylvania
Ground Water Protected Area**

**Superior Tube Company
Groundwater and Surface Water Withdrawal
Lower Providence Township, Montgomery County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) on February 25, 2021 (Application) for renewal of an allocation of groundwater and surface water and review of a groundwater and surface water withdrawal project.

The Application was reviewed for approval under Section 3.8 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 August 11, 2021.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to renew the approval of an existing groundwater and surface water withdrawal of up to 13.4 million gallons per month (mgm) for the docket holder's industrial facility from 11 existing wells and a surface water intake located on Perkiomen Creek. The groundwater withdrawal is part of a groundwater remediation project at the Superior Tube facility and is being performed by the docket holder as part of the Resources Conservation and Recovery Act (RCRA) Corrective Action Program under U.S. EPA Docket No. RCRA-III-029-CA. The site is currently in the post-remediation phase.

2. Location. The project wells are completed in the Brunswick Formation and are located in the Perkiomen Creek Watershed in Lower Providence Township, Montgomery County, Pennsylvania. Perkiomen Creek near the project site is designated by the Pennsylvania Department of Environmental Protection (PADEP) as Warm Water Fishes (WWF) and Migratory Fishes (MF).

Specific location information has been withheld for security reasons.

3. **Area Served.** The docket holder’s existing wells and surface water intake serve only the Superior Tube plant site as shown on a map entitled “Site Plan”, submitted as part of the application. The Superior Tube facility encompasses approximately 96 acres in Lower Providence Township, Montgomery County, Pennsylvania. 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’s groundwater remediation system, consists of 11 existing wells and is separated into the North and South recovery systems, is designed to prevent further off-site migration of contaminated groundwater. Contaminated groundwater is treated onsite and used for industrial purposes at the facility or discharged into tributaries of Perkiomen Creek. The site is currently in the post-remediation phase.

The surface water intake is located along Perkiomen Creek at the confluence of the Perkiomen Creek and an unnamed tributary. The intake has not been utilized to withdraw surface water since 1998. Currently the intake structure is used as an outlet for the discharge of treated industrial wastewater and cooling water. The docket holder indicated that the necessary equipment has been retained to operate the intake and that surface water withdrawals may occur in the future.

The docket holder reports an existing average and maximum demand of 0.166 mgd and 0.179 mgd, respectively. The docket holder projects an average and maximum water demand of 0.248 mgd and 0.699 mgd, respectively, by the year 2031. The allocation of 13.4 mgm should be sufficient to meet the future demands of the docket holder’s system.

5. **Facilities.** The docket holder’s existing wells and surface water intake have the following characteristics:

WELL NO.	DEPTH (FEET)	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY (GPM)	YEAR DRILLED
PW-1	385	107’/6”	45	1948
PW-3	196	101’/8”	36	1951
PW-4	499	21.5’/8”	38	1953
PW-5	535	17’/8”	75	1956
PW-6	580	30’/6”	38	1969
MW-2M	200	22’/6”	16	1979
MW-4M	200	19’/6”	8	1979
MW-5M	200	19’/6”	8	1979
MW-18	550	235’/6”	25	1992
MW-19	206	107’/8”	25	1994
MW-22	235	21’/10”	40	1993

INTAKE NO.	PUMP CAPACITY (GPM)	YEAR CONSTRUCTED
1	700	Pre-1976

The wells and surface water intake connections are metered.

All well water is treated for trichloroethylene (TCE) prior to entering the industrial distribution system.

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

The facility has a regular interconnection with Pennsylvania American Water Company to supply water for potable water use and emergency use in their fire system.

6. Other. Treated groundwater is conveyed for use as cooling or process water and is discharged with the docket holder's industrial wastewater effluent or non-contact cooling water discharge. The existing industrial wastewater and air stripper facilities were approved most recently under Section 3.8 of the *Compact* by DRBC Docket No. D-1997-023 on April 21, 1998. The PADEP issued its most recent NPDES Permit No. PA0011851 on October 1, 2019. The docket holder's industrial wastewater treatment facility has adequate capacity to receive wastewater from this project.

Domestic wastewater from the project is conveyed to Lower Perkiomen Valley Regional Sewer Authority's (LPVRSA) Oaks sewage treatment facility which received approval most recently under Section 3.8 of the *Compact* by DRBC Docket No. D-2001-042 CP-6 on June 10, 2020. The PADEP issued its most recent NPDES Permit No. PA0026964 on August 7, 2015 for this treatment facility. The PADEP issued WQM Permit No. 4698412 A-3 for the Oaks WWTP re-rated design hydraulic capacity on September 1, 2016. The treatment facility has adequate capacity to receive wastewater from this project.

B. FINDINGS

1. 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 (WC)*, *Water Quality Regulations (WQR)* 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 are being utilized.
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*. There have been no reported complaints of well interference since the 1998 approval of this renewal project. No adverse impact is anticipated due to continued operation of this project.
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*.

The docket holder's site located in the Perkiomen - Lodal Creeks subbasin (Subbasin No. 61), where total net annual groundwater withdrawal (620.2 mgd) is less than the withdrawal limit set in Section 6.I of the *GWPAR* (1,600 mgd). The docket holder is requesting a monthly allocation of up to 13.4 mgd (95 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 well below the withdrawal limits set in Section 6.I of the *GWPAR*. Therefore, the withdrawals from the docket holder's eleven (11) wells, in conjunction with other withdrawals in the subbasin, are in accordance with the requirements of Section 6.I of the *GWPAR*.

2. Surface Water Charges

The docket holder shall pay for surface water use in accordance with the provisions of Resolution No. 74-6, as amended as described in Condition C.3. in the DECISION section.

3. Passby Flow

The docket holder's Perkiomen Creek surface water withdrawal will be subject to pass-by flow requirements. The estimated contributing drainage area to Perkiomen Creek above the surface water intake is approximately 293 square miles. The estimated seven-day low flow with a recurrence interval of 10 years (Q_{7-10}) at the point of withdrawal is 21.7 cubic feet per second (cfs) or 14.03 mgd. The project withdrawal must not cause the stream flow in Perkiomen Creek to be less than 21.7 cfs at the point of taking and daily withdrawal rates shall be reduced as appropriate to ensure that a minimum of 21.7 cfs passes by the intake. Withdrawals shall cease

entirely if the 24-hour average flow as measured below the intake, less the withdrawal, is 21.7 cfs or less. Whenever the stream flow below the intakes is less than 21.7 cfs, no withdrawal from the creek shall be made and the entire natural stream flow must be allowed to pass. No withdrawals shall be made until flow in Perkiomen Creek as measured below the intake is above 22.37 cfs (Passby flow plus peak daily withdrawal rate) for at least a 24-hour period. The docket holder shall continue to monitor the pass-by requirement in accordance with Condition C.6 in this docket.

Based on data provided by the docket holder, the project withdrawals used for the purpose of industrial processes and cooling, result in a consumptive use of approximately 3 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

Effective on the approval date for Docket No. D-1996-013-3 below, Docket No. D-1996-013-2 is terminated and replaced by D-1996-013-3. 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. 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 pay for surface water use in accordance with *Administrative Manual – Part III Basin Regulations – Water Supply Charges 18 CFR Part 420*.

Other Conditions

4. During any month, the withdrawal from the following wells and surface water intake shall not exceed 13.4 million gallons. No source shall be pumped above the maximum rate and monthly allocation as indicated below:

WELL NO.	MAXIMUM RATE (GPM)*	MONTHLY ALLOCATION (MGM)
PW-1	45	2.01
PW-3	36	1.12
PW-4	38	1.70
PW-5	75	3.35
PW-6	38	0.38
MW-2M	16	0.54
MW-4M	8	0.11
MW-5M	8	0.23
MW-18	25	1.12
MW-19	25	1.12
MW-22	40	1.79
Intake No. 1	300	13.4

*Based on a 24-Hour Average

In addition:

- i) The total withdrawal from all wells shall not exceed 13.4 mgm, and
- ii) The total annual withdrawal from all wells shall not exceed 95 mgy, and
- iii) The total surface water withdrawal from Intake No. 1 shall not exceed a total withdrawal of 13.4 mgm, and
- iv) The total combined withdrawal from surface and groundwater sources shall not exceed 13.4 mgm.

5. 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.

6. The project withdrawal must not cause the streamflow to be less than 21.7 mgd at the point of taking. Whenever the streamflow below the intake is less than this amount, no withdrawal shall be made and the entire natural streamflow must be allowed to pass.

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

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

9. New and existing wells shall be equipped as necessary to accommodate water level measurements under all reasonable conditions.

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 *WQR* 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. 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 9, 2021

EXPIRATION DATE: September 9, 2031