DOCKET NO. D-1987-032-5

DELAWARE RIVER BASIN COMMISSION

Stanley Black and Decker
Groundwater Treatment Plant Discharge and Groundwater Withdrawal
City of Reading, Berks County, Pennsylvania

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) on September 6, 2023 (Application) for renewal of a groundwater treatment plant (GWTP) and its related discharge and the renewal of an allocation of groundwater and review of a groundwater water withdrawal project. The project discharge was most recently approved by the Pennsylvania Department of Environmental Protection (PADEP) National Pollutant Discharge Elimination System (NPDES) Permit No. PA0011371 on December 20, 2018, effective on January 1, 2019.

The Application was reviewed for approval under Section 3.8 of the *Delaware River Basin Compact*. The Berks County Planning Department has been notified of the application for this permit. A public hearing on this project was held by the DRBC on May 8, 2024.

A. DESCRIPTION

1. Purpose. The purpose of this project is to renew the approval of a groundwater withdrawal associated with the remediation of groundwater contaminated with volatile organic compounds (VOCs) with a decrease in allocation from 14.663 million gallons per month (mgm) to 14.19 mgm from existing Wells PW-5 and PW-6. The approval will also renew the discharge of up to 0.473 million gallons per day (mgd) of the remediated groundwater and its associated treatment. The existing groundwater withdrawal project is a Resource Conservation Recovery Act (RCRA) (Permit No. RCRA-111-004-CA).

2. Location. The project wells are completed in the Buffalo Springs Formation in the Schuylkill River Watershed in the City of Reading, Berks County, Pennsylvania. The Schuylkill River near the project site is designated by the PADEP as supporting Cold Water Fishes (CWF) and Migratory Fishes (MF).

The GWTP will continue to discharge treated groundwater to the Schuylkill River through a municipal storm drain via Outfall No. 001 located at River Mile 92.47 – 75.0 (Delaware River – Schuylkill River).

The project outfall is located in the Schuylkill River Watershed as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	40° 19’ 35”	75° 56’ 6”

3. **Area Served.** The existing project wells will be used only for the purpose of groundwater remediation at the docket holder’s manufacturing facility. 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 docket holder’s groundwater treatment facility processes up to 0.473 mgd of groundwater containing chlorinated volatile organic compounds (VOCs) by air stripping facilities prior to discharging to the Schuylkill River through a stormwater sewer that served the former industrial site.

Wells PW-5 and PW-6 are pumped simultaneously at a combine rate of approximately 300 gallons per minute (gpm) in order to induce a capture zone for the groundwater purge system. Withdrawn groundwater is immediately directed to an air stripper unit for VOC removal. Treated groundwater will continue to be discharged to the Schuylkill River through existing Outfall No. 001.

The average and maximum demand is 0.432 mgd and 0.473 mgd, respectively. The docket holder does not project an increase in demand over the next 10 years. The allocation of 14.19 mgm should be sufficient to meet the future demands of the docket holder’s treatment plant.

5. **Facilities.** Groundwater is continuously pumped from Wells PW-5 and PW-6 at a combined minimum of 300 gpm. The remediation system treats groundwater using a low-profile air stripper capable of removing VOCs up to concentrations of 500 micrograms per liter (µg/l) at a flowrate of 350 gpm. The treated groundwater is discharged directly to the municipal storm drain by means of an existing manhole structure located beyond the southeastern property boundary and is then discharged into the Schuylkill River.

The existing project recovery wells have the following characteristics:

WELL NO.	DEPTH	CASED DEPTH/ CASING DIAMETER	SCREENED INTERVAL	PUMP CAPACITY	YEAR DRILLED
PW-5	197	101’/ 10”	101’ to 146’	400	1985

WELL NO.	DEPTH	CASED DEPTH/ CASING DIAMETER	SCREENED INTERVAL	PUMP CAPACITY	YEAR DRILLED
PW-6	125	95'/ 6"	95' to 125'	90	2013

All wells are metered.

The groundwater treatment system and project recovery wells are above the 100-year flood elevation.

Groundwater is treated by a packed bed air stripping column for VOC removal, prior to being discharged.

The docket holder's facility has an interconnection with the Reading Area Water Authority (RAWA) water distribution system for potable and sanitary water supply if the facility will need either in the future.

6. NPDES Permit / DRBC Docket. NPDES Permit No. PA0011371 issued by the PADEP includes final effluent limitations for the project discharge to surface waters classified by the PADEP as supporting Cold Water Fishes (CWF) and Migratory Fishes (MF). EFFLUENT TABLE C-1 included in this docket contains effluent requirements for DRBC parameters that must be met as a condition of this approval (See C. DECISION Condition C.1.). The docket holder has submitted a NPDES renewal application to the PADEP and it is currently under review.

B. FINDINGS

The former owner, Baldwin, entered an Administrative Order on Consent (Consent Order) with the USEPA in 1987 to remediate chlorinated VOCs in the groundwater pursuant to RCRA Section 3008(h). The Consent Order requires the owner to establish hydraulic control of hazardous constituents in the groundwater through continuous pumping of recovery wells at a minimum combined rate of 300 gpm or 0.432 mgd. A hydraulic containment system was activated in 1988 and must continue to operate until trichloroethylene (TCE) in the groundwater is reduced in concentration to less than 5 micrograms per liter. Groundwater from the hydraulic containment system is treated onsite using an air-stripping tower and discharged to the municipal storm drain approved under NPDES Permit No. PA0011371.

The docket holder has made modifications to the hydraulic containment system which include relocation of plumbing and electric conduits to underground utility trenches, installation of fully automated controls and remote telemetry, replacement of the existing air-stripping tower with a new low-profile unit and consolidation of all controls and treatment system components within a new winterized enclosure in the southeast portion of the property.

Aquifer testing performed in the past has demonstrated sufficient capture of the plume at significantly lower pumping rates than the wells were previously approved at. Reduction in the

combined pumping rates would reduce system maintenance and reduce demands on water resources within the Delaware River Basin. The proposed new pumping rates are 115 gpm and 85 gpm for PW-5 and PW-6, respectively for a total combined pumping rate of 200 gpm. A request for pumping rate reduction was sent to the EPA and PADEP on February 18, 2022 and is being reviewed.

At the project site, the Schuylkill River has an estimated seven-day low flow with a recurrence interval of ten years of 137 mgd (212 cfs). The flow was calculated using U.S. Geological Survey, 2012, The StreamStats Program for Pennsylvania, online at http://water.usgs.gov/osw/streamstats/pennsylvania.html. The ratio of this low flow to the average design wastewater discharge from the 0.473 mgd GWTP is 290 to 1.

The nearest surface water intake of record for public water supply is located approximately 18 river miles on the Schuylkill River and is operated by Pottstown Borough Authority.

The limits in the NPDES Permit are in compliance with Commission effluent quality requirements, where applicable.

The project is designed to produce a discharge meeting the effluent requirements as set forth in the *Water Quality Regulations* of the DRBC.

The DRBC estimates that the project withdrawals, used for the purpose of groundwater remediation, result in negligible consumptive 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-1987-032-5 below, Docket No. D-1987-032-4 is terminated and replaced by Docket No. D-1987-032-5. 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 comply with the requirements contained in the EFFLUENT TABLES below. The docket holder shall submit the required monitoring results electronically to the DRBC Project Review Section via email **aemr@drbc.gov** on the **Annual Effluent Monitoring Report Form** located at this web address: https://www.nj.gov/drbc/programs/project/docket-app-info.html#3. The monitoring results shall

be submitted annually, absent any observed limit violations, by January 31. If a DRBC effluent limit is violated, the docket holder shall submit the result(s) to the DRBC within 30 days of the violation(s) and provide a written explanation that states the action(s) the docket holder has taken to correct the violation(s) and protect against any future violations. The following average monthly effluent limits are among those listed in the NPDES Permit and meet or are more stringent than the effluent requirements of the DRBC.

EFFLUENT TABLE C-1: DRBC Parameters Included in NPDES Permit

Outfall 001 (Schuylkill River)		
PARAMETER	**LIMIT**	**MONITORING**
pH (Standard Units)	6 to 9 at all times	As required by NPDES Permit
Trichloroethylene	0.20 mg/l	As required by NPDES Permit

2. 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).

3. 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.

Other Conditions

4. During any month, the withdrawal from all well sources shall not exceed 14.19 million gallons. No well shall not be pumped above the maximum rate and monthly allocation as indicated below:

WELL NO.	**MAXIMUM RATE (GPM)***	**MONTHY ALLOCATION (MGM)**
PW-5	245	10.594
PW-6	90	3.596

*Based on a 24-Hour Average

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

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

7. 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.

8. 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.

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

10. The docket holder is permitted to treat and discharge wastewaters as set forth in the Area Served section of this docket, which incorporates by reference the Type of Discharge and Service Area sections of the docket holder's Application to the extent consistent with all other conditions of this DECISION section.

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

12. 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.

13. 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*.

14. 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).

15. 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).

16. 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).

17. 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.

18. 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.

19. 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.

20. 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:

EXPIRATION DATE: June 5, 2034