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DOCKET NO. D-1971-064-2

DELAWARE RIVER BASIN COMMISSION

**FedChem, LLC
Groundwater Withdrawal and NCCW Discharge
Lower Nazareth Township, Northampton County, Pennsylvania**

Located in Drainage Area to Special Protection Waters

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) on December 6, 2024 for the renewal and modification of an allocation of groundwater and review of a groundwater withdrawal project and existing non-contact cooling water discharge (Application). The Pennsylvania Department of Environmental Protection (PADEP) issued National Pollutant Discharge Elimination System (NPDES) Permit No. PA0028495 for the discharge. The groundwater withdrawal and discharge project was last approved by the Commission on June 22, 1971.

The Application was reviewed for approval under Section 3.8 of the *Delaware River Basin Compact*. The Lehigh Valley Planning Commission has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on August 6, 2025.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to approve an existing groundwater withdrawal of up to 19.28 mgm (0.622 mgd) from Well W-001 and the resulting discharge of non-contact cooling water. The withdrawal and discharge rates approved by this docket are increases from the amounts of 0.507 mgd (15.72 mgm) described in the previous docket.

2. Location. The docket holder's withdrawal and discharge project is located in Lower Nazareth Township, Northampton County, Pennsylvania. Well W-001 is completed in the Epler Formation in the Monocacy Creek Watershed. NCCW will continue to be discharged via Outfall 001 to Monocacy Creek at River Mile 183.7 – 11.5 - 10.5 (Delaware River – Lehigh River – Monocacy Creek). The project is located in the drainage area to the Lower Delaware Special Protection Waters (SPW).

Specific location information has been withheld for security reasons.

3. **Area Served.** The project withdrawal and discharge will continue to serve only the docket holder's chemical 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.** Groundwater from Well W-001 is used to cool the docket holder's jacketed-reactor vessels and condensers and is then discharged to Monocacy Creek. The well is operated continuously, and the flow rate is not normally adjusted. The consumptive use is zero and withdrawal volume equals the discharge volume.

Based on water usage records from 2020 to the present, water withdrawals ranged from 0.562 million gallons per day (17.42 mgm) to 0.671 mgd (20.14 mgm) and averaged 0.633 mgd (19.62 mgm) over this period. The docket holder requested a withdrawal rate of 432 gpm and a monthly allocation of 19.28 mgm, which is based on the effluent discharge rate of 0.622 mgd listed in the PADEP NPDES permit. On May 8, 2025 the docket holder replaced the Well W-001 flow meter with a new electronic meter and adjusted the discharge valve to achieve a flowrate at or below 432 gpm. The docket holder expects no increases in the 10-year projected water demands and the allocation of 19.28 mgm is sufficient to meet the current and future demands of the docket holder.

5. **Facilities.** The existing project well has the following characteristics:

WELL NO.	DEPTH (FEET)	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY (GPM)	YEAR DRILLED
W-001	250'	140' / unknown	432	Prior to 1961

Well W-001 is metered.

The well water is not treated prior to use.

The project well and manufacturing facility is outside the 100-year floodplain.

Potable and process water is supplied by Easton Suburban Water Authority.

6. **Other.** NCCW along with stormwater is discharged via Outfall No. 001 to Monocacy Creek. The remainder of the water used for industrial processes is stored in central collection tanks and hauled off-site to Lehigh County Authority industrial pre-treatment wastewater facility. Water used for sanitary purposes is disposed of in an on-lot septic system.

B. FINDINGS

1. Special Protection Waters

In 1992, the DRBC amended its Water Quality Regulations (WQR) by the addition of regulations for the protection of Special Protection Waters (SPW), designed to maintain the quality of interstate waters where existing quality is better than the established stream quality objectives. As the result of its initial classifications and subsequent amendments, the Commission has designated the entire non-tidal main stem Delaware River from Hancock, New York to Trenton, New Jersey as SPW. DRBC's SPW regulations apply within the designated reaches and their drainage area.

The well and NCCW discharge are located within the drainage area to the Lower Delaware SPW. Sections 3.10.3A.2.e.1) and 2) of the WQR state that projects subject to review under Section 3.8 of the Compact that are located within the drainage area of SPW must submit for approval a Non-Point Source Pollution Control Plan (NPSPCP) that controls the new or increased non-point source loads generated within the portion of the docket holder's service area which is also located within the drainage area of SPW. Since this project involves existing withdraw and discharge activities and does not entail additional construction or expansion of facilities or create new or increased non-point source loads, the NPSPCP requirement is not applicable at this time. Condition C.22. of this docket provides that at such time, if ever, as additions to the area served by the docket holder's withdrawals are proposed, the docket holder will be required to demonstrate compliance with an approved NPSPCP in accordance with DRBC's SPW regulations.

2. Other Findings

The previous docket was issued to Keystone Chemurgic Corporation. The current docket holder began its operations at the facility in 2002. Process wastewater is no longer discharged at the facility.

Information in the Application indicated that the docket holder is undertaking a 2025 engineering evaluation on the economic possibility of reducing NCCW flowrate to match water demands to the variable production activities. As of the time of review of this project application, the evaluation has not yet been completed.

The DRBC estimates that the project withdrawals, used for the purpose of non-contact cooling, result in negligible consumptive use (zero (0) percent) of the total water use. The DRBC definition of consumptive use is defined in Basin Regulations-Water Supply Charges 18 C.F.R. 420.1(d).

This project consists of an existing withdrawal of groundwater from Well W-001. The docket holder has requested an allocation for existing Well W-001 based on existing water use. These rates are provided in Section C. Decision Condition C.3. 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 well.

At the project discharge, Monocacy Creek an estimated seven-day low flow with a recurrence interval of ten years of 0.85 mgd (1.32 cfs). The ratio of this low flow to the average design NCCW discharge from the facility is 1.4 to 1.

The nearest surface water intake of record for public water supply is located on Delaware River approximately 48 River Miles downstream of the docket holder's NCCW discharge and is operated by North Penn Water Authority for use at the Forest Park Water Treatment Plant.

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.

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

The project is designed to produce a discharge that meets the effluent requirements as set forth in the Commission's *Water Quality Regulations (WQR)*.

C. DECISION

Effective on the approval date for Docket No. D-1971-064-2 below, Docket No. D-1971-064-1 is terminated and replaced by Docket No. D-1971-064-2. 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 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.

Other Conditions

3. During any month, the withdrawal from Well W-001 shall not exceed 19.28 million gallons. The well shall not be pumped above the maximum rate and monthly allocation as indicated below:

WELL NO.	MAXIMUM RATE (GPM)*	MONTHLY ALLOCATION (MGM)
W-001	432 gpm	19.28 mgm

* Based on a 24-Hour Average

4. 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.

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 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 the docket holder has not applied to renew the docket or the DRBC is unable 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 renewal of the docket.

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

7. The well and facility shall be operated at all times to comply with the requirements of the *WC* and *WQR* 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. 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).

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

11. The docket holder shall discharge wastewater in such a manner as to avoid injury or damage to fish or wildlife and shall avoid any injury to public or private property.

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. Prior to allowing connections from any new service areas or any new developments, the docket holder shall either submit and have approved by the Executive Director of the DRBC a Non-Point Source Pollution Control Plan (NPSPCP) in accordance with Section 3.10.3.A.2.e or receive written confirmation from the Executive Director of the DRBC that the new service area complies with a DRBC approved NPSPCP.

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:

EXPIRATION DATE: December 10, 2035