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**DOCKET NO. D-1976-055 CP-5**

**DELAWARE RIVER BASIN COMMISSION**

**Philadelphia Gas Works  
Richmond Facility Non-Process Industrial Wastewater Discharge  
City of Philadelphia, Pennsylvania**

**PROCEEDINGS**

This docket is issued in response to an application submitted to the Delaware River Basin Commission (DRBC or Commission) on date (Application), for renewal of the docket holder's existing discharge of non-process industrial wastewater. The Pennsylvania Department of Environmental Protection (PADEP) issued National Pollutant Discharge Elimination System (NPDES) Permit No. PA0012882 for this discharge.

The application was reviewed for continuation of the project in the Comprehensive Plan and approval under Section 3.8 of the *Delaware River Basin Compact*. The Philadelphia City Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on November 5, 2025.

**A. DESCRIPTION**

**1. Purpose.** The purpose of this docket is to renew approval of the docket holder's existing discharge of up to 8.64 million gallons per day (mgd), of water used to maintain pressure and cool equipment of the facility's fire suppression system.

**2. Location.** The docket holder's natural gas processing and storage facility is located at 3100 East Venango Street in the City of Philadelphia, Philadelphia County, Pennsylvania. The facility will continue to periodically discharge non-process wastewater from Outfall No. 004 to Water Quality Zone 3 of the Delaware River at River Mile 103.7.

The location of the project outfall in the Delaware Watershed is as follows:

| OUTFALL NO. | LATITUDE (N) | LONGITUDE (W) |
|-------------|--------------|---------------|
| 004         | 39° 58' 45"  | 75° 04' 54"   |

3. **Area Served.** The docket holder's facility is a city-owned utility that supplies natural gas to customers within the City of Philadelphia. The docket holder will continue to discharge non-process wastewater from the Richmond Plant located in the City of Philadelphia, Pennsylvania. For the purpose of defining the Area Served, the Type of Discharge and the Service Area sections from the docket holder's Application are incorporated herein by reference, to the extent consistent with all other conditions contained in Section C. DECISION of this docket.

4. **Design Criteria.** The docket holder's Richmond Plant utilizes Delaware River intake water for operation of its emergency fire suppression system.

5. **Facilities.** The PGW Richmond Plant facility contains two systems (one active and one decommissioned) that produce liquefied natural gas. The Expander Plant, currently in operation, does not require river water for cooling purposes. The Cascade Refrigerant System, currently decommissioned, contains compressors and heat exchanger units that previously required river water for cooling purposes.

Though the docket holder's process-driven NCCW needs have been eliminated with the decommissioning of the Cascade Refrigerant System, water is still continuously circulated within the facility's river water piping system to maintain pressure to emergency equipment critical to the facility's fire suppression system. All of the water used for these processes is withdrawn from the Delaware River and discharged back to the Delaware River either to Outfall 004 via the Castor Avenue city sewer line, or as spill back to the facility's river water Wet Well which is connected to the Delaware River via a 48" diameter underground pipe. During normal operations, the river water is discharged as spillback to the Wet Well. During winter months, and only on days when freezing conditions within the plant's river water piping system is a concern, a portion of the river water withdrawn from the wet well is circulated through the system piping and discharged to Outfall No. 004, with the remainder of the river water discharged back to the Wet Well.

River water is used only for emergency fire suppression purposes, no cooling water is currently used by any facility processes vital to its core functions. During emergencies, a small portion of the river water withdrawn would be used to cool three (3) natural gas fired engines which can power three (3) of the river water pumps when the plant is without electrical power. These back-up pump engines are kept offline during normal operation and are only tested for approximately 90 minutes per engine on a weekly basis. During these tests, any river water used by the engine is spilled back to the Wet Well.

Prior to November 2011, PGW maintained its river water system pressure using its high-capacity pumps, which required a long-term average water flow of 6.67 mgd. In November 2011, the docket holder installed a smaller capacity jockey pump that can maintain sufficient water pressure at lower pumping rates (less than 1 mgd on average). Currently, the jockey pump is operated as the primary source of water pressure to the facility's river water system when no testing or maintenance is needed. The higher capacity pumps must still be placed online to supply larger

fire suppression systems, or when maintenance and repairs to the jockey pump are needed. The five larger capacity river water pumps are rated at 6.048 mgd (3 pumps) and 8.640 mgd (2 pumps).

Flow data recorded during the previous two years indicates an average daily discharge of 0.300 mgd and a maximum daily discharge of 6.32 mgd. The average daily flow reflects typical operating conditions when only the jockey pump is in use. The maximum daily flow reflects operating conditions when river water system winterization is needed or when the jockey pump is offline for service and a larger pump is in use instead.

Sanitary wastewater is conveyed to the City of Philadelphia Northeast wastewater treatment plant (WWTP), which was most recently approved by the Commission via Docket No. D-1970-052 CP-2 on December 11, 2019.

**6. Water Withdrawals.** Water is supplied by the docket holder's on-site intake on the Delaware River as described in detail in Docket No. D-2012-017 CP-2, approved on June 8, 2022.

The potable water supply in the project service area is supplied by the City of Philadelphia and was approved by the Commission via Docket No. D-1964-004 CP-1 on February 21, 1964.

**7. NPDES Permit / DRBC Effluent Requirements.** NPDES Permit No. PA0012882 issued by the PADEP includes final effluent limitations for the project discharge to surface waters classified by the PADEP as supporting warm water fishes and migratory fishes (WWF/MF). EFFLUENT TABLE C-1 included in Section C. DECISION condition C.1. of this docket, contains effluent requirements for DRBC parameters that must be met as a condition of this approval. Effluent requirements for Outfall No. 004 are based on a discharge rate of 8.64 mgd. Because discharges from Outfall 004 do not usually occur, the docket holder collects effluent monitoring samples from spillback outlet locations at the wet well.

**8. Relationship to the Comprehensive Plan.** The Project was first added to the Comprehensive Plan by Docket No. D-1976-055 CP-1 on December 8, 1976. Issuance of this docket will continue the WWTP and its discharge in the Comprehensive Plan.

## **B. FINDINGS**

The docket holder applied to renew approval of the existing discharge of up to 8.64 mgd (based on design capacity) of water used to maintain pressure and cool equipment of the facility's fire suppression system.

### **1. Heat Dissipation Area**

Section 4.30.6.C. of the Commission's *Water Quality Regulations (WQR)* requires that discharges to Zone 3 shall not result in an induced temperature increase of 5°F (2.8°C) above the average 24-hour temperature gradient displayed during the 1961-1966 period, or a maximum of 86°F (30.0°C), whichever is less.

Section 4.30.6.F.3. of the Commission's *WQR* allows for heat dissipation areas up to 3,500 feet in length, two-thirds the surface width, and a maximum cross section up to one-quarter of the cross-sectional area of the stream in Zone 3. By letter dated December 22, the Commission approved a heat dissipation area of 150 feet centered on Outfall No. 004. Although NCCW discharges related to the former processing of natural gas no longer occur, the 150-foot radius heat dissipation area around Outfall No. 004 is continued in this docket renewal (See DECISION Condition C.2.).

## 2. Other

There are no public water supply intakes downstream of the project discharge.

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-1976-055 CP-5 below, the project described in Docket No. D-1976-055 CP-4 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-1976-055 CP-5; Docket No. D-1976-055 CP-4 is terminated and replaced by Docket No. D-1976-055 CP-5; and the project and the appurtenant facilities described in Section A "DESCRIPTION" of this docket shall be included in the Comprehensive Plan. The project and appurtenant facilities as described in Section A of this docket are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

### 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](mailto: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**

| <b>OUTFALL No. 004</b><br><b>(Discharge of water used to maintain pressure and cool fire suppression equipment)</b> |                     |                             |
|---|---------------------|-----------------------------|
| <b>PARAMETER</b>  | <b>LIMIT</b>        | <b>MONITORING</b>           |
| pH (Standard Units)   | 6 to 9 at all times | As required by NPDES Permit |
| Temperature   | 110 ° F (Max)       | As required by NPDES Permit |
| Temperature - Influent  | Monitor and Report  | As required by NPDES Permit |
| Total Dissolved Solids*   | 1,000 mg/l          | As required by NPDES Permit |

\* See DECISION Condition C.4

### **Other Conditions**

2. The discharge of wastewater shall not increase the ambient temperatures of the receiving waters by more than 5°F above the average 24-hour temperature gradient displayed during the 1961-1966 period, nor shall such discharge result in stream temperatures exceeding 86°F, except within an assigned heat dissipation area consisting of a 150-foot radius around Outfall No. 4.
3. Except as otherwise authorized by this docket, if the docket holder seeks relief from any limitation based upon a DRBC water quality standard or minimum treatment requirement, the docket holder shall apply for approval from the Executive Director or for a docket revision in accordance with Section 3.8 of the *Compact* and the *Rules of Practice and Procedure*.
4. The docket holder may request permission from the Executive Director to perform specific conductance monitoring in lieu of TDS monitoring. The request shall be made in writing and shall include information that supports the effluent specific correlation between TDS and specific conductance. Upon review, the Executive Director may modify the docket to allow specific conductance monitoring in lieu of TDS monitoring.
5. 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 docket holder is permitted to treat and discharge wastewater 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 section. Any expansion beyond that included in Section A.3. Area Served is subject to DRBC review and approval in accordance with Section 3.8 of the Compact.

8. In accordance with the Commission's regulations at 18 C.F.R. Part 440, the docket holder is prohibited from discharging wastewater from high volume hydraulic fracturing ("HVHF") or HVHF-related activities to waters or land within the Basin. The docket holder is further prohibited from discharging hydraulic fracturing wastewater, whether treated or untreated, from sources within or outside the Basin, without obtaining the Commission's prior review and express approval in the form of a revised docket. Violation of this or any condition of this docket approval may result in enforcement, including the risk of financial penalties, pursuant to Section 14.17 of the Delaware River Basin Compact and Section 2.7.8 (18 CFR 401.98) of the Commission's Rules of Practice and Procedure.

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

10. The facility shall be operated at all times to comply with the requirements of the Commission's *WQR*.

11. If at any time the receiving treatment plant proves unable to produce an effluent that is consistent with the requirements of this docket approval, no further connections shall be permitted until the deficiency is remedied.

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 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.

14. The issuance of this docket approval shall not create any private or proprietary rights in the waters of the Basin, and the Commission reserves the right to amend, suspend or rescind the docket for cause, to ensure proper control, use and management of the water resources of the Basin.

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 C.F.R. 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 C.F.R. 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 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.

**19.** 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 (RPP)*. 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: March 4, 2031**