

DOCKET NO. D-2006-014-4

DELAWARE RIVER BASIN COMMISSION

**Trane Technologies Company LLC
Groundwater Treatment System Discharge
Phillipsburg, Warren County, New Jersey**

PROCEEDINGS

This docket is issued in response to an application submitted to the Delaware River Basin Commission (DRBC or Commission) on August 11, 2023 (Application), for renewal of the docket holder’s existing Groundwater Treatment System (GWTS) and its discharge. The New Jersey Department of Environmental Protection (NJDEP) issued New Jersey Pollution Discharge Elimination System (NJPDES) Individual NJPDES/DSW General Permit Authorization Number NJG0004049 under the General Groundwater Petroleum Product Cleanup (B4B) Permit NJPDES General Permit No. NJ0102709 for this discharge.

The application was reviewed for approval under Section 3.8 of the *Delaware River Basin Compact*. The Warren County Planning Department has been notified of pending action. A public hearing on this project was held by the DRBC on February 7, 2024.

A. DESCRIPTION

- Purpose.** The purpose of this docket is to renew approval of the docket holder’s existing GWTS and its 0.075 million gallons per day (mgd) discharge.
- Location.** The GWTS will continue to discharge treated effluent to a ditch that drains to Lopatcong Creek at River Mile 182.0 – 1.87 (Delaware River – Lopatcong Creek) via Outfall No. DSN002A, to waters within the drainage area to the Lower Delaware Special Protection Waters (SPW), in the Town of Phillipsburg, Warren County, New Jersey as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
DSN002A	40° 41’ 26.04”	75° 09’ 56.43”

- Area Served.** The docket holder’s GWTS treats withdrawn groundwater from the on-site recovery wells located at the former Ingersoll-Rand property located in Warren County, New Jersey. Treated water is discharged on site as described herein. The remediation site is depicted in Figures 1 and 2 included with the application.
- Design Criteria.** The docket holder will continue to operate its existing GWTS that treats petroleum impacted groundwater from eight (8) remediation wells prior to discharging up to 0.075 mgd of treated groundwater on site. Two additional existing wells, Well 1P and Well RW-08 are not currently used for remediation, but may be used for this purpose in the future if necessary.

5. Facilities. The GWTS consists of an oil/water separator, a holding tank, sediment filters, and a carbon organo-clay filtration unit. Groundwater is pumped from 8 remediation wells located onsite, referred to as wells RW01, RW02, RW03, RW04, RW05, RW06, RW08A, and RW17. Two additional existing wells, Well 1P and Well RW-08 may also be used for remediation purposes.

The docket holder's GWTS will continue to discharge to waters classified as SPW but is not required to have available emergency power. The GWTS does not have a generator available for emergency power supply. If power is lost, the pumps that withdraw water from the eight remediation wells stop production and the GWTS ceases to function.

The docket holder's wastewater treatment facility is not staffed 24 hours per day and shall have a remote alarm system that continuously monitors plant operations in accordance with the Commission's SPW requirements. The existing GWTP has a remote alarm system installed that continuously monitors plant operations.

The docket holder's existing wastewater treatment facility has prepared and implemented an emergency management plan (EMP) in accordance with Commission SPW requirements.

The project facilities are not located in the 100-year floodplain.

Residuals are managed in accordance with NJPDES Permit No. NJG0004049 and N.J.A.C. 7:14A-20.

6. Water Withdrawals. Groundwater for remediation is withdrawn from 8 remediation wells that are operated at a rate less than DRBC's review threshold of greater than 100,000 gallons per day on average over any consecutive 30-day period.

7. NJPDES/ DRBC Effluent Requirements. NJPDES Permit No. NJG0004049 issued by the NJDEP includes effluent limitations for the project discharge to surface waters classified by the NJDEP as Fresh Water 2, Trout Production, Category 1 (FW2-TP (C1)) waters. EFFLUENT TABLES C-1 & C-2 included in Section C. DECISION condition C.1. of this docket contain effluent requirements for DRBC parameters that must be met as a condition of this approval. Effluent requirements for Outfall No. DSN002 are based on a discharge rate of 0.075 mgd.

B. FINDINGS

The docket holder applied to renew approval of their existing GWTS and its 0.075 mgd discharge.

On July 16, 2008, the DRBC approved amendments to its *Water Quality Regulations (WQR)* that provide increased protection for waters that the Commission classifies as SPW. The portion of the Delaware River and its tributaries within the boundary of the Lower Delaware River Management Plan Area was approved for SPW designation.

Article 3.10.3A.2.e.1). and 2). of the Commission's *WQR* states that projects subject to review under Section 3.8 of the Compact that are located in 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. The service area of the docket holder is located within the drainage area to the Lower Delaware SPW. Since this project does not entail additional construction and expansion of facilities/service area and there are not any new or increased non-point source loads associated with this approval, the NPSPCP requirement is not applicable at this time.

The docket holder withdraws water from the fractured carbonate rock aquifer underlying the site. As a result, Total Dissolved Solids (TDS) concentrations in groundwater are elevated naturally. While groundwater TDS sample results have approached 1,000 mg/l, the docket holder is concerned that discharges may at some point exceed the 1,000 mg/l effluent limit included in DRBC's regulations if the system is operated at its designed rate.

The applicant has requested a higher TDS effluent limit and has demonstrated, based on a mass balance assessment, that at the design discharge rate of 0.075 mgd and an estimated TDS in effluent concentration of up to 2,846 mg/l, DRBC's stream quality objective of less than 133% of background TDS could be met in Lopatcong Creek. However, as the expected concentration can at present only be estimated, an increase in the allowable TDS limit is not warranted at this time. Furthermore, DRBC Water Quality Regulations provide that biodegradable and other waste matter to be treated or reduced shall not include that incorporated in inflect waters, unless special circumstances as determined by the Commission require such inclusion. As the remediation operation is providing a benefit to the local hydrologic system, DRBC staff recommend including a TDS monitor and report requirement in the docket as well as a requirement that, within 10 days of operation of the GWTS at the design rate, the docket holder perform one additional characterization of groundwater to determine the constituents contributing to TDS in groundwater at the site, including monitoring and reporting for: **Calcium, Chloride, Sodium, Magnesium, Manganese, Potassium, Sulfate, Bicarbonate, Hardness, Iron, and TDS**. The laboratory report shall be provided to the DRBC Project Review Manager once received by the docket holder (see Section C. DECISION, Condition C.2). Routine effluent monitoring and reporting shall be conducted in accordance with EFFLUENT TABLE C-1 and C-2 of this docket.

Near the docket holder's GWTS discharge, Lopatcong Creek has an estimated seven-day low flow with a recurrence interval of ten years (Q_{7-10}) of 3.93 mgd (6.1 cfs). The ratio of this low flow to the hydraulic design wastewater discharge from the 0.075 mgd GWTS is 43.67 to 1.

The nearest surface water intake of record for public water supply is located approximately 32 River Miles downstream of the docket holder's GWTS on the Delaware River and is operated by the North Penn Water Authority.

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 NJPDES Permit conform with Commission effluent quality requirements, where applicable.

The project is designed to produce a discharge meeting the effluent requirements as set forth in the Commission’s *WQR*.

C. DECISION

Effective on the approval date for Docket No. D-2006-014-4 below, Docket No. D-2006-014-3 is terminated and replaced by Docket No. D-2006-014-4. 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 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 NJPDES Permit

OUTFALL DSN002 (ditch to the Lopatcong Creek)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required by NJPDES Permit
Total Suspended Solids	25 mg/l	As required by NJPDES Permit

The following monitoring requirements and average monthly effluent limits are for DRBC parameters not listed in the NPDES Permit.

EFFLUENT TABLE C-2: DRBC Parameters Not Included in NJPDES Permit

OUTFALL DSN002 (ditch to the Lopatcong Creek)		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids*	Monitor and Report *	Monthly *

* See Section C. DECISION Condition C.3.

2. Within 10 days of operation of the GWTS at the design rate, the docket holder shall perform one additional characterization of groundwater to determine the constituents contributing to TDS in groundwater at the site, including monitoring and reporting for: **Calcium, Chloride, Sodium, Magnesium, Manganese, Potassium, Sulfate, Bicarbonate, Hardness, Iron, and TDS**. The laboratory report shall be provided to the DRBC Project Review Manager once received by the docket holder.

3. 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.

4. 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*.

5. The docket holder may request of the Executive Director in writing the substitution of specific conductance for TDS. The request should include information that supports the effluent specific correlation between TDS and specific conductance. Upon review, the Executive Director may modify the docket to allow the substitution of specific conductance for TDS monitoring.

Other Conditions

6. 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 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.

7. Section 2.3.10 of the Commission’s *Rules of Practice and Procedure (RPP)* (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.

- 8.** 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 or not 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.
- 9.** 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 Figures 1 and 2 of the docket holder's Application.
- 10.** 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.
- 11.** The facility and operational records shall be available at all times for inspection by the DRBC.
- 12.** The facility shall be operated at all times to comply with the requirements of the Commission's *WQR*.
- 13.** 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.
- 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 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.
- 16.** No sewer 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).

17. 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.

18. 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).

19. 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).

20. 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).

21. 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: March 6, 2024

EXPIRATION DATE: March 6, 2029