

DOCKET NO. D-1978-068-6

DELAWARE RIVER BASIN COMMISSION

**Municipal Authority of the Borough of Morrisville
Morrisville KTC Sewage and Industrial Wastewater Treatment Plants
Falls Township, Bucks County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an application submitted to the Delaware River Basin Commission (DRBC or Commission) by Pennoni Associates, Inc. on behalf of the Municipal Authority of the Borough of Morrisville on June 7, 2024 (Application), for renewal of the docket holder's existing Keystone Trade Center (KTC) Sewage Treatment Plant (STP) and industrial wastewater treatment plant (IWTP) and their combined discharge. The Pennsylvania Department of Environmental Protection (PADEP) issued National Pollutant Discharge Elimination System (NPDES) Permit No. PA0245399 for this discharge.

The application was reviewed for approval under Section 3.8 of the *Delaware River Basin Compact*. The Bucks County Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on February 5, 2025.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to renew approval of the docket holder's existing STP, existing IWTP, and the combined discharge via Outfall No. 003. Effluent limits in the NPDES permit for the STP discharge and IWTP discharge are based on discharge rates of 0.163 million gallons per day (mgd) and 3.75 mgd, respectively.

2. Location. The docket holder's STP and IWTP are located at the KTC, formerly known as the U.S. Steel Fairless Works industrial site, in Falls Township, Bucks County, Pennsylvania. The IWTP consists of the Finishing Mill Treatment Plant (FMTP), the effluent from which is monitored at monitoring point (MP) 403, and the Industrial Treatment Plant (IWTP), the effluent from which is combined with FMTP effluent and is monitored at MP 103. The STP effluent is monitored at MP 203. The IWTP effluent (MP 103) combines with STP effluent (MP 203) in a tidal canal prior to discharge via Outfall 003 to Delaware River Water Quality Zone 2 at River Mile 127.0. The location of the monitoring points and outfall in the Delaware River Watershed are as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
MP 103 (IWTP)	40° 8' 19.63"	74° 44' 21.68"
MP 203 (STP)	40° 8' 19.57"	74° 44' 24.81"
MP 403 (FMTP)	40° 8' 50.00"	74° 44' 39.00"
Outfall 003 (combined effluent)	40° 8' 20.41"	74° 44' 19.32"

3. **Area Served.** The docket holder's STP and IWTP will continue to serve the US Steel galvanizing facility along with several other businesses located at the Keystone Trade Center in Falls Township, Bucks County, Pennsylvania, including, but not limited to: Fairless Energy, LLC (Dominion), Air Gas USA, LLC (Airgas), and GMA Garnet (GMA). 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 STP utilizes a trickling filter treatment system. Effluent limits in the NPDES permit for the DWTP effluent are based on a discharge rate of 0.163 mgd.

The IWTP utilizes aeration, API separation, and a polishing lagoon for treatment. Blowdown and skimming from the IWTP API separator along with other wastes generated on-site is directed to the FMTP for treatment and is re-circulated back to the IWTP after treatment at the FMTP. Effluent limits in the NPDES permit for the IWTP effluent are based on discharge rate of 3.75 mgd.

5. **Facilities.** The STP treatment facilities consist of 3 booster pumps, a main pump station, a primary clarifier (and digester), 2 trickling filters working in parallel, a secondary clarifier, and chemical disinfection (chlorine/sodium hypochlorite).

The docket holder's IWTP treatment facilities consist of 2 pump stations, an aeration basin, an API separator, a polishing lagoon, and a water storage lagoon. The docket holder's FMTP treatment facilities consist of a mixer and 3 clarifiers. An anti-foaming agent is applied as a polishing agent as needed. A polymer may be added for the purpose of flocculation, though this rarely occurs.

Wasted sludge will continue to be hauled off-site for disposal in accordance with the NPDES Permit No. PA0245399.

6. **Water Withdrawals.** The docket holder's process water withdrawal from the Delaware River is described in detail in Docket No. D-2009-006-2, approved on August 12, 2020.

7. **NPDES Permit / DRBC Effluent Requirements.** NPDES Permit No. PA0245399 issued by the PADEP includes final effluent limitations for the project discharge to surface waters classified by the PADEP as supporting migratory fishes (MF) and warm water fishes (WWF). EFFLUENT TABLES C-1 & C-2 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 MP 203 (STP effluent) are based on a discharge rate of 0.163 mgd. Effluent requirements for MP 103 (IWTP) are based on a discharge rate of 3.75 mgd.

B. FINDINGS

The docket holder applied to renew approval of its existing STP, IWTP, and the combined discharge of IWTP and STP effluent.

1. Total Dissolved Solids

Section 3.10.4.D.2 of the Commission's Water Quality Regulations (WQR) states the following:

Total dissolved solids shall not exceed 1000 mg/l, or a concentration established by the Commission which is compatible with designated water uses and stream quality objectives and recognizes the need for reserve capacity to serve future dischargers.

On March 11, 2009, the DRBC approved Docket No. D-1978-068-2 which included a TDS determination for the IWTP discharge consisting of TDS effluent concentration limits of 1,100 mg/l (average monthly), 2,200 mg/l (daily maximum), and 2,750 mg/l (instantaneous maximum). This determination was continued in docket nos. D-1978-068-3, D-1978-068-4, and D-1978-5 on May 11, 2011; March 16, 2016; and May 13, 2020, respectively. The instant docket (D-1978-068-6) continues and renews approval of the TDS determination.

2. CBOD₂₀ Wasteload Allocation

The Commission's WQR provide for the allocation of the stream assimilative capacity where waste discharges would otherwise result in exceeding such capacity. It was determined in the late 1960s that discharges to the Delaware Estuary be limited to a total of 322,000 lbs/day of carbonaceous biochemical (first stage) oxygen demand (CBOD₂₀). In accordance with the WQR, the assimilative capacity of each Delaware Estuary zone minus a reserve was originally allocated in 1968 among the individual dischargers based upon the concept of uniform reduction of raw waste in a zone (Zones 2, 3, 4 and 5). The totals and percent reduction for each zone are given in Table 1 of the Commission's *Status of CBOD₂₀ Wasteload Allocations* (Revised October 1, 2000). The docket holder's STP and IWTP is located in Zone 2 at River Mile 127.0. Zone 2 has a total allocation of 18,600 lbs/day of CBOD₂₀ and has a minimum percent removal requirement of CBOD₂₀ of 88.5%.

On March 11, 2009, Docket No. D-1978-068-2 approved CBOD₂₀ allocations for the docket holder consisting of 67 lbs/day for the STP (Outfall No. 203) and 750 lbs/day for the IWTP (Outfall No. 103). These allocations were continued in docket nos. D-1978-068-3, D-1978-068-4, and D-1978-068-5. The instant docket (D-1978-068-6) continues the CBOD₂₀ allocations of 67 lbs/day for the STP and 750 lbs/day for the IWTP.

3. CBOD Allocation Compliance and Monitoring

Compliance with the 88.5% CBOD₂₀ Zone 2 reduction requirement can be demonstrated by meeting the 88.5% BOD₅ removal requirement included in EFFLUENT TABLES C-1 & C-2

in DECISION Condition C.1. This docket requires the docket holder to monitor BOD₅ influent for the STP and IWTP, and to meet an average monthly BOD₅ effluent limit of 25 mg/l at the STP and IWTP, also included in EFFLUENT TABLES C-1 & C-2.

4. Other

The nearest surface water intake of record for public water supply is located on the Delaware River approximately 3 River Miles downstream of the docket holder's IWTP and STP and is operated by Lower Bucks County Joint Municipal 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 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-1978-068-6 below, the project described in Docket No. D-1978-068-5 is terminated and replaced by Docket No. D-1978-068-6; and the project and the appurtenant facilities described in Section A “DESCRIPTION” 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: <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 – MP 203

MP 203 (STP Effluent)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required by NPDES Permit
Total Suspended Solids	30 mg/l	As required by NPDES Permit
BOD ₅ (at 20° C)*	25 mg/l; 88.5% minimum removal	As required by NPDES Permit
BOD ₅ (at 20° C) Influent	Monitor & Report	As required by NPDES Permit
Ammonia Nitrogen	20 mg/l Monthly Avg. 40 mg/l Instant. Maximum	As required by NPDES Permit
Fecal Coliform	200 colonies per 100 ml as a geo. avg.	As required by NPDES Permit
Color (Pt-Co Units)	Monitor & Report	As required by NPDES Permit
Total Dissolved Solids**	Monitor & Report	As required by NPDES Permit

*Per the NPDES permit, when the raw sewage influent is 25 mg/l BOD₅ or less, the effluent shall not exceed a monthly average of 5.0 mg/l BOD₅ and the 88.5 percent removal requirement shall not apply.

**See Condition C.6.

EFFLUENT TABLE C-2: DRBC Parameters Included in NPDES Permit – MP 103

MP 103 (IWTP Effluent)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required by NPDES Permit
Total Suspended Solids	30 mg/l	As required by NPDES Permit
BOD ₅ (at 20° C)*	7.5 mg/l; 88.5% minimum	As required by NPDES Permit

MP 103 (IWTP Effluent)		
PARAMETER	LIMIT	MONITORING
	removal	
BOD ₅ (at 20° C) Influent	Monitor & Report	As required by NPDES Permit
Ammonia Nitrogen	20 mg/l avg. quarterly 40 mg/l Instant. Maximum	As required by NPDES Permit
Color (Pt-Co Units)	100 units max	As required by NPDES Permit
Total Dissolved Solids**	1,100 mg/l (Monthly Average) 2,200 mg/l (Daily Maximum) 2,750 mg/l (Inst. Maximum)	As required by NPDES Permit
Temperature	110 ° F (Max)	As required by NPDES Permit

* Per the NPDES permit, when the IWTP influent is 30 mg/l BOD₅ or less, the effluent shall not exceed a monthly average of 7.5 mg/l BOD₅ and the 88.5 percent removal requirement shall not apply.

**See DECISION Condition C.6

2. The docket holder shall continue to submit polychlorinated biphenyl (PCB) monitoring data and Pollutant Minimization Plan (PMP) Annual Reports to the Commission's Science & Water Quality Management Branch as required in the existing NPDES Permit.

Other Conditions

3. Nothing in this docket constitutes a defense to any penalty action for past conduct of the docket holder or ongoing activity not authorized by this approval. In particular, renewal of this docket does not resolve violations – whether in the past or continuing – of provisions of the Delaware River Basin Compact ("Compact") or any rule, regulation, order or approval duly issued by the Commission or the Executive Director pursuant to the Compact. The Commission reserves its right to take appropriate enforcement action against the docket holder, including but not limited to recovery of financial penalties consistent with Section 14.17 of the Compact, for any and all such prior or continuing violations.

4. 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.

5. 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 Commission's *Rules of Practice and Procedure*.

6. 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.

7. 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 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 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.

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 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.** 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* (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: September 10, 2025

EXPIRATION DATE: September 10, 2030