

DOCKET NO. D-1985-059-4

DELAWARE RIVER BASIN COMMISSION

**Brightsmith, LLC
Industrial Wastewater Treatment Plant
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) on April 28, 2023 (Application), for renewal of the docket holder’s existing industrial wastewater treatment plant (IWTP) and its discharge. The Pennsylvania Department of Environmental Protection (PADEP) issued National Pollutant Discharge Elimination System (NPDES) Permit No. PA0045021 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 7, 2024.

A. DESCRIPTION

- Purpose.** The purpose of this docket is to renew approval of the docket holder’s existing 0.0334 million gallons per day (mgd) IWTP and its discharge.
- Location.** The docket holder’s IWTP is located at Enterprise Avenue in Falls Township, Bucks County, Pennsylvania. The IWTP will continue to discharge treated industrial wastewater and non-contact-cooling water (NCCW) to a stormwater ditch that drains to Biles Creek, which is a tidal tributary to the Delaware River Water Quality Zone 2, at River Mile 130.3 – 1.9 (Delaware River – Biles Creek).

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

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	40° 10’ 13.00”	74° 45’ 46.00”

- Area Served.** The docket holder’s IWTP will continue to treat industrial wastewater generated at the Brightsmith coil coating facility in Falls Township located in Bucks County, 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 0.0334 mgd IWTP treats industrial wastewater generated by the activity of pretreating metal coil for subsequent coating with paint. The IWTP treatment processes include hexavalent chrome reduction, acidification, gravity oil-water separation, metal precipitation, clarification, sand filtration, sludge thickening and dewatering.

5. **Facilities.** The IWTP facilities consist of wastewater streams contaminated with hexavalent chromium pumped from the collection pits into the chrome holding tank. Also pumped into this tank is the cooling tower blowdown that contains low levels of chrome. The chrome comes from the hot quench water, which is cooled by the cooling tower. From the holding tank the wastewater goes into the chromium reduction unit which operates in batches. Sodium metabisulfite and sulfuric acid are added to reduce the hexavalent chromium to trivalent chromium, which is later converted to chromic hydroxide in the treatment plant.

The effluent of the chrome reduction unit discharges into the alkaline holding tanks where it commingles with the alkali wastewater streams. The combined stream is first acidified to convert the emulsified oil to floatable oil droplets. The floating oil is removed in the oil/water separation tank and skimmed off.

Hydrated lime is added to the effluent of the oil/water separation tank to raise the pH to precipitate the metals as hydroxides. Lime precipitation also removes the phosphate in the alkaline cleaner. Following precipitation, polymer is added to coagulate and flocculate the solids, which then settle in the clarifier. The clarifier effluent is pumped into a sand filter, which removes residual solids. The sand filter effluent flows into a final pH adjustment tank where the pH is lowered to the permissible range before being discharged into the receiving stream.

Wasted sludge will continue to be hauled off-site for disposal in accordance with the NPDES Permit No. PA0045021.

6. **Water Withdrawals.** Process water and potable water supply for the facility is provided by Morrisville Municipal Authority (MMA), which is described in detail in DRBC Docket No. D-2009-006-2, which was approved on September 10, 2020 and transferred to MMA on July 8, 2021.

7. **NPDES Permit / DRBC Effluent Requirements.** NPDES Permit No. PA0045021 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. 001 are based on a discharge rate of 0.0334 mgd.

B. FINDINGS

The docket holder applied to renew approval of their existing 0.0334 mgd Brightsmith IWTP and its discharge of treated industrial wastewater and NCCW. The docket holder also requested renewal of a total TDS determination for the IWTP discharge, consisting of an average monthly effluent limit of 2,500 mg/l that was continued in Docket No. D-1985-059-3.

1. Total Dissolved Solids Determination

This docket continues approval of the TDS determination consisting of the average monthly effluent concentration limit of 2,500 mg/l.

2. Other

The facility continues to discharge treated industrial wastewater and NCCW to a stormwater ditch that drains to Biles Creek, and therefore is classified by the Commission as an intermittent stream (18 CFR Part410 Section 3.10.6.F.2.).

The nearest surface water intake of record for public water supply is located on the Delaware River approximately 8 River Miles downstream of the docket holder's IWTP and is operated by the 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-1985-059-4 below, the project described in Docket No. D-1985-059-3 is terminated and replaced by Docket No. D-1985-059-4; 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 TABLE 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 (Biles Creek)		
Parameter	Limit	MONITORING
pH (Standard Units)	6 to 9 at all times	As required by NPDES permit
Total Suspended Solids (TSS)	30 mg/l	As required by NPDES permit
Total Dissolved Solids*	2,500 mg/l	As required by NPDES permit
Temperature	110 ° F (instant max.)	As required by NPDES permit
Aluminum, Total	2.05 mg/l (instant max.)	As required by NPDES permit
Copper, Total	0.887 mg/l	As required by NPDES permit
Chromium, Hex	0.02 mg/l	As required by NPDES permit
Cyanide, Total	0.70 mg/l (instant max.)	As required by NPDES permit
Zinc, Total	1.37 mg/l	As required by NPDES permit
PCBs	Monitor & Report	As required by NPDES permit

* See Section C. DECISION Condition C.5.

2. The docket holder shall continue to submit Polychlorinated Biphenyl (PCB) monitoring data and PMP Annual Reports to the Commission’s Science & Water Quality Management Branch as required in the existing/proposed NPDES Permit.

Other Conditions

3. 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.

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.
6. 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.
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 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.
9. 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.

10. The facility and operational records shall be available at all times for inspection by the DRBC.
11. The facility shall be operated at all times to comply with the requirements of the Commission's *WQR*.
12. 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.
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 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.
15. 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).
16. 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.
17. 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).
18. 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).
19. 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).
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. 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: September 30, 2029