

**DOCKET NO. D-1974-162-4**

**DELAWARE RIVER BASIN COMMISSION**

**Knoll, Inc.  
Industrial Wastewater Treatment Plant  
Upper Hanover Township, Montgomery County, Pennsylvania**

**PROCEEDINGS**

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by Knoll Inc. (Knoll or docket holder) on July 26, 2013 (Application), for renewal of the docket holder's existing industrial wastewater treatment plant (IWTP) and its discharge. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0011070 for this facility was issued by the Pennsylvania Department of Environmental Protection (PADEP) on August 18, 2009, effective September 1, 2009. Renewal of the NPDES Permit is expected shortly.

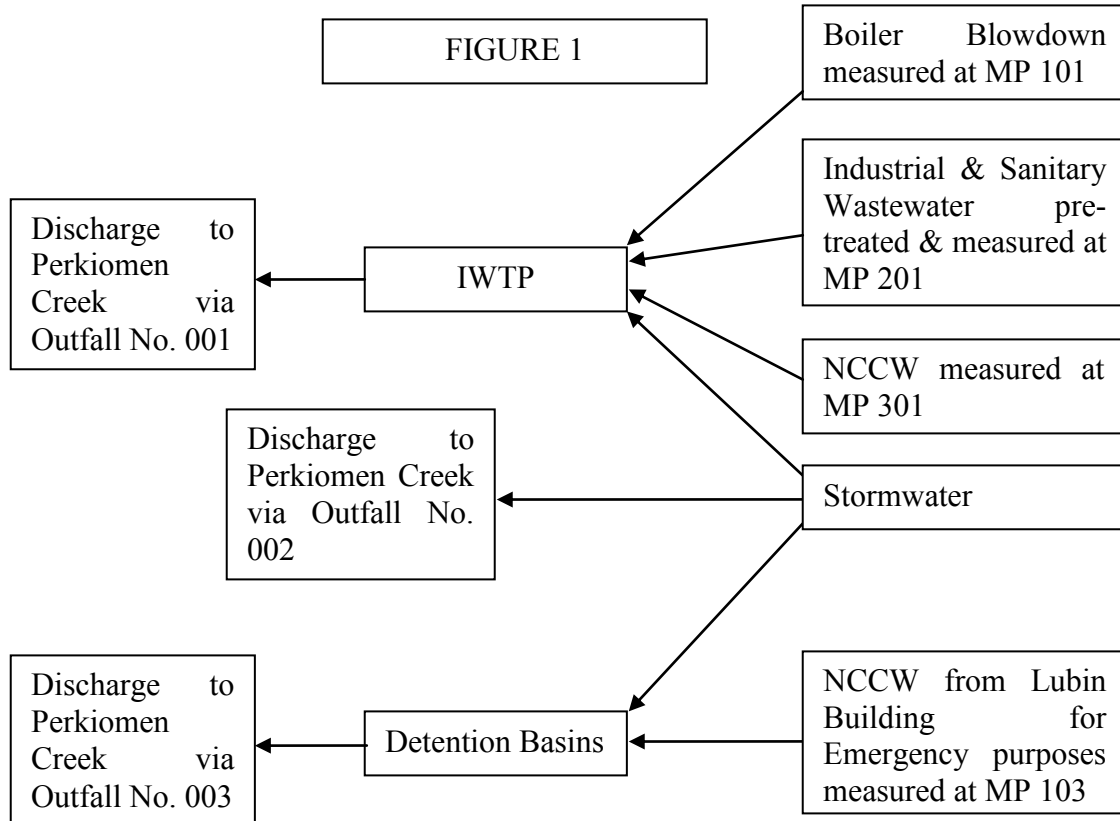
The Application was reviewed for approval under Section 3.8 of the *Delaware River Basin Compact*. The Montgomery County Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on September 9, 2014.

**A. DESCRIPTION**

**1. Purpose.** The purpose of this docket is to renew approval of the docket holder's existing 0.0715 million gallons per day (mgd) IWTP and its discharge from Outfall No. 001 as well as the discharge of up to 0.0215 mgd of non-contact cooling water (NCCW) from Outfall No. 003 (monitored at MP 103).

**2. Location.** The IWTP will continue to discharge treated effluent to Perkiomen Creek at River Mile 92.47 – 32.3 – 28.47 (Delaware River – Schuylkill River – Perkiomen Creek) via Outfall No. 001. Comingled NCCW and stormwater will continue to be discharged to Perkiomen Creek via Outfall No. 003. The docket holder's facility is located in Upper Hanover Township, Montgomery County, Pennsylvania and the outfall discharge locations are as follows:

<b>OUTFALL NO.</b>	<b>LATITUDE (N)</b>	<b>LONGITUDE (W)</b>
001	40° 25' 03"	75° 31' 22"
003	40° 24' 23"	75° 31' 19"



3. **Area Served.** The docket holder's IWTP will continue to serve the docket holder's furniture manufacturing operation in Upper Hanover Township, Montgomery County, Pennsylvania. For the purpose of defining the Area Served, Section B (Type of Discharge) and D (Service Area) of the docket holder's Application are incorporated herein by reference, to the extent consistent with all other conditions contained in the DECISION Section of this docket.

4. **Physical Features.**

a. **Design Criteria.** The docket holder will continue to operate its existing 0.0715 mgd IWTP. The IWTP treats pre-treated industrial/sanitary waste (up to 0.04 mgd) from the docket holder's furniture manufacturing facility as well as NCCW and boiler blowdown (up to 0.0315 mgd). Additionally, the docket holder discharges up to 0.0215 mgd of untreated NCCW to Perkiomen Creek via Outfall No. 003 on an emergency basis.

b. **Facilities.** Industrial waste and sanitary sewage from the docket holder's furniture manufacturing facility is pre-treated in a septic tank system designed to remove iron and phosphate in a two part process. Pre-treated effluent is then discharged into the docket holder's IWTP via an equalization tank that also accepts boiler blowdown and NCCW (monitoring point 201 measures pre-treated flow prior to mixing) from other regions of the facility.

The combined flow is then sent to the docket holder's extended aeration treatment system. The IWTP's extended aeration treatment system consists of an equalization/chemical (NaOH and carbon) addition tank, a wet well, a primary settling tank, an aeration tank, a chemical addition unit that uses alum and polymer to settle-out phosphate, tertiary settling tanks, and chlorine contact tanks. The treated flow from this facility is then discharged via Outfall No. 001 to the Perkiomen Creek (See FIGURE 1 above).

Up to an additional 0.0215 mgd of NCCW is permitted to be discharged on an emergency basis. The NCCW combines with on-site stormwater and is held in detention basins prior to being discharged from Outfall No. 003. MP 103 monitors the NCCW prior to its combining with stormwater.

There is a third outfall on-site (Outfall No. 002) that discharges only stormwater and has not been given effluent limits from the Commission.

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

Wasted sludge will continue to be hauled off-site by a licensed hauler for disposal at a state-approved facility.

**c. Water withdrawals.** The potable water supply in the project service area is provided by the Upper Hanover Authority. The withdrawal was last approved by the DRBC via Docket No. D-2002-010 CP-2 on May 10, 2007.

**d. NPDES Permit / DRBC Docket.** NPDES Permit No. PA0011070 was issued by the PADEP on August 18, 2009 (effective September 1, 2009) and includes final effluent limitations for the project discharge of up to 0.093 mgd from Outfalls Nos. 001 and 003 to surface waters classified by the PADEP as a trout stocking fishery (TSF). Renewal of the NPDES Permit is expected shortly. The following average monthly effluent limits are among those listed in the current NPDES Permit for Outfall No. 001, are expected to be renewed, and meet or are more stringent than the effluent requirements of the DRBC.

**EFFLUENT TABLE A-1: DRBC Parameters Included in NPDES Permit**

OUTFALL 001 (IWTP)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required by NPDES Permit
Total Suspended Solids	30 mg/l (85% minimum removal*)	As required by NPDES Permit
Total Dissolved Solids	1,000 mg/l	As required by NPDES Permit

*The PADEP has required a Phosphorous limit of 0.5 mg/l for Outfall No. 001 in compliance with the Green Lane Reservoir TMDL approved by the Environmental Protection Agency (EPA). DRBC does not require Phosphorous effluent limits outside of Special Protection Waters.*

The following average monthly effluent limits are among those listed in the current NPDES Permit for MP 201, are expected to be renewed, and meet or are more stringent than the effluent requirements of the DRBC.

**EFFLUENT TABLE A-2: DRBC Parameters Included in NPDES Permit**

<b>MP 201 (Pre-treated Effluent from Septic System)</b>		
<b>PARAMETER</b>	<b>LIMIT</b>	<b>MONITORING</b>
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
CBOD (5-Day at 20° C)	25 mg/l (85% minimum removal)	As required by NPDES permit
Ammonia Nitrogen (5-1 to 10-31) (11-1 to 4-30)	10 mg/l 20 mg/l	As required by NPDES permit
Fecal Coliform	200 colonies per 100 ml as a geo. avg.	As required by NPDES permit

The following average monthly effluent limits are among those listed in the current NPDES Permit for MP 103, are expected to be renewed, and meet or are more stringent than the effluent requirements of the DRBC.

**EFFLUENT TABLE A-3: DRBC Parameters Included in NPDES Permit**

<b>MP 103 (NCCW)</b>		
<b>PARAMETER</b>	<b>LIMIT</b>	<b>MONITORING</b>
pH	6 to 9 at all times	As required by NPDES permit
Temperature	110 ° F (Max)	As required by NPDES permit

- e. **Cost.** There are no construction costs associated with this IWTP renewal.

## **B. FINDINGS**

The purpose of this docket is to renew approval of the docket holder's existing 0.0715 mgd IWTP and its discharge from Outfall No. 001 as well as the discharge of up to 0.0215 mgd of NCCW from Outfall No. 003 (monitored at MP 103).

According to the United States Geological Survey (USGS) Streamstats program Perkiomen Creek at the docket holder's IWTP discharge has an estimated seven-day low flow with a recurrence interval of ten years ( $Q_{7-10}$ ) of 4.4 mgd (6.8 cfs). The ratio of this low flow to the hydraulic design wastewater discharge from the 0.0715 mgd IWTP is 60 to 1.

The nearest surface water intake of record for public water supply is located on Perkiomen Creek approximately 0.7 River Miles downstream of the docket holder's IWTP, and is operated by the East Greenville Borough Water Department.

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 are in compliance 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 *Water Quality Regulations (WQR)*.

### C. DECISION

I. Effective on the approval date for Docket No. D-1974-162-4 below, Docket No. D-74-162-3 is terminated and replaced by Docket No. D-1974-162-4.

II. The project and appurtenant facilities as described in Section A "Physical Features" of this docket are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the PADEP in its NPDES Permit, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission's.

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

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

d. The docket holder shall comply with the requirements contained in the EFFLUENT TABLES in Section A.4.d. of this docket. The docket holder shall submit the required monitoring results electronically to the DRBC Project Review Section via email [aemr@drbc.state.nj.us](mailto:aemr@drbc.state.nj.us) on the **Annual Effluent Monitoring Report Form** located at this web address: <http://www.state.nj.us/drbc/programs/project/application/index.html>. 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.

e. 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*.

f. 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.

g. 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.

h. The docket holder is permitted to treat and discharge wastewaters as set forth in the Area Served Section of this docket, which incorporates by reference Sections B (Type of Discharge) and D (Service Area) of the docket holder's Application to the extent consistent with all other conditions of this DECISION Section.

i. 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.

j. Nothing in this docket approval shall be construed as limiting the authority of DRBC to adopt and apply charges or other fees to this discharge or project.

k. 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, in order to ensure proper control, use and management of the water resources of the Basin.

l. Unless an extension is requested and approved by the Commission in advance, in accordance with paragraph 11 of the Commission's Project Review Fee schedule (Resolution No. 2009-2), the docket holder is responsible for timely submittal of a docket renewal application on the appropriate DRBC application form at least 12 months in advance of the docket expiration date set forth below. The docket holder will be subject to late charges 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. In the event that 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 (or the later date established by an extension that has been timely requested and approved), the terms and conditions of the current docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

m. 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.

n. 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.

o. The docket holder is prohibited from treating/pre-treating any hydraulic fracturing wastewater from sources in or out of the Basin at this time. Should the docket holder wish to treat/pre-treat hydraulic fracturing wastewater in the future, the docket holder will need to first apply to the Commission to renew this docket and be issued a revised docket allowing

such treatment and an expanded service area. Failure to obtain this approval prior to treatment/pre-treatment will result in action by the Commission.

**BY THE COMMISSION**

**DATE APPROVED: September 10, 2014**

**EXPIRATION DATE: August 31, 2019**