

DOCKET NO. D-1969-059-2

DELAWARE RIVER BASIN COMMISSION

**The Chemours Company FC, LLC
A Wholly Owned Subsidiary of E. I. du Pont de Nemours and Company
Chambers Works Surface Water Withdrawal
Pennsville Township, Salem County, New Jersey**

PROCEEDINGS

This docket is issued in response to an Application submitted by The Chemours Company FC, LLC (Chemours), a wholly owned subsidiary of E.I. du Pont de Nemours and Company (DuPont) to the Delaware River Basin Commission (DRBC or Commission) on February 27, 2015 with additional application materials submitted on April 17, 2015 for review of an existing groundwater and surface water withdrawal project and an allocation of groundwater and surface water (Application). DuPont reorganized its Performance Chemicals business on February 1, 2015 and the Chambers Works facility became part of Chemours. DuPont expects to spin off Chemours so that Chemours will become a totally separate publicly traded company on or about July 1, 2015 that will continue to operate the Chambers Works facility. The groundwater withdrawals and Salem Canal surface water withdrawals were approved by the New Jersey Department of Environmental Protection (NJDEP) on January 29, 2015 with the effective date of February 1, 2015 (Water Allocation Permit No. 2122P). These sources were previously approved by the Commission in Docket No. D-93-19-2 on March 1, 2006. These withdrawals will continue to be regulated by NJDEP in accordance with the Administrative Agreement between DRBC and NJDEP, Section IV.C.4, enacted on December 18, 2009, amended May 8, 2013. The docket holder's main stem Delaware River withdrawal remains reviewable by the Commission and is the subject of this docket renewal.

The Application was reviewed for approval under Section 3.8 of the *Delaware River Basin Compact*. The Salem County Planning Board has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on June 9, 2015.

A. DESCRIPTION

1. Purpose. The purpose of this project is to renew the approval to continue to withdraw up to 1,314 million gallons per month (mgm) of surface water from an existing intake on the

Delaware River for non-contact cooling and industrial processes at the Chambers Works chemical manufacturing facility. The water diverted from the Delaware River is not regulated under the NJDEP Water Allocation Permit No. 2122P. The docket also approves a docket transfer upon the transfer of ownership to Chemours on or about July 1, 2015. DuPont operated its withdrawals under DRBC Docket No. D-69-59 and DRBC Certificate of Entitlement No. 177. The Certificate of Entitlement will terminate when Chemours ceases to be a wholly-owned subsidiary of DuPont. The intake described in DRBC Docket No. D-69-59 was constructed and used until the mid-1970's. The docket holder's groundwater and surface water withdrawals from the Salem Canal were previously approved by DRBC Docket No. D-93-19-2 and are regulated by the NJDEP in accordance with the Administrative Agreement between DRBC and NJDEP.

2. Location. The Chambers Works facility is located on approximately 1,500 acres in Carneys Point and Pennsville Townships, immediately north of the Salem Canal, adjacent to the Delaware River in Salem County, New Jersey. The Delaware River intake is located in Water Quality Zone 5, south (downstream) of the Delaware Memorial Bridge in Pennsville Township, Salem County, New Jersey. Specific location information has been withheld for security reasons.

3. Area Served. Surface water from the Delaware River intake supplies cooling water and industrial process water to the Chambers Works facility. In the future, DuPont will lease a small portion of Chambers Works from Chemours and Chemours will supply its water needs. The service area is outlined on a map entitled "Water Source Location Map" submitted with the Application. For the purpose of defining Area Served, the Application is incorporated herein by reference consistent with conditions contained in the DECISION section of this docket.

4. Physical features.

a. Design criteria. Surface water withdrawn from the Delaware River is primarily used for non-contact cooling at the Chambers Works facility. River water is also used in once through and recirculating air pollution control scrubbers, vacuum jets or condensers and as filter press wash water. Where the river water is used in applications with the potential for chemical contact, the resulting wastewater is routed to the docket holder's industrial wastewater treatment plant.

Chemours reports that during the last four years of operation (2011-2014), monthly withdrawals from the Delaware River ranged from 341 mgm to 931 mgm. Withdrawals over the four year period averaged 600.8 mgm. The docket holder expects that water demands in the next 10 years will be consistent with the previous four year period, but the docket holder is currently exploring opportunities for future growth or expansion at the facility which may increase future water demands. The docket holder has requested an allocation of 1,314 mgm, based on the total pumping capacity of the Delaware River intake, which should be sufficient to meet the future monthly demands of the Chambers Works facility.

The docket holder also withdraws water from an intake on the Salem Canal, eight water supply wells and 12 groundwater remediation wells. The water from the Salem Canal and

supply wells is used for industrial processes and potable use at the Chambers Works facility. As described in DRBC Docket No. D-91-19, approved on March 27, 1991, additional surface water withdrawn by the docket holder from the Salem Canal is transferred to the Carneys Point Generating Plant owned by Chambers Cogeneration Limited Partnership where it is used for cooling purposes, steam generation and boiler makeup water. The groundwater and Salem Canal surface water withdrawals are regulated by NJDEP. The most recent NJDEP Water Allocation Permit (Permit No. 2122P), issued on January 29, 2015 approved the following allocations: a total of 1,125.6 mgm from the following diversion sources, 892.8 mgm from Intake 111 on the Salem Canal and 423.23 mgm from all diversion wells. These sources were previously approved by the Commission in Docket No. D-93-19-2 on March 1, 2006. These sources will continue to be regulated by NJDEP in accordance with the Administrative Agreement between DRBC and NJDEP.

b. Facilities. The existing intake has the following characteristics:

SURFACE WATER INTAKE				
INTAKE NO.	WITHDRAWAL WATER BODY	PUMP CAPACITY	7Q10 FLOW AT INTAKE	YEAR CONSTRUCTED
Delaware River Intake	Delaware River	30,000 gpm (43.2 mgd)	4,475 CFS* (2,892 mgd)	1940

* CFS = cubic feet per second

A flowmeter has been installed on the Delaware River Intake, but is not yet fully operational.

Sodium hypochlorite solution is added to the river water to prevent bacterial growth in the river water distribution system. Additionally, a dispersant is used to prevent sediment from settling in the water distribution system.

The Delaware River Intake on-shore facilities are located in the 100-year flood plain.

The water system is not presently interconnected with any other distribution system.

Delaware River Intake

River water used by Chambers Works is withdrawn from Calpine’s Deepwater Energy facility intake, which is located to the south of the Delaware Memorial Bridge. Historically, water was supplied to Chambers Works under a service level agreement with Calpine. Because Calpine has ceased its operations at the site, Chemours has entered into an access and easement agreement with Calpine and has installed and/or modified the necessary water supply system equipment which is now owned and operated by Chemours. The modifications to the water supply system began in October 2014 and are nearly complete.

Calpine's intake is an off shore wood timber intake structure that measures 425 feet in length and is approximately 24 feet wide. The bay serving Chambers Works is about 10 feet wide and feeds two submerged 54-inch diameter intake pipes that run from the intake structure to the on-shore screen house wet well located on the Calpine property. The screen house serving Chambers Works is approximately 37 feet wide by 30 feet long and extends about 9 feet below river bottom. Water is pumped from the screen house wet well using 2 pumps each with a capacity of 15,000 gpm. These pumps supply water to the Chambers works facility through a 60-inch diameter supply line. The river water intake is equipped with traveling screens designed to prevent aquatic organisms from entering the water lines and to free them for return to the river.

c. **Other.** Wastewater is conveyed to the Docket Holder's Chambers Works Industrial Wastewater Treatment Plant (IWTP) most recently approved by DRBC Docket No. D-1988-085-3 on May 11, 2011. The NJDEP issued its most recent NJPDES Permit No. NJ0005100 on July 20, 2011 for this treatment facility. The non-contact cooling water withdrawn from the Delaware River is combined with treated effluent from the IWTP and discharged to the Delaware River via Outfall No. DSN002. Non-contact cooling water and stormwater run-off flows in excess of the Outfall DSN002 capacity are discharged to the Delaware River via DSN001. The treatment facility has adequate capacity to continue to receive wastewater from the project.

d. **Cost.** There is no cost associated with this renewal project.

B. FINDINGS

This docket approves a withdrawal of up to 1,314 mgm of surface water from the existing Delaware River Intake for industrial cooling and industrial processes at the Chambers Works facility. The previous docket indicated a total pumping capacity of 115,000 gpm, but did not specify an allocation for the Delaware River surface water withdrawal.

Administrative Agreement

This project involves a withdrawal of groundwater and surface water. The groundwater withdrawals and the Salem Canal withdrawals are classified as a Category F Project according to the Administrative Agreement between the DRBC and NJDEP (AA) Section IV.C.1., enacted on December 18, 2009. Applications for modifications or renewals of permits associated with the groundwater and/or Salem Canal withdrawal approvals shall be submitted to NJDEP. The Commission conducts no review unless review and/or docket action or technical assistance is requested by the DRBC Commissioner from the State of New Jersey as described in Condition C.II.m. in the Decision section of this docket. The surface water withdrawal project described in this docket is from the main stem Delaware which is considered shared interstate waters and is classified as a Category B project. The Commission retains review and approval and issues a docket for these projects. The docket holder is required to submit an application to the DRBC for review for renewals or modifications of the Delaware River surface water withdrawal.

Transfer of Ownership

The Chambers Works facility became part of Chemours, a wholly owned subsidiary of DuPont on February 1, 2015. Chemours will become a total separate publicly traded company on or about July 1, 2015, and will continue to operate Chamber Works facility. This docket shall remain in effect and continue to apply to the Chemours' operation of the Chambers Works facility upon Chemours assumption of ownership of the facility on or about July 1, 2015, at which time Chemours shall become the docket holder referred to herein. Chemours is required to notify the DRBC of the transfer of ownership of the facility within ten (10) days after the date of the transfer (see Decision Condition C.II.f.).

Certificate of Entitlement and Surface Water Charges

DuPont was granted Certificate of Entitlement No. 177 ("Entitlement") on July 15, 1976. The Entitlement approved a withdrawal of 6,640.738 mgm non-consumptive use and 117.595 mgm consumptive use, for a total withdrawal of 6,758.333 mgm from the Delaware River and Salem Canal. Entitlement No. 177 will terminate upon Chemours' assumption of ownership of the Chambers Works facility, which is scheduled on or about July 1, 2015. Thereafter, Chemours shall pay water supply charges to the Commission in accordance with Administrative Manual – Part III, Basin Regulations – Water Supply Charges (see Condition C.II.g.).

Drought Management and Contingency Plans (DMCPs)

Section 2.3.5.1 C. of the Commission's *Rules of Practice and Procedure (RPP)*, requires industrial and commercial water withdrawals in excess of one million gallons per day to develop a contingency plan including emergency conservation measures to be instituted in the event of a Commission declared drought or other water shortage. Resolution No. 83-14 amended the Commission's *Water Code* (Section 2.1.4) to include the conservation goal of a 15 percent reduction in depletive use during drought conditions. Hereafter referred to as drought management and contingency plans (DMCPs), DMCPs must contain the following: source of water supply; the average daily and monthly peak water withdrawal; average daily and peak monthly consumptive use (difference between quantity withdrawn and quantity returned to the ground or surface waters of the basin); description of recycling and conservation measures; point of discharge (where water is returned or discharged); types of products produced; normal employment levels (numbers); and estimated employment (numbers) and economic impact for curtailment of water usage for the following levels of curtailment: 10%; 25%; 35%; 50% and 100%. The DMCP shall be submitted to the Commission within 6 months (December 10, 2015) of the docket approval date. The Executive Director shall review the DMCP and either require modifications or provide approval in writing if the DMCP is found to be in accordance with the Commission requirements. The docket holder shall implement the DMCP upon direction by the Executive Director (see Condition C.II.i.).

Consumptive Use

The docket holder reports that consumptive use at the site is negligible. The site does not utilize any cooling towers and uses very little water in products. All water brought onto the site is returned to the Delaware River or Salem Canal. The only consumptive use would be surface evaporation from water in site ditches or open tanks at the WWTP. The docket holder currently estimates its Delaware River surface water withdrawals based on a monthly water balance that

utilizes metered discharge. In the future, metered flows will be used for water balance and reporting once the new river water intake system and flow meter are fully operational. The DRBC definition of consumptive use is defined in Article 5.5.1.D of the *Administrative Manual – Part III – Basin Regulations – Water Supply Charges*

Other

At the withdrawal location, the Delaware River is tidal. The Trenton low flow target is 2,500 cfs (1.62 billion gallons per day). The addition of the tidal tributaries upstream of the withdrawal location at their Q7-10 flow and the low flow Trenton target results in a low-flow of approximately 4,475 cfs (2.9 billion gallons per day) for the Delaware River at the withdrawal location.

The project is designed to conform to the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.

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.

C. DECISION

- I. Effective on the approval date for Docket No. D-1969-059-2 below:
 - a. Docket No. D-69-59 is terminated and replaced by Docket No. D-1969-059-2.
- II. The project and appurtenant facilities as described in the Section A “Physical features” 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 NJDEP in its Water Allocation Permit and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission’s
 - b. The intake and operational records shall be available at all times for inspection by the DRBC.
 - c. The intake shall be operated at all times to comply with the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.
 - d. Withdrawals from the intake shall not exceed the maximum instantaneous rate and monthly allocation as indicated below:

INATKE NO.	MAXIMUM INSTANTANEOUS RATE	MONTHLY ALLOCATION
Delaware River Intake	30,000 gpm	1,314 mgm

e. The project withdrawals shall be metered with an automatic continuous recording device that measures to within 5 percent of actual flow. An exception to the 5 percent performance standard, but no greater than 10 percent, may be granted if maintenance of the 5 percent performance is not technically feasible or economically practicable. A record of daily withdrawals shall be maintained, and monthly totals shall be reported to the DRBC quarterly through the Commission's Water Supply Charges Program online reporting system and shall be available at any time to the Commission if requested by the Executive Director. The docket holder shall begin measuring the project withdrawals with an automatic recording device by December 10, 2015.

f. Chemours is required to notify the DRBC Executive Director of the transfer of ownership of the Chambers Works facility within ten (10) days after the date of the transfer. Upon transfer of ownership of the facility to Chemours, Chemours will become the docket holder referred to herein.

g. Entitlement No. 177 will terminate upon Chemours' assumption of ownership of the Chambers Works facility which is scheduled on or about July 1, 2015. Thereafter, Chemours shall pay water supply charges to the Commission in accordance with Administrative Manual – Part III, Basin Regulations – Water Supply Charges.

h. The docket holder shall implement to the satisfaction of the DRBC, the continuous program to encourage water conservation in all types of use within the facilities served by this docket approval. The docket holder will report to the DRBC on the actions taken pursuant to this program and the impact of those actions as requested by the DRBC.

i. The docket holder shall prepare and submit a DMCP to the Commission within 6 months (December 10, 2015) of docket approval. The Executive Director shall review the DMCP and either require modifications or provide approval in writing if the DMCP is found to be in accordance with the Commission requirements. The docket holder shall implement the DMCP upon direction by the Executive Director.

j. 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.

k. The docket holder is permitted to provide the water approved in this docket to the areas included in Section A.3. Area Served of this docket. Any expansion beyond those included in Section A.3. Area Served is subject to DRBC review and approval in accordance with Section 3.8 of the *Compact*.

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 6 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. Applications for modifications or renewal of permits associated with the Salem Canal surface water withdrawal and/or groundwater withdrawals shall be submitted to NJDEP. The Commission conducts no review and/or docket action or technical assistance unless requested by the DRBC Commissioner from the State of New Jersey in accordance with the Administrative Agreement, Section IV.C.4.

n. The issuance of this docket approval shall not create any private or proprietary rights in the water of the Basin, and the Commission reserves the rights to amend, alter or rescind any actions taken hereunder in order to insure the proper control, use and management of the water resources of the Basin.

o. 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.

p. During any drought emergency declared by the Governor of New Jersey, NJDEP or the Commission, water service or use by the project docket holder pursuant to this docket approval shall be subject to any order or restriction governing those non-essential uses specified by the NJDEP to the extent that they may be applicable, and to any other emergency resolutions or orders adopted by the Commission.

q. 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.

BY THE COMMISSION

APPROVAL DATE: June 10, 2015

EXPIRATION DATE: June 10, 2025