

DOCKET NO. D-88-74-3

DELAWARE RIVER BASIN COMMISSION

**Croda, Inc.
Ground and Surface Water Withdrawal
New Castle County, Delaware**

PROCEEDINGS

This docket is issued in response to an Application submitted by Croda, Inc. to the Delaware River Basin Commission (DRBC or Commission) on May 14, 2008, for decrease of an allocation of surface water and review of an increase to the existing ground water withdrawal allocation (Application). The project was previously approved by the DRBC on April 28, 1999. The project was approved by the Delaware Department of Natural Resources and Environmental Control (DNREC) by issuance of Industrial Water Allocation Permit Nos. 88-0013AM2, 88-0013BM2, and 88-0013CM2, effective November 14, 1988 and modified in March 2008, subject to approval by the DRBC.

The Application was reviewed for approval under Section 3.8 of the *Delaware River Basin Compact*. The New Castle County Planning Department has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on September 24, 2008.

A. DESCRIPTION

1. **Purpose.** The purpose of this project is to continue to supply water for heating and cooling purposes to the Croda, Inc. industrial facility from one Delaware River Intake and Wells Nos. 8, 9, 10, 11, and 12. In addition, the docket holder is requesting an increase to their existing allocation as a previously drilled well (Well No. 12) will now be fully utilized. The project allocation of groundwater is being increased from 60.04 mg/30 days to 76.63 mg/30 days for all wells, but the surface water allocation will be reduced from 470.0 mg/30 days to 99.0 mg/30 days.

Furthermore, the permits granted by the DNREC will be for the following:

FACILITY	PERMIT NO.
Well No. 8	88-0013BM2
Well No. 9	88-0013BM2
Well No. 10	88-0013BM2
Well No. 11	88-0013BM2
Well No. 12	88-0013CM2
Delaware River Intake	88-0013AM2

2. **Location.** The project wells are located in the Potomac Formation, in the Brandywine-Christina Watershed. The surface water intake is located on the west bank of the Delaware River, south of Interstate Route 295 in New Castle County, Delaware. Specific location information has been withheld for security reasons.

3. **Area Served.** The project wells and intake supply potable and non-contact cooling water (NCCW) to the Croda, Inc. industrial/chemical manufacturing facility. 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.** The docket holder's wells will supply an average and maximum of 60.04 mg/30 days and 76.63 mg/30 days, respectively, of water for industrial process and potable supply. The Delaware River intake currently supplies an average and maximum of 90.5 mg/30 days and 99.0 mg/30 days, respectively, of water for industrial cooling purposes. Both the ground and surface water withdrawal demands are not expected to increase within the next 10 years.

b. **Facilities.** The project wells and intake have the following characteristics:

WELL NO.	DEPTH	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY	YEAR DRILLED
Well No. 8	93'	70'/16"	500 gpm	1949
Well No. 9	117'	97'/16"	580 gpm	1949
Well No. 10	112'	94'/16"	635 gpm	1949
Well No. 11	85'	75'/16"	510 gpm	1951
Well No. 12	289'	249'/12"	500 gpm	1972
Delaware River Intake	---	---	10,474 gpm	---

All water service connections are metered.

All wells are metered.

Prior to entering the distribution system, the water for Well No. 10 will be treated by aeration and carbon adsorption.

The project wells are above the 100-year flood elevation.

c. **Wastewater.** Wastewater is conveyed to the City of Wilmington sewage treatment facility, most recently approved by DRBC Docket No. D-92-67 CP on December 8, 1993. The DNREC issued its most recent NPDES Permit No. DE0020320 on June 16, 2000 and was made effective on July 1, 2000 for this treatment facility. The City of Wilmington sewage treatment facility has adequate capacity to continue receiving wastewater from the facility. NCCW is discharged back to the Delaware River via a state permitted outfall, but does not have DRBC approval. A docket application letter is being drafted for this discharge.

B. FINDINGS

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

The DNREC water allocation is valid for a period of 30 years from date of issue, with review every five years.

The docket holder obtains 10.95 mg/30 days of supplemental water from United Water Delaware (UWD) for this facility. The groundwater withdrawal increase provided from this docket will remove the need for supplemental water acquired from UWD. The UWD withdrawal was approved by DRBC Docket No. D-1996-50 CP-2, on January 19, 2005.

The docket holder estimates that the project withdrawals used for the purpose of industrial process and cooling, result in a consumptive use of one (1) percent of the total water use. 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*.

Condition II.e. of the DECISION Section of the docket provides language for new well inclusions into the existing distribution system and protocol for increased withdrawal allocations to existing wells. Prior to adding any new wells to the Croda, Inc. distribution system or seeking any increase in allocation from existing wells the docket holder must conduct a 48-hour pumping test on the new well(s) as outlined in the *Application for a Ground and/or Surface Water Withdrawal in the Delaware River Basin*.

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-88-74-3 below, Docket No. D-88-74-3 is terminated and replaced by Docket No. D-88-74-3.

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 DNREC 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 wells and operational records shall be available at all times for inspection by the DRBC.

c. The wells shall be operated at all times to comply with the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.

d. During any 30-day period, surface water withdrawals shall not exceed 99.0 million gallons, and the withdrawal from all five wells shall not exceed 76.63 million gallons.

e. Prior to adding any new wells to the Croda, Inc. distribution system or seeking any increase in allocation from existing wells the docket holder must conduct a 48-hour pumping test on the new well(s) as outlined in the *Application for a Ground and/or Surface Water Withdrawal in the Delaware River Basin*.

f. The existing wells shall be equipped with readily accessible capped ports and drop pipes so that water levels may be measured under all conditions.

g. The docket holder shall pay for surface water use in accordance with the provisions of Resolution No. 74-6, as amended.

h. 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 DNREC and shall be available at any time to the Commission if requested by the Executive Director.

i. In accordance with DRBC Resolution No. 87-6 (Revised), the docket holder shall continue to implement to the satisfaction of the DNREC, the systematic program to monitor and control leakage within the water supply system. The program shall at a minimum include: periodic surveys to monitor leakage, enumerate unaccounted-for water, and determine the current status of system infrastructure; recommendations to monitor and control leakage; and a schedule for the implementation of such recommendations. The docket holder shall proceed expeditiously to correct leakages and unnecessary usage identified by the program.

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

k. No water 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).

l. The docket holder shall continue to implement its Water Conservation Plan as approved by the DNREC, and shall report to the DNREC on actions taken pursuant to this program and the impact of those actions as requested by the DNREC.

m. The docket holder shall implement to the satisfaction of the DNREC, a drought or other water supply emergency plan.

n. No new water service connections shall be made to premises connected to sewerage systems which are not in compliance with all applicable effluent limits contained in State permits and the *Water Quality Regulations* of the Commission.

o. 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.

p. 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*.

q. A complete application for the renewal of this docket, or a notice of intent to cease the operations (withdrawal, discharge, etc.) approved by this docket by the expiration date, must be submitted to the DRBC at least 12 months prior to the expiration date below (unless permission has been granted by the DRBC for submission at a later date), using the appropriate DRBC application form. 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, the terms and conditions of this docket will

remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

r. 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.

s. If the operation of this project significantly affects or interferes with any domestic or other existing wells or surface water supplies, or if the docket holder receives a complaint by any user of wells or surface water supplies within the zone of influence of the withdrawal, the docket holder shall immediately notify the Executive Director of any complaints by users of wells or surface water supplies within the zone of influence of the withdrawal, and unless excused by the Executive Director, shall investigate such complaints. The docket holder should direct phone call notifications of potential well or surface water interference or complaints of interference to the DRBC Project Review Section at 609-883-9500, extension 216. Oral notification must always be followed up in writing directed to the Executive Director. In addition, the docket holder shall provide written notification to all potentially impacted users of wells or surface water supplies of the docket holder's responsibilities under this condition. Any well or surface water supply which is substantially adversely affected, or rendered dry or otherwise unusable as a result of the docket holder's project withdrawal, shall be repaired, replaced or otherwise mitigated at the expense of the docket holder. A report of investigation and/or mitigation plan prepared by a hydrologist shall be submitted to the Executive Director as soon as practicable. The Executive Director shall make the final determination regarding the validity of such complaints, the scope or sufficiency of such investigations, and the extent of appropriate mitigation measures, if required. 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.

t. For the duration of any drought emergency declared by either Delaware or the Commission, water service or use by the docket holder pursuant to this approval shall be subject to the prohibition of those nonessential uses specified by the Governor of Delaware, to the extent that they may be applicable, and to any other emergency resolutions or orders adopted hereafter by the Commission.

u. The docket holder and any other person aggrieved by a reviewable action or decision taken by the Executive Director or Commission pursuant to this docket may seek an administrative hearing pursuant to Articles 5 and 6 of the Commission's *Rules of Practice and Procedure*, and after exhausting all administrative remedies may seek judicial review pursuant to Article 6, section 2.6.10 of the *Rules of Practice and Procedure* and section 15.1(p) of the Commission's *Compact*.

BY THE COMMISSION

APPROVAL DATE:

EXPIRATION DATE: September 24, 2018

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