



STATE OF DELAWARE

**DEPARTMENT OF NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL**

DIVISION OF WATER

RICHARDSON & ROBBINS BUILDING

89 KINGS HIGHWAY

DOVER, DELAWARE 19901

COMMERCIAL &
GOVERNMENT SERVICES:
WASTEWATER,
STORMWATER, &
BIOSOLIDS
MANAGEMENT

PHONE
(302) 739-9946

Public Notice FACT SHEET – June 5th, 2024

Croda Inc.
315 Cherry Lane
New Castle, Delaware 19720

NPDES Permit No. DE 0000621
State Permit No. WPCC 3127G/74

Croda Inc. has applied for reissuance of its National Pollutant Discharge Elimination System (NPDES) permit to discharge storm water to the Delaware River and Magazine Ditch.

Proposed Changes

1. Revised effluent limitations and monitoring requirements for Outfalls 001A, 001B, and 003. Because Croda Inc. is no longer discharging non-contact cooling water, both Temperature and Flow limits were removed. Both load limits for Total Suspended Solids (TSS) and five-day Biochemical Oxygen Demand (BOD₅) were changed to storm water benchmark monitoring concentrations.

Facility Location

The facility is located at 315 Cherry Lane in New Castle County, Delaware.

Activity Description

The facility produces ethylene oxide from ethanol in a continuous process. Side-streams include technical grade monoethylene glycol and polyglycols, and carbon dioxide. The ethylene oxide is then used at the facility in the production of ester-type and alkoxylate-type surfactants, plus blended surfactant mixtures with and without purchased solvents. An analytical lab and research & development activities which support the surfactant business are also present on the site.

Discharge Description

The permittee has identified 26 discharge points at the facility (Outfalls 001A, 001B, 003, and 1 through 23) in the permit application. Outfalls 001A, 001B, 003 discharge storm water associated with industrial activity. Outfalls 1 through 23 consist of storm water runoff from parking areas, railroad siding and open areas. All the discharges go directly or via Magazine Ditch to the Delaware River.

Outfall 001A captures storm-related runoff from Ethylene Oxide production area and associated buildings and facilities. Outfall 001B captures runoff from Batch Plant manufacturing areas and associated buildings and facilities. Outfall 003 captures runoff from the Powerhouse and Building 88 area. There has been no

discharge from 001B since 2012 and no discharge from 003 since 2015. All storm water runoff to Outfalls 001B and 003 are routed to process wastewater treatment.

Both process wastewater and sewage are directed to the New Castle County wastewater collection system and pretreatment program.

Receiving Stream Classification

The designated uses for the Delaware River in the area of the discharge are: primary contact recreation; secondary contact recreation; and maintenance of fish, aquatic life & wildlife; agricultural water supply (for freshwater segments only).

Statutory and Regulatory Basis

The Delaware Department of Natural Resources and Environmental Control (DNREC) proposes to reissue an NPDES permit to discharge the wastewater subject to certain effluent discharge limitations, monitoring requirements and other terms and conditions identified in the permit. Section 402 of the federal Clean Water Act, as amended, and 7 Del. C. Chapter 60 provide the authority for permit issuance. Federal and state regulations promulgated pursuant to these statutes are the regulatory bases for permit issuance.

Bases for Effluent Limitations

DNREC has examined the permit application, recent discharge monitoring data and related information. The Department proposes to reissue the facility's NPDES permit for a period not to exceed five (5) years, subject to the effluent discharge limitations and monitoring requirements shown in the attached permit.

The following table indicates the bases for effluent limitations for Outfall 001A, 001B, and 003:

Bases for Effluent Limitations – Outfall 001A, 001B and 003			
Parameter	Technology Based		Monitoring Only
	RGCWP ⁽¹⁾	2021 MSGP ⁽²⁾	
Storm Water Benchmark Monitoring			
Nitrate+Nitrite Nitrogen (NO ₃ +NO ₂)	§9.1.4.3.2.3.2		X
Total Recoverable Zinc (Zn)	§9.1.4.3.2.3.2		X
pH	§9.1.4.3.2.3.2		X
BOD ₅		§4.2.2.2	X
TSS		§4.2.2.2	X
1. State of Delaware, Regulations Governing the Control of Water Pollution (RGCWP) 2. EPA NPDES Multi-Sector General Permit (MSGP) for Stormwater Discharges associated with Industrial Activity			

Storm Water Benchmark Monitoring:

Based on the primary Standard Industrial Classification (SIC) code reported in the NPDES Permit Application, benchmark monitoring requirements have been retained for storm water discharges from Outfalls 001A, 001B, and 003. The RGCWP §9.1.4.3.2.3.2 requires semi-annual benchmark monitoring for Nitrate + Nitrite Nitrogen, Total Recoverable Zinc, and pH. Benchmark monitoring concentrations for these parameters are outlined in the table below. Monitoring for the parameters in the table below shall be completed at least once in each of the following six-month periods: January through June and July through December. All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches and at least seventy-two (72) consecutive hours from the previously measurable (greater than 0.1-inch rainfall) storm event. All samples shall be taken within thirty (30) minutes after discharge starts, or as soon as practicable.

Parameter	Units	Benchmark Monitoring Concentrations
Nitrate+Nitrite Nitrogen	mg/L	0.68
Total Recoverable Zinc	mg/L	0.117
pH	Standard units	6 - 9

The current permit includes load limitations and monitoring requirements for TSS and BOD₅. The load limits were calculated based on the applicable technology-based (RGCWP) concentrations and the average flow limits described in current permit. Croda Inc. is no longer discharging non-contact cooling water, so flow limits were removed from current permit. Both loads limits for TSS and BOD₅ were also removed. Based on a review of the discharge monitoring reports, the proposed permit retains TSS and BOD₅ monitoring. The proposed permit requires the permittee to monitor TSS, and BOD₅ once per quarter. Based on EPA's 2021 Multi-Sector General Permit (MSGP) for Industrial Stormwater Discharges §4.2.2.2, benchmark thresholds for TSS and BOD₅, which are 100 mg/L and 30 mg/L respectively, have been included in the proposed permit. These benchmark thresholds are consistent with benchmark monitoring concentrations for other sectors in §9.1.4.3.2 of the RGCWP.

The Benchmark Monitoring Concentrations represent target pollutant concentrations for the facility to achieve through implementation of its Storm Water Plan (SWP). Analytical results that exceed Benchmark Monitoring Concentrations are indications that the facility's storm water discharge could potentially impair the receiving water body. The facility shall be required to compare all storm water monitoring results to the Benchmark Monitoring Concentrations. Special Condition No. 4 requires the facility to investigate the cause for any exceedance of these values. The results of the investigation shall identify additional potential sources of pollution, additional Best Management Practices necessary, revisions to the Significant Material Management Section of the SWP or identify other areas of the SWP that may require revision in order to meet the goal of the Benchmark Monitoring Concentrations.

Storm Water Outfalls 1 through 23:

The remaining 23 outfalls (SW 1 through 23) drain storm water from parking areas, railroad siding and open areas. Other than narrative limits, no additional limits or monitoring are proposed for these outfalls. Outfall 1-23 were designated as a storm water only outfalls (not associated with industrial activity) and was subject to narrative "free from" requirements.

Special Conditions

Special Condition No. 1 states that this permit supersedes the State Permit WPCC 3127F/74 and NPDES Permit DE 0000621, issued on January 12, 2018, with a February 1, 2018, effective date.

Special Condition No. 2 is a standard permit reopener clause. This special condition allows the Department to reopen and modify the permit if the discharger is causing water quality problems.

Special Condition No. 3 requires the permittee to continue to implement and maintain a Storm Water Plan (SWP) to minimize the discharge of contaminated storm water from its facility.

Special Condition No. 4 requires the facility to compare storm water monitoring results to Benchmark Monitoring Concentrations and take actions as warranted.

Special Condition No. 5 requires the permittee to use EPA-approved analytical methods that are capable of detecting and measuring the pollutants at or below the applicable water quality criteria or permit limits pursuant to 40 CFR Part 136.

Antidegradation Statement

The proposed effluent limitations included in this NPDES permit comply with the applicable portions of the State of Delaware Surface Water Quality Standards, Section 5: Antidegradation and ERES Waters Policies.

Public Notice and Process for Reaching a Final Decision

The public notice of the Department's receipt of the application and of reaching the tentative determinations outlined herein will be published in the Wilmington News Journal and the Delaware State News on **June 5, 2024**. Interested persons are invited to submit their written views on the draft permit and the tentative determinations made with respect to this NPDES permit application. The Department will not hold a public hearing on this application unless the Department receives a meritorious request to do so or unless the notice of this proposal generates substantial public interest. A public hearing request shall be deemed meritorious if it exhibits a familiarity with the application and a reasoned statement of the permit's probable impact. The request for a public hearing shall be in writing and shall state the nature of the issues to be raised at the hearing. All comments received by 4:30 p.m. on **July 5, 2024** will be considered by the Department in preparing the final permit.

Department Contact for Additional Information:

Wenjia Fan, PhD, P.E., Environmental Engineer
Commercial and Government Services Section, Division of Water
Department of Natural Resources and Environmental Control
89 Kings Highway, Dover, DE 19901
Telephone: (302) 739-9946
Email: Wenjia.Fan@Delaware.gov