

Permit by Rule (PBR) Registration Technical Review

Company:	Covestro LLC	Registration No.:	177355
Nearest City:	Baytown	Project No.:	378920
County:	Chambers	Project Type:	Initial
Project Reviewer:	Amanda Andrews	Regulated Entity No.:	RN100209931
Unit Name:	Covestro Industrial Park Baytown Plant	Customer Reference No.:	CN601544042
PBR No(s).:	106.262	Project Received Date:	August 26, 2024
Physical Location:	8500 W Bay Rd		

Project Overview / Process Description

Covestro LLC (Covestro) owns and operates a chemical plant located at 8500 West Bay Road in Baytown, Chambers County, Texas (Baytown Facility). This project will be incorporated into NSR No. 32770 at the next amendment or renewal.

With this submittal, Covestro is seeking authorization under Permit by Rule (PBR) 30 TAC §106.262 for changes to the annual loading rate of the strong effluent stream coming from the is mono nitrobenzene (MNB) washing process in the Aniline Unit. Covestro is submitting this PBR registration to increase the annual loading of the strong effluent stream into tank trucks (EPN: FL612L2105). The strong effluent stream comes from the MNB washing process in the Aniline Unit. There are no increases in the production rate or any increases in the hourly loading rate.

Covestro is seeking 25 additional tank trucks in addition to the 50 trucks that are currently authorized. The strong effluent is loaded into tank trucks for temporary storage while the downstream process is unavailable. Once the downstream process is available, the material is returned to the process. Thus, there is no increase in upstream or downstream throughput based on the additional temporary storage from the increased number of trucks.

There are no changes to the upstream or downstream unit operations anticipated by the implementation of this project. Also, the project will not constitute an increase in production.

Permit by Rule Requirements - 30 TAC Chapter 106

General Requirements

Registration Fee Reference No.:	Application fee: 718859 / 582EA000623084
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Is this registration certified?	Yes
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Is planned MSS included in the registration?	No
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Are there affected NSR or Title V authorizations for the project?	Yes
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NSR and/or Title V authorizations:	NSR No. 32770; Title V O-3764
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If there are affected Title V authorizations, is monitoring being submitted as part of this registration?	Yes
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Are there any upstream or downstream affects associated with this registration?	No
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Are associated upstream/downstream emissions either included in the registration OR within current permitted limits with no changes to underlying air authorizations for the applicable units regarding BACT, health and environmental impacts, or other representations.	NA
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Are emissions for each PBR authorized facility less than the § 106.4(a)(1) limits?	Yes
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Are total emissions from all sitewide PBR authorized facilities less than the § 106.4(a)(4) limits, OR has the site been subject to public notice requirements? PN for NSR No. 32770	Yes
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Are there permit limits on using PBRs at the site?	No
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Is the facility subject to the NO _x Mass Cap and Trade Program? No new NO_x emissions.	Yes
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Is the facility in compliance with all other applicable rules and regulations?	Yes
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Does the registration include an appropriate PBR workbook, and has the workbook been verified?	Yes
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Notes: NESHAPs Subpart FF

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Federal Applicability

Does this project trigger a PSD or Nonattainment review?	No
Does the Major NSR applicability analysis include all associated upstream and/or downstream emissions?	NA
Are there any applicable standards under NSPS, NESHAP, or NESHAP for source categories (MACT)?	Yes
If Yes, list applicable subparts: NESHAP Subpart FF	

Permit by Rule Requirements - Compliance Demonstrations

PBR 106.262 Facilities (Emission and Distance Limitations)

- (a)(1) The facilities or changes will be located **2800 ft** from any off-site receptor.
- (a)(2) Total new or increased emissions authorized by this section are below E lb/hr, as determined using the equation $E = L/K$, and 5 tpy.
- (a)(3) Notification and all required documentation have been submitted.
- (a)(4) NA – No chemicals for this section.
- (a)(5) There will not be any changes or additions of any existing abatement equipment.
- (a)(6) Visible emissions will not exceed the 5.0 % opacity limit.
- (b) This registration is not for authorization for construction or to change a facility authorized under another section of this chapter or under standard permit.

Compliance History and Site Review

In accordance with 30 TAC Chapter 60, a compliance history report was reviewed on:		August 29, 2024
Site rating / classification:	3.29 / Satisfactory	Company rating / classification: 2.88 / Satisfactory
Has any action occurred on the basis of the compliance history or rating?		No
Did the Regional Office provide site approval and confirm distances?		NA

106.262(a)(2) Distance

Distance to nearest off-plant receptor (feet):	2800
K value:	9.2

106.262(a)(2) Emissions – Table 262

Chemical	Criteria Pollutant Designation	CAS No. (optional input)	L Value (mg/m ³)	E, maximum Hourly Emission Threshold (lb/hr)	Actual Emission Threshold (tpy)	Actual Hourly Increases (lb/hr)	Actual Annual Increase (tpy)	Meets Threshold?
Benzene	VOC		3	3.26E-01	1.43E+00	0.00E+00	1.99E-05	Yes

106.262(a)(2) Emissions – 1997 ACGIH Guide

Chemical	Criteria Pollutant Designation	CAS No. (optional input)	L Value (mg/m ³)	E, maximum Hourly Emission Threshold (lb/hr)	Actual Emission Threshold (tpy)	Actual Hourly Increases (lb/hr)	Actual Annual Increase (tpy)	Meets Threshold?
Nitrobenzene	VOC	98-95-3	5	5.43E-01	2.38E+00	0.00E+00	2.47E-06	Yes

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Total 106.261/262 Combined Emissions

	Total Hourly Emissions (lb/hr)	Total Annual Emissions (tpy)
Total Emissions:	----	0.00002237

Emission Summary

EPN / Emission Source	VOC		NOx		CO		PM ₁₀		PM _{2.5}		SO ₂		Other	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
FL612L2105 / Loading Emissions	---	<0.01												
TOTAL EMISSIONS (TPY):		<0.01												
MAXIMUM OPERATING SCHEDULE:			Hours/Day		24	Days/Week		7	Weeks/Year		52	Hours/Year		8,760

Amanda Andrews

September 6, 2024

Ms. Amanda Andrews
Permit Reviewer
Rule Registration Section

Date

Michael Partee

September 6, 2024

Michael Partee, Manager
Rule Registrations Section
Air Permits Division
Section Manager

Date