Permit by Rule (PBR) Registration
Technical Review

Company:	Carlisle Coatings & Waterproofing Incorporated	**Registration No.:**	83510
Nearest City:	Wylie	**Project No.:**	372406
County:	Collin	**Project Type:**	Revision
Project Reviewer:	Guillermo Reyes, P.E.	**Regulated Entity No.:**	RN100548759
Unit Name:	Carlisle Coating and Waterproofing	**Customer Reference No.:**	CN600259782
PBR No(s).:	New/Revised: 106.122, 106.333, 106.395, 106.454, 106.472, 106.473	**Project Received Date:**	April 4, 2024
Physical Location:	900 Hensley Ln		

Project Overview / Process Description
Carlisle Coatings and Waterproofing Inc. (Carlisle) is an Adhesives and Sealants manufacturer located in Wylie, Collin County. The emissions from the site are currently authorized under PBR Registration Nos. 83510, 70815, and 147787.

The purpose of this PBR Registration revision for PBR No. 83510 is to authorize the replacement of existing Mixers 301/302, authorized under PBR 106.333, with a new set of mixers (EPN 8A/ Butyl Mixer Dust Collector), update formulation changes for the adhesives and sealants, and reauthorize the plant to include only emission sources that are currently present.

Mixer 501/502 includes two, side-by-side 2,000-gallon capacity vessels with a single mixing mechanism mounted overhead that can be raised and lowered into either vessel. While one side is mixing product, the other side is either empty, being filled with batch ingredients, or loading finished product into final packages. Mixer 1 operates in the same fashion; however, the vessel capacity is 1,000 gallons. Mixer 501/502 and Mixer 1 are controlled by a single Opti-flo dust collector that operates during filling of a vessel.

The emission sources listed below were authorized under PBR Registration No. 83510 and have been removed from the site: Carlisle is requesting that these emission sources be removed from PBR Registration No. 83510.

Hot Melt Mixer #6 (EPN 2A); PBR 106.433;
H41 & Gasket Tape Dust Collector (EPN 3A) PBR 106.221;
Tape Oven (EPN 5A), PBR 106.433;
Mixer No. 4 (EPN FUG 2); 106.333;
H41 & Gasket Tape Mixers 7 & 11 (EPN FUG 3); PBR 106.221;
Hobart Mixer (EPN FUG 4); 106.433;
No Fiber Sealant Mixer (EPN FUG 6); PBR 106.261.

Carlisle is authorizing the emissions sources at the plant using PBRs as shown in the table below.

EMISSION SOURCE	EMISSION POINT	PERMIT BY RULE
Mixer 501/502 and associated dust collector	FUG 501 / Mixer 501/502 Fugitives 1A / Opti-flo Mixer Dust Collector	106.333 Water Based Adhesive Mixers
Mixer 1 and associated dust collector	FUG 1 / Mixer #1 Fugitives 1A / Opti-flo Mixer Dust Collector	106.333 Water Based Adhesive Mixers
Mixer 10 and associated dust collector	8A / Butyl Mixer Dust Collector	106.395 Equipment for Mixing Plastic and Rubber (No Solvent)
Storage Tanks	FUG 7 / Storage Tanks	106.472 Organic and Inorganic Liquid Loading and Unloading (Tanks 1 through 8) 106.473 Organic Liquid Loading and Unloading (Tanks 9 and 10)
QA Lab	4A / QA Lab	106.122 Bench Scale Laboratory Equipment
Parts Washers	FUG 5 / Parts Washers	106.454 Degreasing Units

Because coating production is a batch process, startup and shutdown of the process line are regular and planned operations at the plant. The coating operations during startup and shutdown have no different character of emissions than during normal

operations and the emission rates during startup and shutdown are less than or equal to the normal operating emissions.

Sitewide emissions authorized by PBR Registration Nos. 83510, 70815, and 147787 are less than the 106.4(a)(4) limits.

Permit by Rule Requirements - 30 TAC Chapter 106

General Requirements	
Registration Fee Reference No.:	**Application fee: 700003 / 582EA000605153**
Is this registration certified?	**Yes**
Is planned MSS included in the registration?	**Yes; Startup and Shutdown**
Are there affected NSR or Title V authorizations for the project?	**No**
Are there any upstream or downstream affects associated with this registration?	**No**
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**
Are emissions for each PBR authorized facility less than the § 106.4(a)(1) limits?	**Yes**
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? **Sitewide emissions are less than the 106.4(a)(4) limits.**	**Yes**
Are there permit limits on using PBRs at the site?	**No**
Is the facility in compliance with all other applicable rules and regulations?	**Yes**
Does the registration include an appropriate PBR workbook, and has the workbook been verified?	**N/A**

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)?	**No**

Permit by Rule Requirements - Compliance Demonstrations

PBR 106.122 Bench Scale Laboratory Equipment

Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analyses are permitted by rule.

PBR 106.333 Water-Based Adhesive Mixers

Equipment used exclusively for the mixing and blending of materials at ambient temperature to make water-based adhesives is permitted by rule.

PBR 106.395 Equipment for Mixing Plastic and Rubber (No Solvent)

Mixers, blenders, roll mills, or calenders for rubber or plastics are permitted by rule, provided the following conditions of this section are satisfied. Mixers, blenders, roll mills, or calenders handling or adding asbestos shall not be eligible to be permitted by rule under this section.

(1) Organic solvents, diluents, or thinners shall not be used.

(2) Material in powder form shall not be added unless the mixer, blender, roll mill, or calender is vented to a fabric filter having a maximum filtering velocity of 4.0 feet per minute (ft/min) with mechanical cleaning, or 7.0 ft/min with automatic air cleaning.

(3) There shall be no visible emissions.

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PBR 106.454 Degreasing Units

Any degreasing unit that satisfies the following conditions of this section is permitted by rule.
(1) The following general requirements are applicable to all degreasers unless specifically noted by the conditions of this section.
(1)(A) Units subject to paragraphs (3)-(5) of this section shall meet the following:
(1)(A)(i) register with the commission's Office of Permitting, Remediation, and Registration in Austin using Form PI-7 and a Degreasing Unit Checklist;
(1)(A)(ii) on a monthly basis, records shall be kept of total solvent makeup (gross usage minus waste disposal).
(1)(B) Waste solvent from all degreasing operations shall be stored in covered containers, and be removed by a licensed disposal service or until emptying into an authorized on-site waste management facility.
(1)(C) Porous or absorbent materials, such as cloth, leather, wood, or rope shall not be degreased.
(1)(D) Leaks shall be repaired immediately, or the degreaser shall be shut down until repairs are completed.
(1)(E) A permanent and conspicuous label summarizing proper operating procedures to minimize emissions shall be posted on or near the degreaser.
(1)(F) Each unit, regardless of the county in which it is located, shall meet the requirements of §115.412 and §115.415 of this title (relating to Control Requirements and Testing Requirements).
(2) The following conditions apply only to remote reservoir cleaners.
(2)(A) The cleaner shall be designed to prevent exposure of the solvent reservoir to the atmosphere except for the drain openings. The drain openings shall not exceed 3.0% of the total cleaner open area and shall under no conditions exceed 16 square inches.
(2)(B) All solvent sprays shall be a solid fluid stream (not a fine, atomized, or shower type spray) and at a minimal operating pressure that is necessary to prevent excessive splashing, but not to exceed ten pounds per square inch, gauge (psig).
(2)(C) The true vapor pressure of the solvent shall not exceed 0.6 pounds per square inch, absolute (psia) as measured or calculated at an operating temperature of 100 degrees Fahrenheit.
(2)(D) The solvent shall not be heated.
(3) NA
(4) NA
(5) NA

PBR 106.472 Organic and Inorganic Liquid Loading and Unloading

Liquid loading or unloading equipment for railcars, tank trucks, or drums; storage containers, reservoirs, tanks; and change of service of material loaded, unloaded, or stored is permitted by rule, provided that no visible emissions result and the chemicals loaded, unloaded, or stored are limited to:
(1) the following list: polymers,
(9) organic liquids having an initial boiling point of 300 degrees Fahrenheit or greater. Facilities loading, unloading, or storing butyric acid, isobutyric acid, methacrylic acid, mercaptans, croton oil, 2-methyl styrene, or any other compound with an initial boiling point of 300 degrees Fahrenheit or greater listed in 40 Code of Federal Regulations 261, Appendix VIII shall be located at least 500 feet from any recreational area or residence or other structure not occupied or used solely by the owner of the facility or the owner of the property upon which the facility is located.

PBR 106.473 Organic Liquid Loading and Unloading

Organic liquids loading or unloading equipment for railcars, tank trucks, or drums; and storage containers, tanks, or change of service of the material loaded, unloaded, or stored is permitted by rule, provided that all of the following conditions of this section are met.
(1) Uncontrolled emissions calculated using the version of AP-42 in effect at the time are less than 25 tons per year of organic compounds or of any other air contaminant.
(2) The loading rate of the facilities does not exceed 20,000 gallons per day averaged over any consecutive 30-day period.
(3) The capacity of any tank does not exceed 25,000 gallons, except that tanks having a capacity of less than 40,000 gallons may be used to store sweet crude oil, sweet natural gas condensate, gasoline, and petroleum fuels.
(4) The facilities are used exclusively for the loading, unloading, or storage of:
(4)(A) organic liquids normally used as solvents, diluents, thinners,.

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Registration No. 83510 Project No. 372406

Compliance History and Site Review

In accordance with 30 TAC Chapter 60, a compliance history report was reviewed on:			**May 8, 2024**
Site rating / classification:	**0.00 / High**	Company rating / classification:	**0.00 / High**
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**

Emission Summary

EPN / Emission Source	VOC		NOx		CO		PM/ $PM_{10 / 2.5}$		SO_2		NH_4OH		NH_3	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
Existing / Revised Emissions														
1A / Opti-flo Mixer Dust Collector							0.77	3.38						
4A / QA Lab	<0.01	<0.01					<0.01	<0.01					<0.01	<0.01
FUG 1 / Mixer #1 Fugitives	0.11	0.49									<0.01	<0.01	0.04	0.16
FUG 5 / Degreasing Units	0.16	0.69												
FUG 7 / Storage Tanks	6.18	0.78												
New Emissions														
8A / Butyl Mixer Dust Collector							0.17	0.75						
FUG 501 / Mixer 501/502 Fugitives	0.17	0.76									<0.01	<0.01	0.15	0.67
TOTAL EMISSIONS (TPY):		**2.72**						**4.13**				**<0.01**		**0.83**
MAXIMUM OPERATING SCHEDULE: Hours/Year														8,760

TCEQ

May 8, 2024
Mr. Guillermo Reyes, P.E. Date
Permit Reviewer
Rule Registration Section

May 9, 2024
Michael Partee, Manager Date
Rule Registrations Section
Air Permits Division