



Blue Cube Operations LLC

604 Texas Hwy 332
Lake Jackson, TX 77566
www.Olin.com

March 27, 2025

E-PERMIT SUBMISSION

STEERS MC-226
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

RE: B-1900 RCL Piping Modification Project
Epoxy Intermediates Plant, B-1900
Blue Cube Operations LLC*
CN604930784, RN108772245, Acct No. BL-A044-R
PBR §106.261 and 106.262 Registration

Dear APIRT Team Leader:

Blue Cube Operations LLC* (Blue Cube) is submitting the following Permit by Rule (PBR) §106.261 and 106.262 registration to authorize additional fugitive components associated with the Epoxy Intermediates Plant in Freeport, Texas.

The attachments to this submittal are:

- Form PI-7 CERT
- §106.4 Demonstration of Compliance
- Process Flow Diagram and Process Description
- Table 1 Emission Limits
- PBR Compliance Table
- PBR General Facilities Workbook
- Emission Calculations

Blue Cube has included in this PBR registration information that is confidential. The confidential information is labeled and included in a separate section. For future correspondence, please contact me at (979) 529-3365 or via email at OHayes@Olin.com.

Sincerely,

A handwritten signature in black ink that reads "Oakley Hayes" in a cursive script.

Oakley Hayes
Air Permit Manager
Blue Cube Operations LLC*

**Certification and Registration for Permits by Rule
Form PI-7-CERT
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Texas Commission on Environmental Quality**

I. Registrant Information
A. Company or Other Legal Customer Name:
Company Official Contact Information (<input type="checkbox"/> Mr. <input checked="" type="checkbox"/> Mrs. <input type="checkbox"/> Ms. <input type="checkbox"/> Other _____)
Name: Gretchen Abney
Title: Site Leveraged EH&S Leader
Mailing Address: 604 Highway 332
City: Lake Jackson
State: Texas
ZIP Code: 77566
Phone: (979) 529-3050
Fax: N/A
Email Address: GBAbney@Olin.com
<i>All PBR registration responses will be sent via email.</i>
A. Technical Contact Information (<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Mrs. <input type="checkbox"/> Ms. <input type="checkbox"/> Other _____)
Name: Oakley Hayes
Title: Air Permit Manager
Company Name: Blue Cube Operations LLC
Mailing Address: 604 Highway 332
City: Lake Jackson
State: Texas
ZIP Code: 77566
Phone Number: (979) 529-3365
Fax Number: N/A
Email Address: OHayes@Olin.com

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II. Facility and Site Information (continued)	
G. Historical Standard Exemption or PBR	
Are you claiming a historical standard exemption or PBR? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
If "YES," enter rule number(s) and associated effective date in the spaces provided below.	
Rule Number:	Effective Date:
Rule Number:	Effective Date:
H. Previous Standard Exemption or PBR Registration Number	
Is this authorization for a change to an existing facility previously authorized under a standard exemption or PBR? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
If "YES," enter previous standard exemption number(s) and PBR registration number(s) and associated effective dates in the spaces provided below.	
Standard Exemption and PBR Registration Number:	
Effective Date:	
I. Other Facilities at this Site Authorized by Standard Exemption, PBR, or Standard Permit	
Are there any other facilities at this site that are authorized by an Air Standard Exemption, PBR, or Standard Permit? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
If "YES," enter standard exemption number(s), PBR registration number(s), and Standard Permit registration number(s), and associated effective date in the spaces provided below. There are many PBR's and Standard Permits registered at this site. A list can be provided if necessary for review of this project.	
Standard Exemption, PBR Registration, and Standard Permit Registration Number(s):	
Effective Date:	
Standard Exemption, PBR Registration, and Standard Permit Registration Number(s):	
Effective Date:	
Standard Exemption, PBR Registration, and Standard Permit Registration Number(s):	
Effective Date:	
J. Other Air Preconstruction Permits	
Are there any other air preconstruction permits at this site? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
If "YES," enter permit number(s) in the spaces provided below.	
There are many NSR permits issued for this site. A list can be provided if necessary for review of this project.	
K. Affected Air Preconstruction Permits	
Does the PBR being claimed directly affect any permitted facility? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	

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II. Facility and Site Information <i>(continued)</i>
If "YES," enter the permit number(s) in the spaces provided below.
NSR #104098
L. Federal Operating Permit (FOP) Requirements (30 TAC Chapter 122 Applicability)
1. Is this facility located at a site that is required to obtain an FOP pursuant to 30 TAC Chapter 122? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> To Be Determined
If the site currently has an existing FOP, enter the permit number: Title V #O2208
Check the requirements of 30 TAC Chapter 122 that will be triggered if this certification is accepted. <i>(check all that apply)</i>
<input type="checkbox"/> Initial Application for a FOP <input type="checkbox"/> Significant Revision for an SOP <input type="checkbox"/> Minor Revision for an SOP
<input type="checkbox"/> Operational Flexibility/Off Permit Notification for an SOP <input type="checkbox"/> Revision for a GOP
<input type="checkbox"/> To be Determined <input checked="" type="checkbox"/> None
2. Identify the type(s) of FOP issued and/or FOP application(s) submitted/pending for the site. <i>(check all that apply)</i>
<input checked="" type="checkbox"/> SOP <input type="checkbox"/> GOP <input type="checkbox"/> GOP application/revision (submitted or under APD review)
<input type="checkbox"/> N/A <input type="checkbox"/> SOP application/revision (submitted or under APD review)
III. Fee Information <i>(See Section VII. for address to send fee or go to www.tceq.texas.gov/epay to pay online.)</i>
A. Fee Requirements
Is a fee required per Title 30 TAC § 106.50? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
If "NO," specify the exception. There are three exceptions to paying a PBR fee. <i>(check all that apply)</i>
1. Registration is solely to establish a federally enforceable emission limit. <input type="checkbox"/>
2. Registration is within six months of an initial PBR review, and it is addressing deficiencies, administrative changes, or other allowed changes. <input type="checkbox"/>
3. Registration is for a remediation project (30 TAC § 106.533). <input type="checkbox"/>
B. Fee Amount
1. A \$100 fee is required if <i>any</i> of the answers in III.B.1 are "YES."
This business has less than 100 employees. <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
This business has less than \$6 million dollars in annual gross receipts. <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
This registration is submitted by a governmental entity with a population of less than 10,000. <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
This registration is submitted by a non-profit organization. <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

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III. Fee Information (See Section VII. for address to send fee or go to www.tceq.texas.gov/epay to pay online.) (continued)	
2. A \$450 fee is required for all other registrations	
A. Payment Information	
Check/money order/transaction or voucher number: Paid via STEERS	
Individual or company name on check: N/A	
Fee Amount: \$450	
Was the fee paid online? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
IV. Technical Information Including State and Federal Regulatory Requirements Check the appropriate box to indicate what is included in your submittal. NOTE: Any technical or essential information needed to confirm that facilities are meeting the requirements of the PBR must be provided. Not providing key information could result in a deficiency of the project.	
A. PBR requirements (Checklists are optional; however, your review will go faster if you provide applicable checklists.)	
Did you demonstrate that the general requirements in 30 TAC § 106.4 are met? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
Did you demonstrate that the individual requirements of the specific PBR are met? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
B. Confidential Information Included (If confidential information is submitted with this registration, all confidential pages must be properly marked "CONFIDENTIAL.") <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
C. Process Flow Diagram: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
D. Process Description: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
E. Maximum Emissions Data and Calculations: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
Note: If the facilities listed in this registration are subject to the Mass Emissions Cap & Trade program under 30 TAC Chapter 101, Subchapter H, Division 3, the owner/operator of these facilities must possess NO _x allowances equivalent to the actual NO _x emissions from these facilities.	
F. Is this certification being submitted to certify the emissions for the entire site? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
If "NO," include a summary of the specific facilities and emissions being certified.	
G. Table 1(a) (Form 10153) Emission Point Summary: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
H. Distances from Property Line and Nearest Off-Property Structure	
Distance from this facility's emission release point to the nearest property line: <u>440</u> feet	
Distance from this facility's emission release point to the nearest off-property structure: <u>1,000</u> feet	

**Certification and Registration for Permits by Rule
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IV. Technical Information Including State and Federal Regulatory Requirements
Check the appropriate box to indicate what is included in your submittal.

NOTE: Any technical or essential information needed to confirm that facilities are meeting the requirements of the PBR must be provided. Not providing key information could result in a deficiency of the project.

I. Project Status

Has the company implemented the project or waiting on a response from TCEQ? Implemented Waiting

J. Projected Start of Construction and Projected Start of Operation Dates:

Projected Start of Construction (provide date): 3/25/2025

Projected Start of Operation (provide date): 4/7/2025

V. Delinquent Fees

This form **will not be processed** until all delinquent fees and/or penalties owed to the TCEQ or the Office of the Attorney General on behalf of the TCEQ is paid in accordance with the Delinquent Fee and Penalty Protocol. For more information regarding Delinquent Fees and Penalties, go to the TCEQ website at: www.tceq.texas.gov/agency/financial/fees/delin/index.html.

VI. Signature For Registration and Certification

The signature below confirms that I have knowledge of the facts included in this application and that these facts are true and correct to the best of my knowledge and belief. I further state that to the best of my knowledge and belief, the project for which this application is made will not in any way violate any provision of the Texas Water Code (TWC), Chapter 7; the Texas Health and Safety Code, Chapter 382, the Texas Clean Air Act (TCAA); the air quality rules of the Texas Commission on Environmental Quality; or any local governmental ordinance or resolution enacted pursuant to the TCAA. I further state that I understand my signature indicates that this application meets all applicable nonattainment, prevention of significant deterioration, or major source of hazardous air pollutant permitting requirements. The signature further signifies awareness that intentionally or knowingly making or causing to be made false material statements or representations in the application is a criminal offense subject to criminal penalties.

Name (printed):

Gretchen Abney

Signature (original signature required)



Date: **March 27, 2025**

Blue Cube Operations LLC
Permit by Rule
B-1900 RCL Piping Modification Project
Epoxy Intermediates Plant, B-1900

March 27, 2025

Project Description

Overview

Blue Cube Operations LLC (Blue Cube) is proposing to authorize new fugitive components under PBR §106.261 and 106.262 at the Epoxy Intermediates Plant, B-1900, in Freeport, Texas. The new fugitive components are associated with piping modifications needed to safely operate the pipeline. The purpose of the project is to replace piping that is approaching the end of its mechanical life. This will require piping modifications and the addition of fugitive components to facilitate the replacement. There will be no handling of any chemicals listed under 106.262(a)(4) associated with this project.

There are no changes to production or operating conditions. All applicable requirements will be maintained, and no new requirements are triggered. There will be no additions of MSS activities. There are no upstream/downstream impacts associated with this project.

Affected sources

The following EPN is being affected by this project:

- B19FU1 – Epichlorohydrin Process Fugitive Area
-

Upstream and downstream impacts

The project will have no upstream or downstream impacts.

Impact on central wastewater and solid waste facilities

There will be no impact on the central wastewater treatment facilities or the solid waste facilities.

Emission Calculations

The emission calculations contain confidential information and can be found in the confidential section of this submittal.

MSS Emissions

There are no changes to MSS Emissions as part of this application.

Air Pollutant Watch List

This project occurs within an Air Pollutant Watch List area (APWL1201) but does not include any increases or decreases of any pollutant of concern for that area (arsenic, cobalt, nickel or vanadium).

Title V and Other Regulations

This plant is authorized under the Title V Permit O2208. The affected fugitive area for this project is existing. This change does not require notification under Title V since the addition of components to a fugitive emission source is not considered an “addition of an emission source”. This exclusion from notification is documented in TCEQ’s [“Site Operating Permit \(SOP\) Revision Application Guidance”](#), APDG 5951v16, revised 01/21, middle of page 7 under “Note” in section VII, part D.

General Information

In this section

The permit by rule requirements specified on Form PI-7 CERT are addressed in this section as follows:

PI-7 CERT Section	Description
IV	Process Description (Non-Confidential)
IV	Process Flow Diagram
IV	Regulatory Requirements

Process Description

Introduction

The following represents the process descriptions for the Epoxy Intermediates Plants (B19, B21, and B23). Blue Cube considers any additional process description as confidential business information.

Epoxy Intermediates Products Area

Several processes make up the Epoxy Intermediates Products area. Included in the manufacturing processes are allyl chloride, epichlorohydrin, soil fumigants, propylene dichloride processing, and butylene oxide. Various loading operations to distribute the chemicals produced from the plants are included. Two Thermal Treatment Units (TTU's) along with three flares are included in the processes that control emissions from these and other processes. As defined in the two process flow diagrams (PFDs), several of the plants use chlorine and caustic with organic chemicals including propylene, butene, propylene dichloride, or allyl chloride as raw materials. Emission locations from the Epoxy Intermediate Products are defined in the attached PFDs and plot plans. They include emissions from the TTU's, flares, fugitives from plants, and loading areas that are listed in Table 1a.

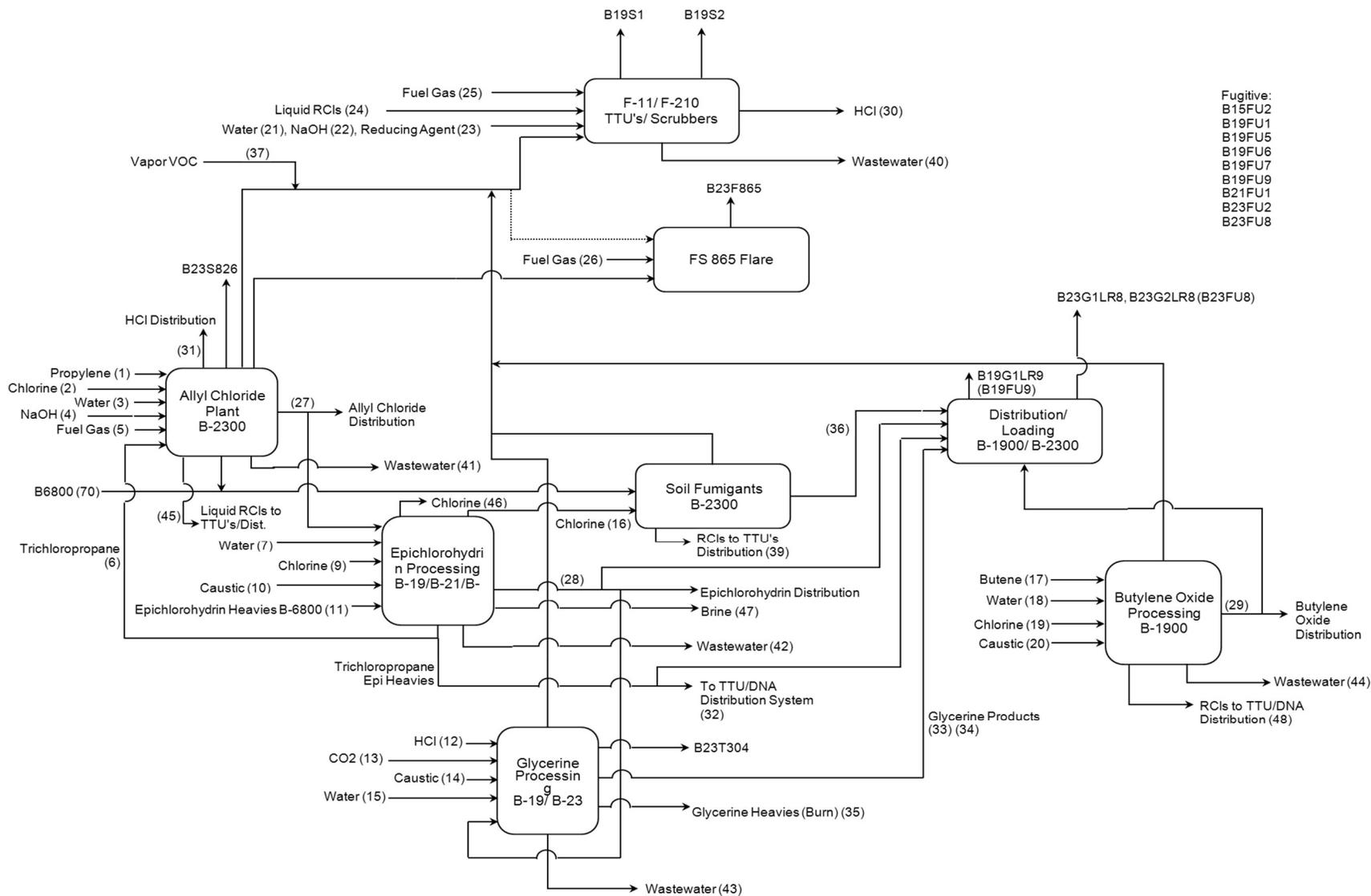
Other

Wastewater and bulk/solid wastes are treated at other facilities under separate air permits and authorizations. The Epoxy Intermediates TTU's are backup units for each other and organic vapors feeding them will automatically switch to the operating unit if one is not operating.

A shared Cooling Tower system provides cooling water to the process. Aqueous HCl is used for pH control.

Maintenance, startup, and shutdown (MSS) emissions are also included. They were originally amended to the former Chapter 1 #20432 1999 flexible permit. This includes, but is not limited to, activities such as clearing of equipment, routine maintenance of equipment, and process projects. It is important to note that during the majority of plant shutdowns, most equipment is not required to be cleared and therefore emissions are kept to a minimum.

Process Flow Diagram– B19, B21, B23



Regulatory Requirements

In this section

Following is a list of topics in this section:

Description
§106.4 General Requirements for Permitting by Rule

**Texas Commission on Environmental Quality
Permit by Rule Applicability Checklist
Title 30 Texas Administrative Code § 106.4**

The following checklist was developed by the Texas Commission on Environmental Quality (TCEQ), **Air Permits Division**, to assist applicants in determining whether or not a facility meets all of the applicable requirements. Before claiming a specific Permit by Rule (PBR), a facility must first meet all of the requirements of **Title 30 Texas Administrative Code § 106.4** (30 TAC § 106.4), “Requirements for Permitting by Rule.” Only then can the applicant proceed with addressing requirements of the specific Permit by Rule being claimed.

The use of this checklist is not mandatory; however, it is the responsibility of each applicant to show how a facility being claimed under a PBR meets the general requirements of 30 TAC § 106.4 and also the specific requirements of the PBR being claimed. If all PBR requirements cannot be met, a facility will not be allowed to operate under the PBR and an application for a construction permit may be required under 30 TAC § 116.110(a).

Registration of a facility under a PBR can be performed by completing **Form PI-7** (Registration for Permits by Rule) or **Form PI-7-CERT** (Certification and Registration for Permits by Rule). The appropriate checklist should accompany the registration form. Check the most appropriate answer and include any additional information in the spaces provided. If additional space is needed, please include an extra page and reference the question number. The PBR forms, tables, checklists, and guidance documents are available from the TCEQ, Air Permits Division website at: www.tceq.texas.gov/permitting/air/nav/air_pbr.html.

1. 30 TAC § 106.4(a)(1) and (4): Emission Limits	Answer
List emissions in tpy for each facility (add additional pages or table if needed): See Table 1(a)	
Are the SO ₂ , PM ₁₀ , VOC, or other air contaminant emissions claimed for each facility in this PBR submittal less than 25 tpy?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Are the NO _x and CO emissions claimed for each facility in this PBR submittal less than 250 tpy?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
<i>If the answer to both is “Yes,” continue to the question below. If the answer to either question is “No,” a PBR cannot be claimed.</i>	
Has any facility at the property had public notice and opportunity for comment under 30 TAC Section 116 for a regular permit or permit renewal? (This does not include public notice for voluntary emission reduction permits, grandfathered existing facility permits, or federal operating permits.)	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
<i>If “Yes,” skip to Section 2. If “No,” continue to the questions below.</i>	
If the site has had no public notice, please answer the following:	
Are the SO ₂ , PM ₁₀ , VOC, or other emissions claimed for all facilities in this PBR submittal less than 25 tpy?	<input type="checkbox"/> YES <input type="checkbox"/> NO
Are the NO _x and CO emissions claimed for all facilities in this PBR submittal less than 250 tpy?	<input type="checkbox"/> YES <input type="checkbox"/> NO
<i>If the answer to both questions is “Yes,” continue to Section 2.</i>	
<i>If the answer to either question is “No,” a PBR cannot be claimed. A permit will be required under Chapter 116.</i>	

**Texas Commission on Environmental Quality
Permit by Rule Applicability Checklist
Title 30 Texas Administrative Code § 106.4**

2. 30 TAC § 106.4(a)(2): Nonattainment Check	Answer
Are the facilities to be claimed under this PBR located in a designated ozone nonattainment county?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
<i>If "Yes," please indicate which county by checking the appropriate box to the right.</i>	
(Moderate) - Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller counties:	<input checked="" type="checkbox"/> HGB
(Moderate) - Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise counties:	<input type="checkbox"/> DFW
<i>If "Yes," to any of the above, continue to the next question. If "No," continue to Section 3.</i>	
1. Does this project trigger a nonattainment review?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
2. Is the project's potential to emit (PTE) for emissions of VOC or NO _x increasing by 100 tpy or more?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<i>PTE is the maximum capacity of a stationary source to emit any air pollutant under its worst-case physical and operational design unless limited by a permit, rules, or made federally enforceable by a certification.</i>	
Is the site an existing major nonattainment site and are the emissions of VOC or NO _x increasing by 40 tpy or more?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<i>If needed, attach contemporaneous netting calculations per nonattainment guidance.</i>	
Additional information can be found at: www.tceq.texas.gov/permitting/air/forms/newsourcereview/tables/nsr_table8.html and www.tceq.texas.gov/permitting/air/nav/air_docs_newsourcereview.html	
<i>If "Yes," to any of the above, the project is a major source or a major modification and a PBR may not be used. A Nonattainment Permit review must be completed to authorize this project. If "No," continue to Section 3.</i>	
3. 30 TAC § 106.4(a)(3): Prevention of Significant Deterioration (PSD) check	
Does this project trigger a review under PSD rules? No	
To determine the answer, review the information below:	
Are emissions of any regulated criteria pollutant increasing by 100 tpy of any criteria pollutant at a named source?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Are emissions of any criteria pollutant increasing by 250 tpy of any criteria pollutant at an unnamed source?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Are emissions increasing above significance levels at an existing major site?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
PSD information can be found at: www.tceq.texas.gov/assets/public/permitting/air/Forms/NewSourceReview/Tables/10173tbl.pdf and www.tceq.texas.gov/permitting/air/nav/air_docs_newsourcereview.html	
<i>If "Yes," to any of the above, a PBR may not be used. A PSD Permit review must be completed to authorize the project.</i>	
<i>If "No," continue to Section 4.</i>	

**Texas Commission on Environmental Quality
Permit by Rule Applicability Checklist
Title 30 Texas Administrative Code § 106.4**

4. 30 TAC § 106.4(a)(6): Federal Requirements	Answer
Will all facilities under this PBR meet applicable requirements of Title 40 Code of Federal Regulations (40 CFR) Part 60, New Source Performance Standards (NSPS)?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
If "Yes," which Subparts are applicable? <i>(answer below.)</i>	
Will all facilities under this PBR meet applicable requirements of 40 CFR Part 63, Hazardous Air Pollutants Maximum Achievable Control Technology (MACT) standards?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> NA
If "Yes," which Subparts are applicable? <i>(answer below.)</i>	
Subpart A, Subpart H	
Will all facilities under this PBR meet applicable requirements of 40 CFR Part 61, National Emissions Standards for Hazardous Air Pollutants (NESHAPs)?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
If "Yes," which Subparts are applicable? <i>(answer below.)</i>	
<i>If "Yes" to any of the above, please attach a discussion of how the facilities will meet any applicable standards.</i>	
5. 30 TAC § 106.4(a)(7): PBR prohibition check	
Are there any air permits at the site containing conditions which prohibit or restrict the use of PBRs?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<i>If "Yes," PBRs may not be used or their use must meet the restrictions of the permit. A new permit or permit amendment may be required.</i>	
<i>List permit number(s):</i>	
6. 30 TAC § 106.4(a)(8): NO_x Cap and Trade	
Is the facility located in Harris, Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, or Waller County?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
<i>If "Yes," answer the question below.</i>	
<i>If "No," continue to Section 7.</i>	
Will the proposed facility or group of facilities obtain required allowances for NO _x if they are subject to 30 TAC Chapter 101, Subchapter H, Division 3 (relating to the Mass Emissions Cap and Trade Program)?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA

**Texas Commission on Environmental Quality
Permit by Rule Applicability Checklist
Title 30 Texas Administrative Code § 106.4**

7. Highly Reactive Volatile Organic Compounds (HRVOC) check		
Is the facility located in Harris County?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
<i>If "Yes," answer the next question. If "No," skip to the box below.</i>		
Will the project be constructed after June 1, 2006?	<input type="checkbox"/> YES <input type="checkbox"/> NO	
<i>If "Yes," answer the next question.</i>		
<i>If "No," skip to the box below.</i>		
Will one or more of the following HRVOC be emitted as a part of this project?	<input type="checkbox"/> YES <input type="checkbox"/> NO	
<i>If "Yes," complete the information below:</i>		
Information	lb/hr	tpy
▶ 1,3-butadiene		
▶ all isomers of butene (e.g., isobutene [2-methylpropene or isobutylene])		
▶ alpha-butylene (ethylethylene)		
▶ beta-butylene (dimethylethylene, including both cis- and trans-isomers)		
▶ ethylene		
▶ propylene		
Is the facility located in Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, or Waller County?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
<i>If "Yes," answer the next question. If "No," the checklist is complete.</i>		
Will the project be constructed after June 1, 2006?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
<i>If "Yes," answer the next question. If "No," the checklist is complete.</i>		
Will one or more of the following HRVOC be emitted as a part of this project?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
<i>If "Yes," complete the information below:</i>		
Information	lb/hr	tpy
▶ ethylene		
▶ propylene		

TCEQ - 10149 (APDG 4999v18, revised 12/19) 106.4 Checklist for Permits by Rule General Requirements
This form for use by facilities subject to air quality permit requirements and may be revised periodically.

APPENDICES

In this section

Following is a list of topics in this section:

Description	Page
Appendix A: PBR Compliance Table	A-1
Appendix B: Table 1(a) - Page 1	B-1
Appendix C: Emission Calculations (CONFIDENTIAL)	C-1

Appendix A

PBR Compliance Table

Table 2 PBR Compliance

EPN	Air Contaminant	Project Increase		TLV or L Value	PBR Limit		Limit Citation	In Compliance
		lb/hr	T/yr	mg/m3	lb/hr	T/yr		
B19FU1	1,2,3-TRICHLOROPROPANE	2.17E-03	9.50E-03					
	Total 1,2,3-TRICHLOROPROPANE	2.17E-03	9.50E-03	60.0	1.76	5.00	106.262(a)(2)	YES
B19FU1	PROPYLENE DICHLORIDE	6.12E-05	2.68E-04					
	Total PROPYLENE DICHLORIDE	6.12E-05	2.68E-04	347.0	1.00	4.38	106.261(a)(3)	YES
B19FU1	1,2-DICHLORO-3-PROPANOL	2.30E-05	1.01E-04					
	Total 1,2-DICHLORO-3-PROPANOL	2.30E-05	1.01E-04	None	1.00	4.38	106.261(a)(3)	YES
B19FU1	2,3-DICHLORO-1-PROPENE	1.71E-04	7.47E-04					
	Total 2,3-DICHLORO-1-PROPENE	1.71E-04	7.47E-04	None	1.00	4.38	106.261(a)(3)	YES
B19FU1	ISOPROPYL CHLORIDE	4.73E-05	2.07E-04					
	Total ISOPROPYL CHLORIDE	4.73E-05	2.07E-04	None	1.00	4.38	106.261(a)(3)	YES
B19FU1	ACROLEIN	5.94E-05	2.60E-04					
	Total ACROLEIN	5.94E-05	2.60E-04	0.2	0.01	0.03	106.262(a)(2)	YES
B19FU1	ALLYL CHLORIDE	1.80E-06	7.88E-06					
	Total ALLYL CHLORIDE	1.80E-06	7.88E-06	3.0	0.09	0.39	106.262(a)(2)	YES
B19FU1	BENZENE	9.00E-07	3.94E-06					
	Total BENZENE	9.00E-07	3.94E-06	3.0	0.09	0.39	106.262(a)(2)	YES
B19FU1	BIS(CHLOROISOPROPYL)ETHER	1.56E-03	6.84E-03					
	Total BIS(CHLOROISOPROPYL)ETHER	1.56E-03	6.84E-03	None	1.00	4.38	106.261(a)(3)	YES
B19FU1	N-PROPYL CHLORIDE	6.03E-05	2.64E-04					
	Total N-PROPYL CHLORIDE	6.03E-05	2.64E-04	None	1.00	4.38	106.261(a)(3)	YES
B19FU1	EPICHLOROHYDRIN	3.41E-04	1.49E-03					
	Total EPICHLOROHYDRIN	3.41E-04	1.49E-03	1.9	0.06	0.24	106.262(a)(2)	YES
B19FU1	1,3-DICHLOROPROPENE	3.60E-06	1.58E-05					
	Total 1,3-DICHLOROPROPENE	3.60E-06	1.58E-05	4.5	0.13	0.58	106.262(a)(2)	YES
	Grand Total VOC		1.97E-02			40	106.4(a)(2)	YES

Note: Project does not change hourly emissions.

B-1900		1,000	ft. from the nearest off-site receptor.
	Therefore in 106.262, the value for K is:	34	

PSD/NNSR Evaluation Table

Project Summary of Emission Changes								
B1900 Epoxy Intermediates Plant								
B-1900 RCL Piping Modification Fugitives								
		CO	NO_x	PM	PM₁₀	PM_{2.5}	SO₂	VOC
Total of Net Increases		0.00	0.00	0.00	0.00	0.00	0.00	1.97E-02
PSD Significance Levels		100	40	25	15	10	40	
Site Netting Supplied?		NO	NO	NO	NO	NO	NO	
Site Contemporaneous Net		NA	NA	NA	NA	NA	NA	
PSD Applicable?		NO	NO	NO	NO	NO	NO	
NNSR Project Netting Required?			NO					NO
NNSR Net Project Increase			0.00					1.97E-02
NNSR Site Contemporaneous Net								
NNSR Applicable?			NO					NO
<p>Basis for Determination: This determination is based on project and AEI information according to TCEQ's draft "PSD Air Quality Guidance Document" dated January, 2001 and the "Nonattainment New Source Review" draft guidance document dated January, 2002; and also includes the change of the "increase" determination to "net increase" determination as per the EPA's March 2018 Policy memo.</p>								
Post-Project Maximum Allowable Annual Emissions, T/yr								
Emission Units affected		CO	NO_x	PM	PM₁₀	PM_{2.5}	SO₂	VOC
FIN	EPN							
B19G1FU1	B19FU1							39.93
Pre-Project Actual Annual Emissions, T/yr (24 month average)								
SUBSTITUTE THE PRECHANGE ALLOWABLE IF IT IS SMALLER THAN THE ACTUAL								
Emission Units affected		CO	NO_x	PM	PM₁₀	PM_{2.5}	SO₂	VOC
FIN	EPN							
B19G1FU1	B19FU1							39.91
<i>For fugitive emissions, assumed the pre-project actuals are equal to permit limit.</i>								
Changes in Emissions, T/yr								
(Post-Project Allowable, T/yr) - (Pre-Project Actual, T/yr)								
Emission Units affected		CO	NO_x	PM	PM₁₀	PM_{2.5}	SO₂	VOC
FIN	EPN							
B19G1FU1	B19FU1							1.97E-02

Appendix B

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Table 1(a) Emissions Point Summary

Date:	March 2025	Permit Number:	104098	RN Number:	108772245
Area Name:	Epoxy Intermediates			CN Number:	604930784

Review of applications and issuance of permits will be expedited by supplying all necessary information requested on this Table.

AIR CONTAMINANT DATA

1. Emission Point			2. Component or Air Contaminant Name	3. Air Contaminant Emission Rate	
EPN (A)	FIN (B)	NAME (C)		Pound Per Hour [A]	Ton Per Year [B]
B19FU1	B19G1FU1	Epoxy Intermediates Epichlorohydrin Process Fugitive Area	VOC	4.50E-03	1.97E-02

TCEQ - 10153 (Revised 04/08) Table 1(a)

This form is for use by sources subject to air quality permit requirements and may be revised periodically. (APDC 5178 v5)