



Blue Cube Operations LLC

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

January 31, 2025

**E-PERMIT SUBMISSION**

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

RE: Connector Addition  
Chlorinated Methane Products Facility  
Blue Cube Operations LLC\*  
CN604930784, RN108772245, Acct No. BL-A044-R  
PBR §106.262 Registration

Dear APIRT Team Leader:

Blue Cube Operations LLC\* (Blue Cube) is submitting the following Permit by Rule (PBR) §106.261/262 registration to authorize replacement valves at the Chlorinated Methane Products Facility in Freeport, Texas. There will be no new MSS activities associated with this project.

The attachments to this submittal are:

- Form PI-7 CERT
- §106.4 Demonstration of Compliance
- §106.261/262 Workbook
- Process Flow Diagram and Process Description
- Table 1 Emission Limits
- PBR Compliance Table
- 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.

Please contact me at (979) 979-529-3209 or via email at VLProper1@Olin.com for question regarding this submittal.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Lauren Proper', is written over a light blue horizontal line.

Lauren Proper  
Air Permit Manager  
Blue Cube Operations LLC\*

**Certification and Registration for Permits by Rule**  
**Form PI-7-CERT**  
**Page 1**  
**Texas Commission on Environmental Quality**

<b>I. Registrant Information</b>
A. Company or Other Legal Customer Name: <b>Blue Cube Operations LLC (a wholly owned subsidiary of Olin Corporation)</b>
Company Official Contact Information ( <input type="checkbox"/> Mr. <input type="checkbox"/> Mrs. <input checked="" type="checkbox"/> Ms. <input type="checkbox"/> Other _____)
Name: <b>Gretchen Abney</b>
Title: <b>Site Leveraged EH&amp;S Leader</b>
Mailing Address: <b>604 Highway 332</b>
City: <b>Lake Jackson</b>
State: <b>Texas</b>
ZIP Code: <b>77566</b>
Phone: <b>979-529-3050</b>
Fax: <b>N/A</b>
Email Address: <b>FBCLEHS@Olin.com</b>
<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: <b>Lauren Proper</b>
Title: <b>Air Permit Manager</b>
Company Name: <b>Blue Cube Operations LLC</b>
Mailing Address: <b>604 Highway 332</b>
City: <b>Lake Jackson</b>
State: <b>Texas</b>
ZIP Code: <b>77566</b>
Phone Number: <b>979-529-3209</b>
Fax Number: <b>N/A</b>
Email Address: <b>VLProper1@Olin.com</b>

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<b>II. Facility and Site Information</b>
A. Name and Type of Facility
Facility Name: <b>Chlorinated Methane Products Facility</b>
Facility Type: <input checked="" type="checkbox"/> Permanent <input type="checkbox"/> Temporary
For portable units, please provide the serial number of the equipment being authorized below.
Serial No(s):
B. Facility Location Information
Street Address: <b>2301 N. Brazosport Blvd</b>
If there is no street address, provide written driving directions to the site and provide the closest city or town, county, and ZIP code for the site (attach description if additional space is needed).
City: <b>Freeport</b>
County: <b>Brazoria</b>
ZIP Code: <b>77541-3257</b>
C. TCEQ Core Data Form
Is the Core Data Form (TCEQ Form Number 10400) attached? <span style="float: right;"><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</span>
If "NO," provide customer reference number (CN) and regulated entity number (RN) below.
Customer Reference Number (CN): <b>CN604930784</b>
Regulated Entity Number (RN): <b>RN108772245</b>
D. TCEQ Account Identification Number (if known): <b>BL-A044-R</b>
E. Type of Action
<input checked="" type="checkbox"/> Initial Application <input type="checkbox"/> Change to Registration
For Change to Registration provide the Registration Number:
F. PBR number(s) claimed under 30 TAC Chapter 106
(List all the individual rule number(s) that are being claimed.)
<b>106.261</b>
<b>106.262</b>
106.
106.

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<b>II. Facility and Site Information (continued)</b>	
G. Historical Standard Exemption or PBR	
Are you claiming a historical standard exemption or PBR? <span style="float: right;"><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</span>	
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? <span style="float: right;"><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</span>	
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? <span style="float: right;"><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</span>	
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.	
Standard Exemption, PBR Registration, and Standard Permit Registration Number(s):	
Effective Date:	<b>There are many PBRs and Standard Permits registered at this site. A list can be provided if necessary for review of this project.</b>
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? <span style="float: right;"><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</span>	
If "YES," enter permit number(s) in the spaces provided below.	
<b>There are many NSR Permits issued for this site. A list can be provided if necessary for review of this project.</b>	
K. Affected Air Preconstruction Permits	
Does the PBR being claimed directly affect any permitted facility? <span style="float: right;"><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</span>	

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<b>II. Facility and Site Information</b> <i>(continued)</i>
If "YES," enter the permit number(s) in the spaces provided below.
<b>5340</b>
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? <span style="float: right;"><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> To Be Determined</span>
If the site currently has an existing FOP, enter the permit number: <b>O1388</b>
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 <span style="margin-left: 50px;"><input type="checkbox"/> Significant Revision for an SOP</span> <span style="margin-left: 50px;"><input type="checkbox"/> Minor Revision for an SOP</span>
<input type="checkbox"/> Operational Flexibility/Off Permit Notification for an SOP <span style="float: right;"><input type="checkbox"/> Revision for a GOP</span>
<input type="checkbox"/> To be Determined <span style="margin-left: 100px;"><input checked="" type="checkbox"/> None</span>
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 <span style="margin-left: 50px;"><input type="checkbox"/> GOP</span> <span style="margin-left: 20px;"><input type="checkbox"/> GOP application/revision (submitted or under APD review)</span>
<input type="checkbox"/> N/A <span style="margin-left: 50px;"><input checked="" type="checkbox"/> SOP application/revision (submitted or under APD review)</span>
<b>III. Fee Information</b> <i>(See Section VII. for address to send fee or go to <a href="http://www.tceq.texas.gov/epay">www.tceq.texas.gov/epay</a> to pay online.)</i>
A. Fee Requirements
Is a fee required per Title 30 TAC § 106.50? <span style="float: right;"><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</span>
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. <span style="float: right;"><input type="checkbox"/></span>
2. Registration is within six months of an initial PBR review, and it is addressing deficiencies, administrative changes, or other allowed changes. <span style="float: right;"><input type="checkbox"/></span>
3. Registration is for a remediation project (30 TAC § 106.533). <span style="float: right;"><input type="checkbox"/></span>
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. <span style="float: right;"><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</span>
This business has less than \$6 million dollars in annual gross receipts. <span style="float: right;"><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</span>
This registration is submitted by a governmental entity with a population of less than 10,000. <span style="float: right;"><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</span>
This registration is submitted by a non-profit organization. <span style="float: right;"><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</span>

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<b>III. Fee Information</b> (See Section VII. for address to send fee or go to <a href="http://www.tceq.texas.gov/epay">www.tceq.texas.gov/epay</a> to pay online.) (continued)	
2. A \$450 fee is required for all other registrations	
A. Payment Information	
Check/money order/transaction or voucher number: <b>Paid via STEERS</b>	
Individual or company name on check: <b>Not applicable</b>	
Fee Amount: <b>\$ 450</b>	
Was the fee paid online? <span style="float: right;"><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</span>	
<b>IV. Technical Information Including State And Federal Regulatory Requirements</b> <b>Check the appropriate box to indicate what is included in your submittal.</b> <b>NOTE:</b> 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? <span style="float: right;"><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</span>	
Did you demonstrate that the individual requirements of the specific PBR are met? <span style="float: right;"><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</span>	
B. Confidential Information Included (If confidential information is submitted with this registration, all confidential pages must be properly marked "CONFIDENTIAL.") <span style="float: right;"><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</span>	
C. Process Flow Diagram: <span style="float: right;"><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</span>	
D. Process Description: <span style="float: right;"><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</span>	
E. Maximum Emissions Data and Calculations: <span style="float: right;"><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</span>	
<b>Note:</b> If the facilities listed in this registration are subject to the Mass Emissions Cap & Trade program under <b>30 TAC Chapter 101, Subchapter H, Division 3</b> , the owner/operator of these facilities must possess NO <sub>x</sub> allowances equivalent to the actual NO <sub>x</sub> emissions from these facilities.	
F. Is this certification being submitted to certify the emissions for the entire site? <span style="float: right;"><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</span>	
If "NO," include a summary of the specific facilities and emissions being certified.	
G. Table 1(a) (Form 10153) Emission Point Summary: <span style="float: right;"><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</span>	
H. Distances from Property Line and Nearest Off-Property Structure	
Distance from this facility's emission release point to the nearest property line:	<b>1000 feet</b>
Distance from this facility's emission release point to the nearest off-property structure:	<b>1000 feet</b>

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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): **January 31, 2025**

Projected Start of Operation (provide date): **February 1, 2025**

**V. Delinquent Fees**

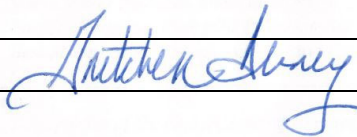
This form **will not be processed** until all delinquent fees and/or penalties owed to the TCEQ or the Office of the Attorney General on behalf of the TCEQ is paid in accordance with the Delinquent Fee and Penalty Protocol. For more information regarding Delinquent Fees and Penalties, go to the TCEQ website at: [www.tceq.texas.gov/agency/financial/fees/delin/index.html](http://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: 1/31/2025

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

**VII. Submitting Copies of the Certification and Registration**

**Copies must be sent as listed below.**

**Processing delays may occur if copies are not sent as noted.**

Who	Where	What
Air Permits Initial Review Team (APIRT)	Regular, Certified, Priority Mail MC 161, P.O. Box 13087 Austin, Texas 78711-3087 Hand Delivery, Overnight Mail MC 161, 12100 Park 35 Circle, Building C, Third Floor Austin, Texas 78753	Originals Form PI-7-CERT, Core Data Form, and all attachments. Not required if using ePermits <sup>1</sup> .
Revenue Section, TCEQ	Regular, Certified, Priority Mail MC 214, P.O. Box 13088 Austin, Texas 78711-3088 Hand Delivery, Overnight Mail MC 214, 12100 Park 35 Circle, Building A, Third Floor Austin, Texas 78753	Original Money Order or Check, Copy of Form PI-7-CERT, and Core Data Form. Not required if fee was paid using ePay <sup>2</sup> .
Appropriate TCEQ Regional Office	To find your Regional Office address, go to the TCEQ website at <a href="http://www.tceq.texas.gov/agency/directory/region">www.tceq.texas.gov/agency/directory/region</a> , or call (512) 239-1250.	Copy of Form PI-7-CERT, Core Data Form, and all attachments. Not required if using ePermits <sup>1</sup>
Appropriate Local Air Pollution Control Program(s)	To Find your local or Regional Air Pollution Control Programs go to the TCEQ, APD website at <a href="http://www.tceq.texas.gov/permitting/air/local_programs.html">www.tceq.texas.gov/permitting/air/local_programs.html</a> , or call (512)-239-1250	Copy of Form PI-7-CERT, Core Data Form, and all attachments.

<sup>1</sup> ePermits located at [www3.tceq.texas.gov/steers/](http://www3.tceq.texas.gov/steers/)

<sup>2</sup> ePay located at [www.tceq.texas.gov/epay](http://www.tceq.texas.gov/epay)



**Blue Cube Operations LLC**  
**Permit by Rule**  
**Connector Addition**  
**Chlorinated Methane Products Facility**

**January 31, 2025**

## Project Description

<b>Overview</b>	<p>This project is to authorize the addition of connectors associated with a replacement heat exchanger. This project will only generate fugitive emissions from the piping components that will be installed. There are no changes to operating conditions or production rates. The applicable requirements will be maintained, and no new requirements are triggered. There are no MSS emissions or upstream/downstream impacts associated with this project.</p>
<b>Affected sources</b>	<p>The following source EPN is being affected by this project:</p> <ul style="list-style-type: none"><li>▪ A18FU01 – A1800 Process Area Fugitives</li></ul>
<b>Upstream and downstream impacts</b>	<p>There are no upstream or downstream impacts.</p>
<b>Impact on central wastewater and solid waste facilities</b>	<p>There will be no impact on the central wastewater treatment facilities or the solid waste facilities.</p>
<b>Emission Calculations</b>	<p>The emission calculations contain confidential information and can be found in the confidential section of this submittal.</p>
<b>MSS Emissions</b>	<p>MSS emissions have not been identified for inclusion in this PBR.</p>
<b>Air Pollutant Watch List</b>	<p>This project occurs within an Air Pollutant Watch List area (APL1201) but does not include any increases or decreases of any pollutant of concern for that area (arsenic, cobalt, nickel, or vanadium).</p>

## Project Description (continued)

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### Title V and Other Regulations

This plant is authorized under the Title V Permit O1388.

The affected fugitive area for this project is an existing fugitive emission area. 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.

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## 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	See Page
IV	Process Description (Non-Confidential)	5
IV	Process Flow Diagram	7

## Process Description

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### Chlorinated Methane Products

Chlorinated methanes are produced in the A-1800 block using two process methods. The first method is the hydrochlorination of methanol, which is stored in NV-11 (EPN A30ST10). HCl and methanol are reacted to methyl chloride and water. Most of the water and HCl are removed in the cooler and sent to treatment at the NBT (Non-Biological Treatment System). Sulfuric acid is fed to the drying tower to continue drying the methyl chloride. After neutralization with water, this liquid effluent flows to the water treatment unit. The methyl chloride is condensed and sent to storage tanks for further reaction in the thermal chlorination system or to loading. The methyl chloride is stored in spherical storage tanks with vents that tie into the process to re-condense.

The second method for producing chlorinated methanes is the thermal chlorination of methyl chloride. Methyl chloride and chlorine are reacted to produce HCl and chloromethanes. HCl and methyl chloride are distilled and the HCl is recycled back to the hydro reactor or the site HCl absorber, while the methyl chloride is recycled to the thermal reactor. The methylene chloride is then separated from the chloroform and crude carbon tetrachloride and then sent to storage for loading.

The chloroform is distilled from crude carbon tetrachloride. The chloroform flows to storage tanks for loading. Crude carbon tetrachloride is stored for loading.

Vents from the production units flow through condensers before flowing to the A16 THROX (EPN A16S1).

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### HCl Absorption and Storage

Anhydrous HCl gas is sent to absorber E-1300 where it is absorbed in water to make 32-38% aqueous HCl acid. The vent streams from the absorbers are sent to the A16 THROX and the acid flows to storage tanks. Storage tank vents and marine loading vents are scrubbed with water in Scrubbers S-2 (EPN A16SV2) and S-1 (EPN A16SV4), respectively. Tank truck loading vents are routed to the Scrubber S-1000 (EPN A10SV1).

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### Non-Biological Treatment Systems

Process water from A-1800, A-1000, A-1600, A-2400, A-3200, A-2600, A-1400 and A-2200 blocks is pH controlled and air stripped before being diverted to a permitted outfall. The air and organics from this process are sent to the A16 THROX, for use as combustion air.

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### A-1600 THROX Treatment System

The “THROX” or Thermal Heat Recovery Oxidizer system uses Blue Cube technology for recovering energy and HCl from waste gas streams. The streams are mixed with methane and burned in excess air to produce HCl, CO<sub>2</sub> and water. The heat of combustion is removed by boiling condensate to generate steam. This steam flows into the plant distribution system. The flue gas from the two redundant boilers, FTB-1A/B flows to a water scrubber T-1 to remove the HCl combustion product. The overhead gas from the water scrubber then flows to a caustic scrubber T-2 which uses water and caustic to react with trace amounts of hydrogen halides and chlorine. The scrubber overhead gas then flows through a blower to a stack (EPN A16S1).

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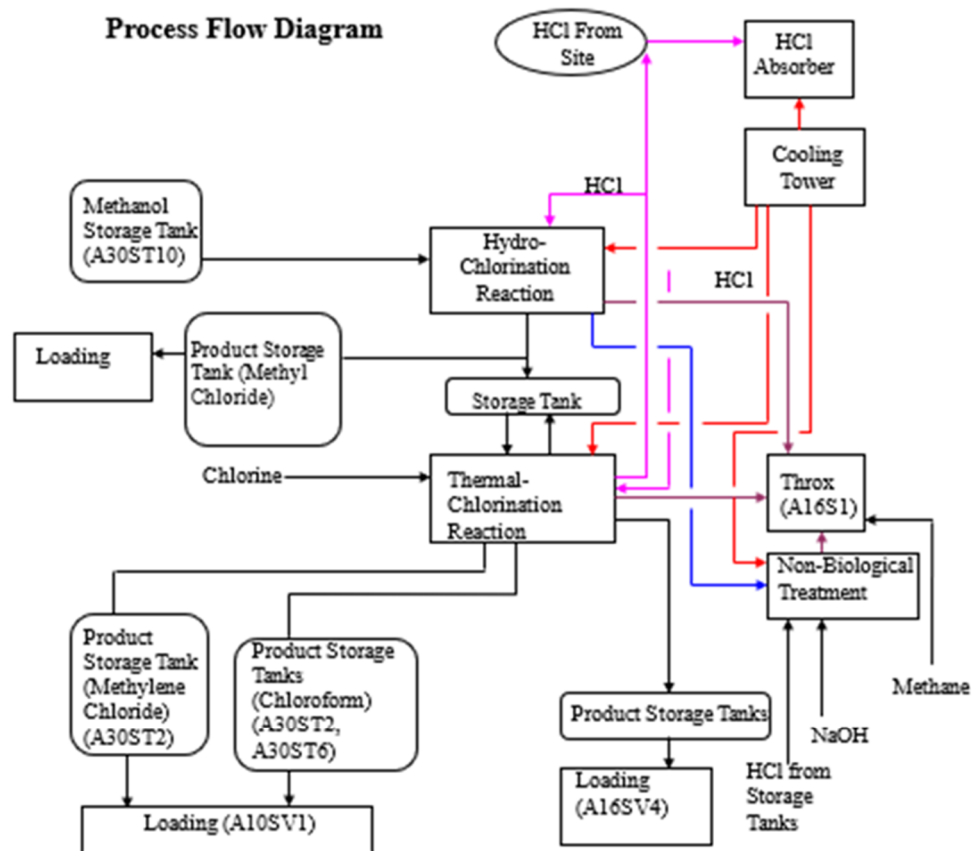
**Perchloroethylene  
Storage**

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Perchloroethylene is brought in from other Blue Cube locations and stored in storage tanks.

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# Process Flow Diagram



Fugitive Areas:  
 A10FU01 – HCl T/T Loading  
 A16FU02 – A1600 Area  
 A18FU01 – A1800 Area  
 A28FUST – A2800 Area  
 A30FU02 – A3000 Area

## Regulatory Requirements

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**In this section**

Following is a list of topics in this section:

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Description	See Page
§106.4 General Requirements for Permitting by Rule	9



**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](http://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 <b>each</b> facility (add additional pages or table if needed): <b>Please see Table 1.a and Table 2</b>	
Are the SO <sub>2</sub> , PM <sub>10</sub> , VOC, or other air contaminant emissions claimed for <b>each</b> facility in this PBR submittal less than 25 tpy?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Are the NO <sub>x</sub> 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 <b>PBR cannot be claimed</b>.</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 <sub>2</sub> , PM <sub>10</sub> , VOC, or other emissions claimed for <b>all</b> facilities in this PBR submittal less than 25 tpy?	<input type="checkbox"/> YES <input type="checkbox"/> NO
Are the NO <sub>x</sub> 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 <b>PBR cannot be claimed</b>. 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**

<b>2. 30 TAC § 106.4(a)(2): Nonattainment Check</b>	<b>Answer</b>
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>	
Does this project trigger a nonattainment review?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Is the project's potential to emit (PTE) for emissions of VOC or NO <sub>x</sub> 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 <sub>x</sub> 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: <a href="http://www.tceq.texas.gov/permitting/air/forms/newsource/tables/nsr_table8.html">www.tceq.texas.gov/permitting/air/forms/newsource/tables/nsr_table8.html</a> and <a href="http://www.tceq.texas.gov/permitting/air/nav/air_docs_newsource.html">www.tceq.texas.gov/permitting/air/nav/air_docs_newsource.html</a>	
<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>	
<b>3. 30 TAC § 106.4(a)(3): Prevention of Significant Deterioration (PSD) check</b>	
Does this project trigger a review under PSD rules?	
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: <a href="http://www.tceq.texas.gov/assets/public/permitting/air/Forms/NewSourceReview/Tables/10173tbl.pdf">www.tceq.texas.gov/assets/public/permitting/air/Forms/NewSourceReview/Tables/10173tbl.pdf</a> and <a href="http://www.tceq.texas.gov/permitting/air/nav/air_docs_newsource.html">www.tceq.texas.gov/permitting/air/nav/air_docs_newsource.html</a>	
<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. <b>30 TAC § 106.4(a)(6): Federal Requirements</b>	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> )	
<b>G,H, EEEE</b>	
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. <b>30 TAC § 106.4(a)(7): PBR prohibition check</b>	
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>	
List permit number(s):	
6. <b>30 TAC § 106.4(a)(8): NO<sub>x</sub> Cap and Trade</b>	
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 <sub>x</sub> 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 checked="" type="checkbox"/> NO

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

<b>7. Highly Reactive Volatile Organic Compounds (HRVOC) check</b>		
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>		
<b>Information</b>	<b>lb/hr</b>	<b>tpy</b>
▶ 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>		
<b>Information</b>	<b>lb/hr</b>	<b>tpy</b>
▶ ethylene		
▶ propylene		

## APPENDICES

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**In this section**

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## 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		
A18FU01	METHYL CHLORIDE	2.3E-04	9.9E-04					
	<b>Total METHYL CHLORIDE</b>	2.3E-04	9.9E-04	103.0	<b>3.03</b>	<b>5.00</b>	106.262(a)(2)	<b>YES</b>
A18FU01	METHANOL	6.8E-04	3.0E-03					
	<b>Total METHANOL</b>	6.8E-04	3.0E-03	262.0	<b>1.00</b>	<b>4.38</b>	106.261(a)(3)	<b>YES</b>
A18FU01	HYDROGEN CHLORIDE	5.0E-03	2.2E-02					
	<b>Total HYDROGEN CHLORIDE</b>	5.0E-03	2.2E-02	1.0	<b>0.03</b>	<b>0.13</b>	106.262(a)(4)	<b>YES</b>
	<b>Grand Total VOC</b>		3.9E-03			<b>5</b>	106.4(a)(2)	<b>YES</b>
	<b>Total HYDROGEN CHLORIDE</b>		2.2E-02			<b>25</b>	106.4(a)(3)	<b>YES</b>

Note: Emissions shown as 0.00 are <0.01 but > zero.

A-1800	1,000 ft. from the nearest off-site receptor.
Therefore in 106.262, the value for K is:	34

### Project Summary of Emission Changes

<b>Plant Name</b>	<b>Chlorinated Methane Products Facility</b>
<b>Project Name</b>	<b>High Level Indicator</b>

	CO	NO <sub>x</sub>	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	VOC
<b>Total of Increases only</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>PSD Significance Levels</b>	<b>100</b>	<b>40</b>	<b>25</b>	<b>15</b>	<b>10</b>	<b>40</b>	
<b>Site Netting Supplied?</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	
<b>Site Contemporaneous Net</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
<b>PSD Applicable?</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	
<b>NNSR Project Netting Required?</b>		<b>NO</b>					<b>NO</b>
<b>NNSR Net Project Increase</b>		<b>0.00</b>					<b>0.00</b>
<b>NNSR Site Contemporaneous Net</b>							
<b>NNSR Applicable?</b>		<b>NO</b>					<b>NO</b>

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.

#### Post-Project Maximum Allowable Annual Emissions, T/yr

Emission Units affected		CO	NO <sub>x</sub>	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	VOC
<b>FIN</b>	<b>EPN</b>							
A18CMFU01	A18FU01							10.36

#### 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 <sub>x</sub>	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	VOC
<b>FIN</b>	<b>EPN</b>							
A18CMFU01	A18FU01							10.36

For fugitive emissions, assumed the pre-project actuals are equal to permit limit.

#### Changes in Emissions, T/yr

(Post-Project Allowable, T/yr) - (Pre-Project Actual, T/yr)

Emission Units affected		CO	NO <sub>x</sub>		PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	VOC
<b>FIN</b>	<b>EPN</b>							
A18CMFU01	A18FU01							0.00

## **Appendix B**

**Table 1(a)-Page 1**

**Table 1(a)-Page 2**



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
Table 1(a) Emissions Point Summary

Date:	January 2025	Permit Number:	5340	RN Number:	108772245
Area Name:	Chlorinated Methane Products Facility			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]
A18FU01	A18CMFU01	A1800 Fugitive Area	VOC	<0.01	0.00
			Hydrogen Chloride	<0.01	0.02

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. (APDG 5178 v5)

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
Table 1(a) Emissions Point Summary

Date:	January 2025		Permit Number:	5340	RN Number:	108772245
Area Name:	Chlorinated Methane Products Facility				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			EMISSION POINT DISCHARGE PARAMETERS										
1. EMISSION POINT			4. UTM COORIDINATES OF EMISSION POINT			SOURCE							
						5. BUILDING HEIGHT (ft)	6. HEIGHT ABOVE GROUND (ft)	7. STACK EXIT DATA			8. FUGITIVES		
EPN (A)	FIN (B)	NAME (C)	ZONE	EAST (Meters)	NORTH (Meters)			DIA (ft) [A]	VEL. (fps) [B]	TEMP (oF) [C]	LENGTH (ft) [A]	WIDHT (ft) [B]	AXIS DEG. [C]
A18FU01	A18CMFU01	A1800 Fugitive Area	15	274,191	3,204,052						700	800	28.62

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. (APDG 5178 v5)

# **APPENDIX C**

## **Monitoring Requirements**

## Monitoring Requirements:

The emissions from this project are from fugitive components.

The plant will follow 28VHP and 28AVO monitoring requirements.