



Building A-3210
2301 N. Brazosport Blvd.
Freeport, TX 77541-3203

ELECTRONIC SUBMITTAL

August 22, 2024

Texas Commission on Environmental Quality
Air Permits Initial Review Team MC-161
P.O. Box 13087
Austin, Texas 78711-3087

RE: Corteva Agriscience LLC; Corteva - Freeport Operations
TCEQ Account Number: BLA060H
CN601287600; RN110746757; Dichlorophenol (DCP) Process Unit;
PBR §106.262 Registration

Dear Sir or Madam:

This registration is being submitted to request authorization of fugitive emissions from components that will be permanently installed at the Dichlorophenol (DCP) Unit. The regulation under 30 Texas Administrative Code (30 TAC) 106.262 will be used to authorize fugitive emissions from these components. The resulting emissions will be rolled into NSR Permit No. 98806 at the next amendment and/or renewal.

The following attachments are being submitted with this package:

- Form PI-7 CERT
- Area Map
- PBR §106.4 Applicability Checklist
- Process Flow Diagram and Process Description
- Table 1(a) Emission Point Summary
- PBR §106.262 Applicability Checklist
- PBR General Facilities Workbook
- Emissions Calculations

If you have any questions concerning this project, please contact me at 979-292-6711 or at the following e-mail address: Sharareh.Rafati@Corteva.com.

Sincerely,

Sharareh Rafati
Environmental Specialist



Enclosures

cc: Director, Environmental Health, Brazoria County Health Department
JodieV@brazoria-county.com



Dichlorophenol (DCP) Unit

106.262 PBR Submittal

Bleed Addition to D-500 KO Pot

August 2024

DCP Process Unit - A3200

2301 N. Brazosport Blvd, Building A-3201
Freeport, TX 77541-3203

Table of Contents

PROJECT DESCRIPTION	3
BACKGROUND	3
SCOPE.....	3
AFFECTED EMISSIONS SOURCES	3
UPSTREAM AND DOWNSTREAM IMPACTS	3
EMISSION CALCULATIONS	3
FEDERAL REGULATORY ANALYSIS	3
TITLE V AND OTHER REGULATIONS	3
PROCESS FLOW DIAGRAM	4

ATTACHMENTS

Attachment A: Area Map

Attachment B: PI-7 CERT

Attachment C: Emissions Calculations

Attachment D: Table 1(a)

Attachment E: TCEQ Workbook

Attachment F: Federal Regulatory Analysis

Attachment G: PBR §106.4 Checklist

Attachment H: PBR §106.262 Checklist

Project Description

Background

Corteva Agriscience LLC (Corteva) owns the Dichlorophenol (DCP) Unit located at Block 3200 of a chemical manufacturing complex in Freeport, Brazoria County, Texas. The DCP Unit is authorized under New Source Review (NSR) Permit 98806 and Federal Operating Permit O2206.

Scope

Addition of a bleed valve to DF-500 KO Pot to improve clearing.

Affected Emissions Sources

The following emission point number (EPN) and facility identification number (FIN) (from NSR 98806) are affected by this project:

EPN: A32FU4300

FIN: A32DCFU430

Upstream and downstream impacts

The proposed project will not increase throughput or production. There will be no upstream or downstream impacts. The emission increases associated with this project are strictly a result of piping reconfigurations.

Emission Calculations

The emission calculations are provided in Attachment C; the Table 1(a) is provided in Attachment D; and the PBR compliance table is shown in Attachment E of this submittal.

Federal Regulatory Analysis

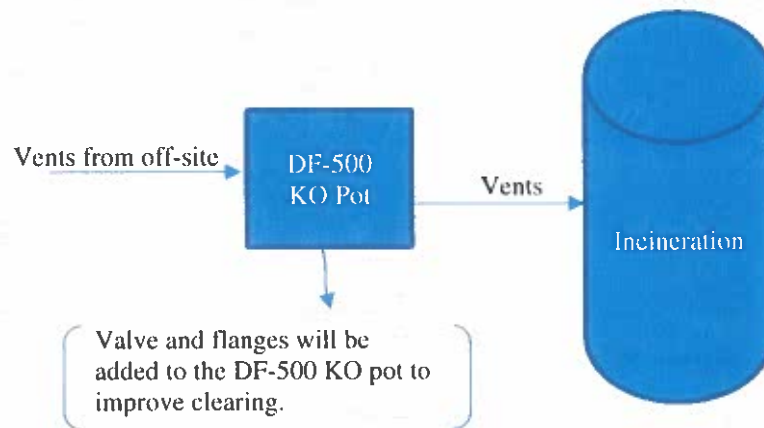
VOC emission increases from equipment fugitives are calculated later in this document to demonstrate that neither PSD nor NNSR is applicable to this project; this analysis is provided in Attachment F.

Title V and Other Regulations

The emissions points and facility IDs for this plant are authorized under Title V Permit O2206. The only affected source for this project is an existing fugitive emission area, and no new chemicals are introduced; therefore, it is exempt from off-permit notification. This exemption is documented in TCEQ's "[Site Operating Permit \(SOP\) Revision Application Guidance](#)", APDG 5951v16, Revised 01/20, middle of page 7 under "Note" in section VII, part D. No other regulatory notifications will be required as a result of this project. The project does not change applicability or compliance to any other current state and federal regulations.

PROCESS FLOW DIAGRAM

1. DF-500 KO Pot (FIN A32DCFU430; EPN A32FU4300):



PBR Attachments

Attachment A: Area Map

Attachment B: PI-7 CERT

Attachment C: Emissions Calculations

Attachment D: Table 1(a)

Attachment E: TCEQ Workbook

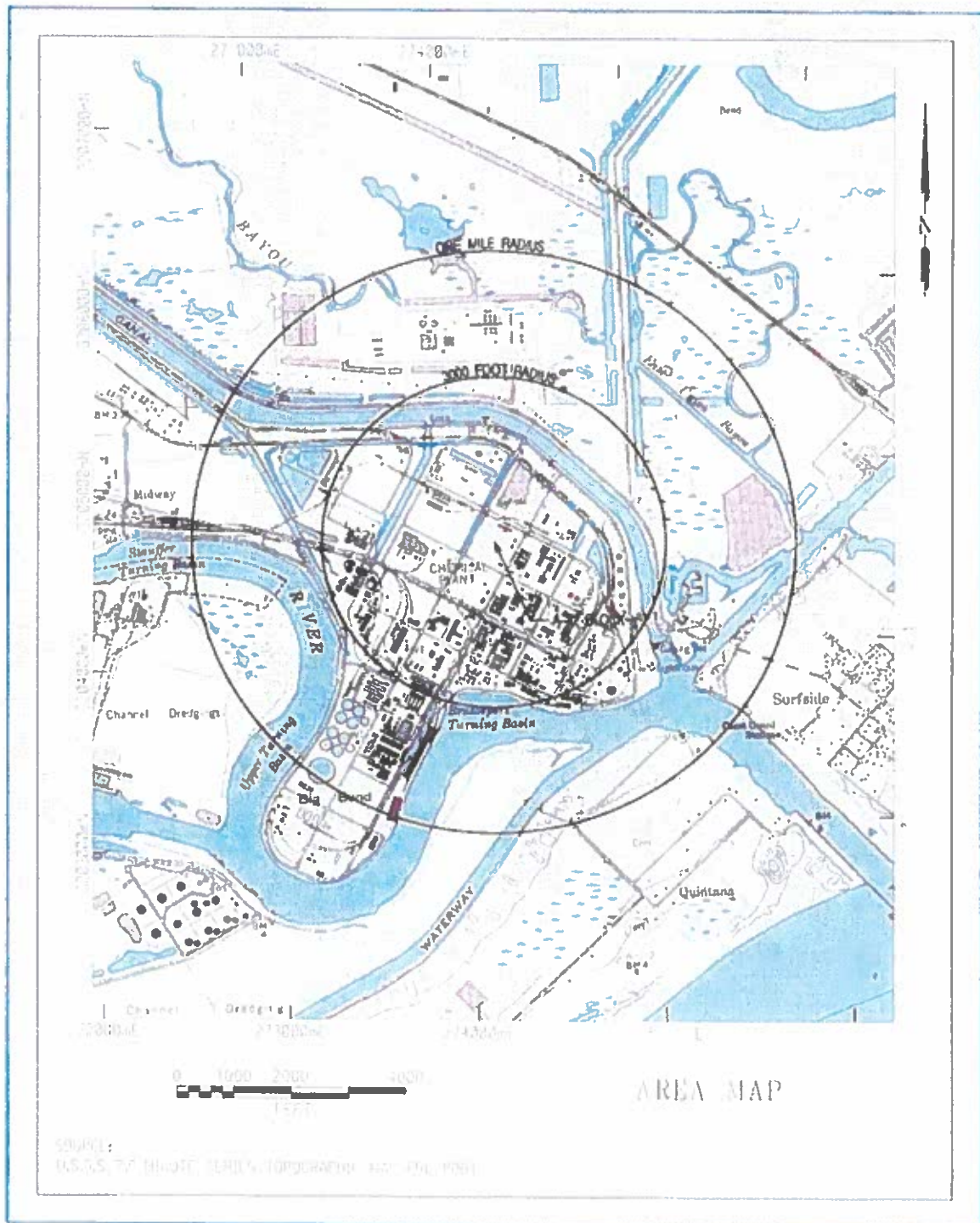
Attachment F: Federal Regulatory Analysis

Attachment G: PBR §106.4 Checklist

Attachment H: PBR §106.262 Checklist

Attachment A: Area Map

Corteva Freeport Operations



Attachment B: PI-7 CERT

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

I. Registrant Information		
A. Company or Other Legal Customer Name: Corteva Agriscience LLC		
B. Company Official Contact Information (☒ Mr. ☐ Mrs. ☐ Ms. ☐ Other _____)		
Name: John D. Phillips III		
Title: Freeport Facility Leader		
Mailing Address: Building A-3210, 2301 N. Brazosport Blvd.		
City: Freeport	State: TX	ZIP Code: 77541
Phone: 515-535-1401	Fax: _____	
E-mail Address: John.Phillips-1@Corteva.com		
<i>All PBR registration responses will be sent via e-mail.</i>		
C. Technical Contact Information (☐ Mr. ☐ Mrs. ☒ Ms. ☐ Other _____)		
Name: Sharareh Rafati		
Title: Environmental Specialist		
Company Name: Corteva Agriscience LLC		
Mailing Address: Building A-3210, 2301 N. Brazosport Blvd.		
City: Freeport	State: TX	ZIP Code: 77541
Phone: 979-292-6711	Fax: _____	
E-mail: Sharareh.Rafati@Corteva.com		
II. Facility and Site Information		
A. Name and Type of Facility		
Facility Name: Dichlorophenol (DCP) Unit		
Type of Facility:	☒ Permanent	☐ Temporary
For portable units, please provide the serial number of the equipment being authorized below.		
Serial No: _____	Serial No: _____	
B. Facility Location Information		
Street Address: 2301 N. Brazosport Blvd.		
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: Freeport	County: Brazoria	ZIP Code: 77541

**Texas Commission on Environmental Quality
Certification and Registration for Permits by Rule
Form PI-7-CERT
Page 2**

II. Facility and Site Information *(continued)*

C. TCEQ Core Data Form

Is the Core Data Form (TCEQ Form Number 10400) attached?

☐ YES ☒ NO

If "NO," provide customer reference number (CN) and regulated entity number (RN) below.

Customer Reference Number (CN): **CN 601287600**

Regulated Entity Number (RN): **RN 110746757**

D. TCEQ Account Identification Number (if known): BLA060H

E. Type of Action:

☒ Initial Application ☐ 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.)

	106.
106.262	106.
	106.

G. Historical Standard Exemption or PBR

Are you claiming a historical standard exemption or PBR?

☐ YES ☒ NO

If "YES," enter rule number(s) and associated effective date in the spaces provided below.

Rule Number(s)	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?

☐ YES ☒ 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(s)	Effective Date

**Texas Commission on Environmental Quality
Certification and Registration for Permits by Rule
Form PI-7-CERT
Page 3**

II. Facility and Site Information (continued)	
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?	☒ YES ☐ 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.	
Standard Exemption, PBR Registration, and Standard Permit Registration Number(s)	Effective Date
There are several standard exemptions, PBRs and Standard Permit Registrations at this site. A list can be provided if necessary.	
J. Other Air Preconstruction Permits	
Are there any other air preconstruction permits at this site?	☒ YES ☐ NO
If "YES," enter permit number(s) in the spaces provided below.	
NSR 770 NSR 98806	
K. Affected Air Preconstruction Permits	
Does the PBR being claimed directly affect any permitted facility?	☒ YES ☐ NO
If "YES," enter the permit number(s) in the spaces provided below.	
NSR 98806	
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?	☒ YES ☐ NO ☐ To Be Determined
If the site currently has an existing FOP, enter the permit number: O2206	
Check the requirements of 30 TAC Chapter 122 that will be triggered if this certification is accepted. (check all that apply)	
☐ Initial Application for an FOP ☐ Significant Revision for an SOP ☐ Minor Revision for an SOP ☐ Operational Flexibility/Off Permit Notification for an SOP ☐ Revision for a GOP ☐ To be Determined ☒ None	
2. Identify the type(s) of FOP issued and/or FOP application(s) submitted/pending for the site. (check all that apply)	
☒ SOP ☐ GOP ☐ GOP application/revision (submitted or under APD review) ☐ N/A ☐ SOP application/revision (submitted or under APD review)	

**Texas Commission on Environmental Quality
Certification and Registration for Permits by Rule
Form PI-7-CERT
Page 4**

III. Fee Information (See Section VII. for address to send fee or go to www.tceq.texas.gov/epay to pay online.)

A. Fee Requirements

Is a fee required per Title 30 TAC § 106.50? ☒ YES ☐ NO

If "NO," specify the exception. There are three exceptions to paying a PBR fee. (check all that apply)

1. Registration is solely to establish a federally enforceable emission limit. ☐

2. Registration is within six months of an initial PBR review, and it is addressing deficiencies, administrative changes, or other allowed changes. ☐

3. Registration is for a remediation project (30 TAC § 106.533). ☐

B. Fee Amount

1. A \$100 fee is required if any of the answers in III.B.1 are "YES."

This business has less than 100 employees. ☐ YES ☒ NO

This business has less than \$6 million dollars in annual gross receipts. ☐ YES ☒ NO

This registration is submitted by a governmental entity with a population of less than 10,000. ☐ YES ☒ NO

This registration is submitted by a non-profit organization. ☐ YES ☒ NO

2. A \$450 fee is required for all other registrations.

C. Payment Information

Check/money order/transaction or voucher number:

Individual or company name on check:

Fee Amount: **\$450**

Was fee paid online? ☒ YES ☐ 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? ☒ YES ☐ NO

Did you demonstrate that the individual requirements of the specific PBR are met? ☒ YES ☐ NO

B. Confidential Information Included (If confidential information is submitted with this registration, all confidential pages must be properly marked "CONFIDENTIAL.") ☒ YES ☐ NO

**Texas Commission on Environmental Quality
Certification and Registration for Permits by Rule
Form PI-7-CERT
Page 5**

IV. Technical Information Including State and Federal Regulatory Requirements
(continued)

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.

C. Process Flow Diagram	☒ YES ☐ NO
-------------------------	---

D. Process Description	☒ YES ☐ NO
------------------------	---

E. Maximum Emissions Data and Calculations	☒ YES ☐ 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?	☐ YES ☒ NO
--	---

If "NO," include a summary of the specific facilities and emissions being certified.

G. Table 1(a) (Form 10153) Emission Point Summary	☒ YES ☐ NO
---	---

H. Distances from Property Line and Nearest Off-Property Structure

Distance from this facility's emission release point to the nearest property line:	2,756 feet
--	------------

Distance from this facility's emission release point to the nearest off-property structure:	4,035 feet
---	------------

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):	September 2024
---	----------------

Projected Start of Operation (provide date):	September 2024
--	----------------

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.

Texas Commission on Environmental Quality

Certification and Registration for Permits by Rule

Form PI-7-CERT

Page 6

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): **John D. Phillips III, Freeport Facility Leader**

Signature (original signature required):

John D. Phillips, III

8/22/24
Date

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

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 ¹ .
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 ² .
Appropriate TCEQ Regional Office	To find your Regional Office address, go to the TCEQ website at www.tceq.texas.gov/agency/directory/region , or call (512) 239-1250.	Copy of Form PI-7-CERT, Core Data Form, and all attachments. Not required if using ePermits ¹
Appropriate Local Air Pollution Control Program(s)	To Find your local or Regional Air Pollution Control Programs go to the TCEQ, APD website at www.tceq.texas.gov/permitting/air/local_programs.html , or call (512)-239-1250	Copy of Form PI-7-CERT, Core Data Form, and all attachments.

¹ ePermits located at www3.tceq.texas.gov/steers/

² ePay located at www.tceq.texas.gov/epay

TCEQ-20182 (APDG 5379v25, revised 07/19) PI-7-CERT

This form is for use by facilities subject to air quality permit requirements and may be revised periodically.

Attachment C: Emissions Calculations

EPN: A32FU4300
FIN: A32DCFU430
Description: Fugitive Emission Calculations

Basis of Calculation:

The emission factors and reduction factors are taken from TCEQ's Technical Guidance Document "Fugitive Guidance," (APDG 6422) dated June 2018.

Equipment	Service	Stream Name	Component Count	Monitoring Program/Definition	Monitoring	Time (hrs/yr)	Ethylene Service	Emission Factor (lb/hr-#)	Total Emissions (lb/hr)	Total Emissions (tpy)
Valves	G/V	39	1	28VHP	0.97	8760	SOCMI w/o C2	0.0089	0.00027	0.0012
Connectors	G/V	39	2	28VHP	0.75	8760	SOCMI w/o C2	0.0029	0.00145	0.0064

Stream Speciation	39
Contaminant	(%)
Vinyl Chloride	95%
Acetylene	3%
Ammonia	2%
FERRIC CHLORIDE	0%
PENTACHLOROPHENOL	0%
DOWTHERM J	0%
PHENOL	0%
MONO-CHLOROPHENOL	0%
CHLORINE	0%
SULFUR DIOXIDE	0%
SULFURYL CHLORIDE	0%
HYDROCHLORIC ACID	0%
PERCHLOROETHYLENE (PERC)	0%
NITROGEN	0%
Total	100%

Stream Number	Component	Net Change	Stream	Change Hourly (lb/hr)	Change Yearly (tpy)
B	Valve	1	B	0.00027	0.00117
B	Connector	2	B	0.00145	0.00635

Chemical	lb/hr	tpy
Vinyl Chloride	0.0016	0.007
Acetylene	5.15E-05	2.26E-04
Ammonia	3.43E-05	1.50E-04
SUM VOC ONLY	0.0017	0.0074

Attachment D: Table 1(a)



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Table 1(a) Emission Point Summary

Date:	August 2024	Permit No.:	98806	Regulated Entity No.:	RN 110746757
Area Name:	Dichlorophenol (DCP) Unit			Customer Reference No.:	CN 601287600

AIR CONTAMINANT DATA									
1. Emission Point			2. Component or Air Contaminant Name	Current Allowable Emission Rates		Proposed Increases		New Allowable Emission Rates	
EPN	FTN	Source Description		lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
A 32FU4300	A 32DCFU430	Fugitives for DCP Plant	Vinyl Chloride*	0.21	0.90	0.00168	0.0074	0.21	0.91
			Acetylene*	0.01	0.03	0.00005	0.0002	0.01	0.03
			Ammonia	0.004	0.02	0.00003	0.0002	0.00	0.02
			TOTAL VOC	0.21	0.93	0.0017	0.0074	0.213	0.933

EPN = Emission Point Number

FIN = Facility Identification Number

*VOC

PBR Compliance

EPN	CAS	Air Contaminant	Project Increase		TLV or L Value mg/m3	PBR Limit		Limit Citation	In Compliance
			lb/hr	T/yr		lb/hr	T/yr		
A32FU4300	75-1-04	Vinyl Chloride	0.0016	0.007		0.25	1.10	106.262(a)(2)	YES
	74-86-2	Acetylene	5.15E-05	2.26E-04		6.00	5.00	106.262(a)(2)	YES
	7664-41-7	Ammonia	3.43E-05	1.50E-04		2.13	5.00	106.262(a)(2)	YES
		TOTAL VOC		0.007			5.00	106.4(a)(2)	YES

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

Distance = 4035
K = 8

Attachment E: TCEQ Workbook

Attached as external Excel workbook.

Attachment F: Federal Regulatory Analysis

Federal Regulatory Analysis

PBR 106.261

	CO	NOx	PM-10	SO2	VOC
Total of Increases only	0.00	0.00	0.00	0.00	0.0074
PSD Significance Levels	100	40	15	40	
PSD Site Netting Supplied?	NO	NO	NO	NO	
Site Contemporaneous increase	NA	NA	NA	NA	
PSD Applicable?	NO	NO	NO	NO	
NNSR Project Netting Required?		NO			NO
NNSR Net Project Increase		0.00			0.0074
NNSR Applicable?		NO			NO

Basis for determination:

This determination is based on project and AEI information. According to TCEQ's APDG 5881v7, "Major New Source Review - Applicability Determination" published October 2018.

Post-Project Maximum Allowable Annual Emissions, T/yr

Emission Units affected by project		CO	NOx	PM PM10	SO2	VOC
FIN	EPN					
A32DCFU430	A32FU4300					0.933

Pre-Project Actual Annual Emissions, T/yr (24 month average)

SUBSTITUTE THE PRECHANGE ALLOWABLE IF IT IS SMALLER THAN THE ACTUAL

Emission Units affected by project		CO	NOx	PM PM10	SO2	VOC
FIN	EPN					
A32DCFU430	A32FU4300					0.926

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 by project		CO	NOx	PM PM10	SO2	VOC
FIN	EPN					
A32DCFU430	A32FU4300					0.0074

Attachment G: PBR §106.4 Checklist

**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):	
Are the SO ₂ , PM ₁₀ , VOC, or other air contaminant emissions claimed for each facility in this PBR submittal less than 25 tpy?	☒ YES ☐ NO
Are the NO _x and CO emissions claimed for each facility in this PBR submittal less than 250 tpy?	☒ YES ☐ 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.)	☒ YES ☐ 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?	☐ YES ☐ NO
Are the NO _x and CO emissions claimed for all facilities in this PBR submittal less than 250 tpy?	☐ YES ☐ 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?	☒ YES ☐ 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:	☒ HGB
(Moderate) - Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise counties:	☐ 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?	☐ YES ☒ NO
Is the project's potential to emit (PTE) for emissions of VOC or NO _x increasing by 100 tpy or more?	☐ YES ☒ 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?	☐ YES ☒ 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/newsource/tables/nsr_table8.html and www.tceq.texas.gov/permitting/air/nav/air_docs_newsource.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?	
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?	☐ YES ☒ NO
Are emissions of any criteria pollutant increasing by 250 tpy of any criteria pollutant at an unnamed source?	☐ YES ☒ NO
Are emissions increasing above significance levels at an existing major site?	☐ YES ☒ 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_newsource.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)?	☐ YES ☐ NO ☒ 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?	☐ YES ☐ NO ☒ NA
If "Yes," which Subparts are applicable? <i>(answer below.)</i>	
Will all facilities under this PBR meet applicable requirements of 40 CFR Part 61, National Emissions Standards for Hazardous Air Pollutants (NESHAPs)?	☐ YES ☐ NO ☒ 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?	☐ YES ☒ 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. 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?	☒ YES ☐ 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)?	☐ YES ☒ NO

**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?	☐ YES ☒ 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?	☐ YES ☐ 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?	☐ YES ☐ 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?	☒ YES ☐ NO	
<i>If "Yes," answer the next question. If "No," the checklist is complete.</i>		
Will the project be constructed after June 1, 2006?	☒ YES ☐ 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?	☐ YES ☒ NO	
<i>If "Yes," complete the information below:</i>		
Information	lb/hr	tpy
▶ ethylene		
▶ propylene		

Attachment H: PBR §106.262 Checklist

Texas Commission on Environmental Quality
Title 30 Texas Administrative Code § 106.262
Permit by Rule (PBR) Checklist
Facilities (Emission and Distance Limitations)

The following checklist is designed to help you confirm that you meet Title 30 Texas Administrative Code § 106.262 (30 TAC § 106.262) requirements. If you do not meet all the requirements, you may alter the project design or operation in such a way that all the requirements of the PBR are met or you may obtain a construction permit. The PBR forms, tables, checklists, and guidance documents are available from the Texas Commission on Environmental Quality (TCEQ), Air Permits Division website at, www.tceq.texas.gov/nav/permits/air_permits.html.

For additional assistance with your application, including resources to help calculate your emissions, please visit the Small Business and Local Government Assistance (SBLGA) webpage at the following link: www.TexasEnviroHelp.org

Check the Most Appropriate Answer			
Is a description or checklist of how this claim meets the general requirements for the use of PBRs in 30 TAC § 106.4 attached?		☒ YES ☐ NO ☐ N/A	
a	Does this project represent a physical or operational change to an NSR permitted facility in which the result of the project is an increase in <i>only</i> annual emissions with no impact to the current authorized hourly emission rate? ¹	☐ YES ☒ NO ☐ N/A	
b1.	Is this claim for construction of a facility authorized in another section of this chapter or for which a standard permit is in effect? <i>If "YES," this PBR cannot be used to authorize emissions from the project.</i>	☐ YES ☒ NO ☐ N/A	
b2.	Is this claim for any change to any facility authorized under another section of this chapter or authorized under a standard permit? <i>If "YES," this PBR cannot be used to authorize emissions from the project.</i>	☐ YES ☒ NO ☐ N/A	
c.	Is the facility authorized under another section of this chapter or under a standard permit? <i>If "YES," subsection (a)(2) and (3) of this section may be used to qualify the use of other chemicals at the facility.</i>	☐ YES ☒ NO ☐ N/A	
a1.	Are facilities or changes located at least 100 feet from any recreational area or residence or other structure not occupied or used solely by the owner or operator of the facilities or the owner of the property upon which the facilities are located?	☒ YES ☐ NO ☐ N/A	
a2.	Are new or increased emissions, including fugitives, emitted in a quantity less than five tons per year or in a quantity less than E as determined by using the equation $E=L/K$? ² See Table 262 Figures 1 and 2. <i>If "YES," the notification shall include a description of the project, calculations for all emissions being claimed under this PBR:</i>	☒ YES ☐ NO ☐ N/A	
Chemical: Vinyl Chloride Chemical: Acetylene	L value: 2 L value: 2662	D: 4035 D: 4035	K: 8 K: 8

¹ Project emission increases associated with a change to a facility that only result in an annual emissions increase can be authorized as part of the PBR claim if the following information is met: 1) the hourly emissions stay at or below current authorized emission limits; 2) there is not a change to any underlying air authorizations for the applicable units associated with BACT or health and environmental impacts; and 3) this claim is certified via PI-7 CERT. The annual emission increases associated with the PBR claim may not circumvent major new source review requirements under 30 TAC Chapter 116.

² Any upstream and/or downstream actual emission increases that result from a project for which this PBR is claimed need to be authorized appropriately. Any associated upstream and/or downstream emissions authorized as part of the PBR claim will need to be included as part of the total new or increased emissions, unless: 1) these emissions stay at or below current authorized emission limits; 2) there is not a change to any underlying air authorizations for the applicable units associated with BACT, health and environmental impacts, or other representations (i.e. construction plans, operating procedures, throughputs, maximum emission rates, etc.); and 3) this claim is certified via PI-7 CERT. Notwithstanding the exclusion of any upstream and/or downstream emissions under this PBR claim, the total of all emission increases, including upstream and/or downstream actual emission increases, are required to be part of the PBR registration to determine major new source review applicability under Title 30 TAC Chapter 116. The emission increases associated with the PBR claim and all upstream and/or downstream actual emission increases may not circumvent major new source review requirements under 30 TAC Chapter 116.

Title 30 Texas Administrative Code § 106.262
Permit by Rule (PBR) Checklist
Facilities (Emission and Distance Limitations)

Check the Most Appropriate Answer			
a3.	Is this checklist attached to a Form PI-7 within ten days following the installation or modification of the facilities? <i>If "YES," the notification shall include a description of the project, calculations, and data identifying specific chemical names, L values, and a description of pollution control equipment, if any.</i>	☒ YES ☐ NO ☐ N/A	
a4.	Are one or more of the following chemicals is handled for this registration? (Check all that apply) <i>If "YES," answer the following four questions.</i>	☐ YES ☒ NO ☐ N/A	
☐	acrolein	☐	diazomethane
☐	allyl chloride	☐	diborane
☐	ammonia (anhydrous)	☐	diglycidyl ether
☐	arsine	☐	dimethylhydrazine
☐	boron trifluoride	☐	ethyleneimine
☐	bromine	☐	ethyl mercaptan
☐	carbon disulfide	☐	fluorine
☐	chlorine	☐	formaldehyde (anhydrous)
☐	chlorine dioxide	☐	hydrogen bromide
☐	chlorine trifluoride	☒	hydrogen chloride
☐	chloroacetaldehyde	☐	hydrogen cyanide
☐	chloropicrin	☐	hydrogen fluoride
☐	chloroprene	☐	hydrogen selenide
☐		☐	hydrogen sulfide
☐		☐	ketene
☐		☐	methylamine
☐		☐	methyl bromide
☐		☐	methyl hydrazine
☐		☐	methyl isocyanate
☐		☐	methyl mercaptan
☐		☐	nickel carbonyl
☐		☐	nitric acid
☐		☐	nitric oxide
☐		☐	nitrogen dioxide
☐		☐	oxygen difluoride
☐		☐	ozone
☐		☐	pentaborne
☐		☐	perchloromethyl mercaptan
☐		☐	perchloryl fluoride
☐		☐	phosgene
☐		☐	phosphine
☐		☐	phosphorus trichloride
☐		☐	selenium
☐		☐	hexafluoride stibine
☐		☐	liquefied sulfur dioxide
☐		☐	sulfur pentafluorid
☐		☐	tellurium hexafluoride
Are all facilities are located at least 300 feet from the nearest property line and 600 feet from any off-plant receptor?			
			☐ YES ☐ NO ☒ N/A
Are the cumulative amount of any of the following chemicals resulting from one or more authorizations under this section (but not including permit authorizations) less than or equal to 500 pounds on the plant property?			
			☐ YES ☐ NO ☒ N/A
Are all listed chemicals handled only in unheated containers operated in compliance with the United States Department of Transportation regulation (49 Code of Federal Regulation, Parts 171-178)?			
			☐ YES ☐ NO ☒ N/A
a5.	Are there any changes to or additions of any existing air pollution abatement equipment?	☐ YES ☐ NO ☒ N/A	
a6.	Will there be any visible emissions, except uncombined water, emitted to the atmosphere from any point or fugitive source in amounts greater that 5.0% opacity in any six-minute period?	☐ YES ☐ NO ☒ N/A	

Title 30 Texas Administrative Code § 106.262
Permit by Rule (PBR) Checklist
Facilities (Emission and Distance Limitations)

D (feet)	K	Value Description
100	326	E=maximum allowable hourly emission, and never to exceed 6 pounds per hour.
200	200	
300	139	
400	104	
600	65	
700	54	
800	46	K=value from the table on this page. (interpolate intermediate values)
900	39	
1,000	34	
2,000	14	D=distance to the nearest off-plant receptor
3,000 or more	8	

Table 262
Limit Values (L) for use with Exemptions from Permitting § 106.262

The values are not to be interpreted as acceptable health affects values relative to the issuance of any permits under Chapter 116 of this title (relating to Control of Air Pollution by Permits for new Construction or Modification).

Compound	Limit (L) Milligrams Per Cubic Meter
Acetone	590.
Acetaldehyde	9.
Acetone	4.
Acetonitrile	34.
Acetylene	2662.
N-Amyl Acetate	2.7
Sec-Amyl Acetate	1.1
Benzene	3.
Beryllium and Compounds	0.0005
Boron Trifluride, as HF	0.5
Butyl Alcohol,	76.
Butyl Acrylate	19.
Butyl Chromate	0.01
Butyl Glycidyl Ether	30.
Butyl Mercaptain	0.3
Butyraldehyde	1.4
Butyric Acid	1.8
Butyronitrile	22.
Carbon Tetrachloride	12.
Chloroform	10.
Chlorophenol	0.2
Chloroprene	3.6
Chromic Acid	0.01
Chromium Metal, Chromium II and III Compounds	0.1
Chromium VI Compounds	0.01
Coal Tar Pitch Volatiles	0.1
Creosote	0.1
Cresol	0.5
Cumene	50.
Dicyclopentadiene	3.1
Diethylaminoethanol.	5.5

Table 262
Limit Values (L) for use with Exemptions from Permitting § 106.262

The values are not to be interpreted as acceptable health affects values relative to the issuance of any permits under Chapter 116 of this title (relating to Control of Air Pollution by Permits for new Construction or Modification).

Compound	Limit (L) Milligrams Per Cubic Meter
Diisobutyl Ketone	63.9
Dimethyl Aniline	6.4
Dioxane	3.6
Dipropylamine	8.4
Ethyl Acrylate	0.5
Ethylene Dibromide	0.38
Ethylene Glycol	26.
Ethylene Glycol Dinitrate	0.1
Ethylidene 2-norbornene, 5	7.
Ethyl Mercaptan	0.08
Ethyl Sulfide	1.6
Glycolonitrile	5.
Halothane	16.
Heptane	350.
Hexanediamine, 1, 6	0.32
Hydrogen Chloride	1.
Hydrogen Fluoride	0.5
Hydrogen Sulfide	1.1
Isoamyl Acetate	133.
Isoamyl Alcohol	15.
Isobutyronitrile	22.
Kepone	0.001
Kerosene	100.
Malononitrile	8.
Mesityl Oxide	40.
Methyl Acrylate	5.8
Methyl Amyl Ketone	9.4
Methyl-T-Butyl Ether	45.
Methyl Butyl Ketone	4.
Methyl Disulfide	2.2

Table 262
Limit Values (L) for use with Exemptions from Permitting § 106.262

The values are not to be interpreted as acceptable health affects values relative to the issuance of any permits under Chapter 116 of this title (relating to Control of Air Pollution by Permits for new Construction or Modification).

Compound	Limit (L) Milligrams Per Cubic Meter
Methylenebis (2-chloroaniline) (MOCA)	0.003
Methylene Chloride	26.
Methyl Isoamyl Ketone	5.6
Methyl Mercaptan	0.2
Merthyl Methacrylate	34.
Methyl Propyl Ketone	530.
Methyl Sulfide	0.3
Mineral Spirits	350.
Naphtha	350.
Nickel, Inorganic Compounds	0.015
Nitroglycerine	0.1
Nitropropane	5.
Octane	350.
Parathion	0.05
Pentane	350.
Perchloroethylene	33.5
Petroleum Ether	350.
Phenyl Mercaptan	0.4
Propionitrile	14.
Propyl Acetate	62.6
Propylene Oxide	20.
Propyl Mercaptan	0.23
Silica-amorphous-precipitated, silica gel	4.
Silicon Carbide	4.

Table 262
Limit Values (L) for use with Exemptions from Permitting § 106.262

The values are not to be interpreted as acceptable health affects values relative to the issuance of any permits under Chapter 116 of this title (relating to Control of Air Pollution by Permits for new Construction or Modification).

Compound	Limit (L) Milligrams Per Cubic Meter
Stoddard Solvent	350.
Styrene	21.
Succionitrile	20.0
Tolidin	0.02
Trichloroethylene	135.
Trinethylamine	0.1
Valeric Acid	0.34
Vinyl Acetate	15.0
Vinyl Chloride	2.0
Note: The time weighted average (TWA) threshold Limit Value (TLV) published by the American Conference of Governmental Industrial Hygienists (ACGIH), in its TLVs and BEIs guide (1997 Edition) shall be used for compounds not included in the table. The Short-Term Exposure Level (STEL) or Ceiling Limit (annotated with a "C") published by the ACGIH shall be used for compounds that do not have a published TWA TLV. This section cannot be used if the compound is not listed in the table or does not have a published TWA TLV, STEL, or Ceiling Limit in the ACGIH TLVs and BEIs guide.	