

STREAMLINED REVISION APPLICATION

Site Operating Permit 02114



**Chevron Phillips Chemical Company, LP
Cedar Bayou Chemical Complex
Olefin Units
Harris County, Texas
CN600303614
RN103919817**

Prepared By:

Kelley Oswalt – Senior Consultant
Lillian Rodriguez- Consultant

TRINITY CONSULTANTS

1800 West Loop South
Suite 1000
Houston, TX 77027
713-552-1371

September 2025

Project 254402.0374



TABLE OF CONTENTS

1. PROJECT INFORMATION	1-1
2. ADMINISTRATIVE FORMS	2-1
3. UNIT ATTRIBUTE FORMS	3-2
4. APPLICABLE REQUIREMENTS SUMMARY FORMS	4-1

1. PROJECT INFORMATION

Chevron Phillips Chemical Company, LP (CPCChem) owns and operates a petrochemical processing facility located in Baytown, Harris County, Texas known as the Cedar Bayou Facility. The various operating units at the facility are authorized under multiple Title V permits. The Normal Alpha Olefins Units, Polyalpha Olefin Units, 1-Hexene Unit, Ethylene Units and Utilities are authorized to operate under Site Operating Permit (SOP) O2114. The purpose of this application is to revise the SOP.

The following revisions are being requested:

- ▶ Incorporate the revised AMOC No. 32. The following changes to the Title V are needed:
 - Add Index R5720-LP-AMOC32 under 30 TAC 115 HRVOC Vent Gas to Unit IDs 1594-VENT and 1595-VENT.
 - Add Index R5121-LP-AMOC32 and R5121-LP2AMOC32 under 30 TAC 115 Vent Gas Control to Unit IDs 1594-VENT and 1595-VENT.
 - Add Index R5720-LP-AMOC32 under 30 TAC 115 HRVOC Vent Gas to Unit ID PK-905.
 - Delete Index R5720-1-LP under 30 TAC 115 HRVOC Vent Gas to Unit ID PK-905.
 - Delete Index R5720-LP under 30 TAC 115 HRVOC Vent Gas to Unit ID 1594-VENT and Unit ID 1595-VENT.
 - Delete Index R5121-LP under 30 TAC 115 Vent Gas Control to Unit ID 1594-VENT and Unit ID 1595-VENT.
 - Delete Index R5121-LP-2 under 30 TAC 115 Vent Gas Control to Unit ID 1594-VENT and Unit ID 1595-VENT.

2. ADMINISTRATIVE FORMS

This section contains the following forms and information:

- ▶ OP-1 – Site Information Summary
- ▶ OP-2 – Application for Permit Revision/Renewal

**Federal Operating Permit Program
Site Information Summary
Form OP-1 (Page 1)
Texas Commission on Environmental Quality**

Please print or type all information. Direct any questions regarding this application form to the Air Permits Division at (512) 239-1250 or to the Texas Commission on Environmental Quality, Office of Air, Air-Permits Division (MC 163), P.O. Box 13087, Austin, Texas 78711-3087.

I. Company Identifying Information
A. Company Name: Chevron Phillips Chemical Company, LP
B. Customer Reference Number (CN): CN600303614
C. Submittal Date (mm/dd/yyyy): 09/08/2025
II. Site Information
A. Site Name: Cedar Bayou Chemical Complex
B. Regulated Entity Reference Number (RN): RN103919817
C. Indicate affected state(s) required to review permit application: <i>(Check the appropriate box[es].)</i>
<input type="checkbox"/> AR <input type="checkbox"/> CO <input type="checkbox"/> KS <input type="checkbox"/> LA <input type="checkbox"/> NM <input type="checkbox"/> OK <input checked="" type="checkbox"/> N/A
D. Indicate all pollutants for which the site is a major source based on the site's potential to emit: <i>(Check the appropriate box[es].)</i>
<input checked="" type="checkbox"/> VOC <input checked="" type="checkbox"/> NO _x <input checked="" type="checkbox"/> SO ₂ <input checked="" type="checkbox"/> PM ₁₀ <input checked="" type="checkbox"/> CO <input type="checkbox"/> Pb <input checked="" type="checkbox"/> HAPS
Other:
E. Is the site a non-major source subject to the Federal Operating Permit Program? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
F. Is the site within a local program area jurisdiction? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
G. Will emissions averaging be used to comply with any Subpart of 40 CFR Part 63? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
H. Indicate the 40 CFR Part 63 Subpart(s) that will use emissions averaging:
III. Permit Type
A. Type of Permit Requested: <i>(Select only one response)</i>
<input checked="" type="checkbox"/> Site Operating Permit (SOP) <input type="checkbox"/> Temporary Operating Permit (TOP) <input type="checkbox"/> General Operating Permit (GOP)

**Federal Operating Permit Program
Site Information Summary
Form OP-1 (Page 2)
Texas Commission on Environmental Quality**

IV. Initial Application Information <i>(Complete for Initial Issuance Applications Only.)</i>
A. Is this submittal an abbreviated or a full application? <input type="checkbox"/> Abbreviated <input type="checkbox"/> Full
B. If this is a full application, is the submittal a follow-up to an abbreviated application? <input type="checkbox"/> Yes <input type="checkbox"/> No
C. If this is an abbreviated application, is this an early submittal for a combined SOP and Acid Rain permit? <input type="checkbox"/> Yes <input type="checkbox"/> No
D. Has an electronic copy of this application been submitted (or is being submitted) to EPA? (Refer to the form instructions for additional information.) <input type="checkbox"/> Yes <input type="checkbox"/> No
E. Has the required Public Involvement Plan been included with this application? <input type="checkbox"/> Yes <input type="checkbox"/> No
V. Confidential Information
A. Is confidential information submitted in conjunction with this application? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
VI. Responsible Official (RO) Identifying Information
RO Name Prefix: (<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Mrs. <input type="checkbox"/> Ms. <input type="checkbox"/> Dr.)
RO Full Name: Bryan Canfield
RO Title: EVP of Manufacturing and Products
Employer Name: Chevron Phillips Chemical Company LP
Mailing Address: 9500 Lakeside Blvd
City: The Woodlands
State: TX
ZIP Code: 77381
Territory:
Country:
Foreign Postal Code:
Internal Mail Code:
Telephone No.: 832-813-4445
Fax No.:
Email: brian.canfield@cpchem.com

**Federal Operating Permit Program
Site Information Summary
Form OP-1 (Page 3)
Texas Commission on Environmental Quality**

VII. Technical Contact Identifying Information <i>(Complete if different from RO.)</i>
Technical Contact Name Prefix: (<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Mrs. <input type="checkbox"/> Ms. <input type="checkbox"/> Dr.)
Technical Contact Full Name: Colton Cromer
Technical Contact Title: Environmental – Air Team Supervisor
Employer Name: Chevron Phillips Chemical Company, LP
Mailing Address: 9500 East Fwy
City: Baytown
State: TX
ZIP Code: 77521
Territory:
Country:
Foreign Postal Code:
Internal Mail Code:
Telephone No.: 281-421-6741
Fax No.:
Email: CBAirGroup@cpchem.com
VIII. Reference Only Requirements <i>(For reference only.)</i>
A. State Senator: Brandon Creighton, District 4
B. State Representative: Briscoe Cain, District 128
C. Has the applicant paid emissions fees for the most recent agency fiscal year (Sept. 1 - August 31)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
D. Is the site subject to bilingual notice requirements pursuant to 30 TAC § 122.322? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
E. Indicate the alternate language(s) in which public notice is required: Spanish

**Federal Operating Permit Program
Site Information Summary
Form OP-1 (Page 4)
Texas Commission on Environmental Quality**

IX. Off-Site Permit Request <i>(Optional for applicants requesting to hold the FOP and records at an off-site location.)</i>
A. Office/Facility Name:
B. Physical Address:
City:
State:
ZIP Code:
Territory:
Country:
Foreign Postal Code:
C. Physical Location:
D. Contact Name Prefix: (<input type="checkbox"/> Mr. <input type="checkbox"/> Mrs. <input type="checkbox"/> Ms. <input type="checkbox"/> Dr.)
Contact Full Name:
E. Telephone No.:
X. Application Area Information
A. Area Name: Olefin Units
B. Physical Address: 9500 East Fwy
City: Baytown
State: TX
ZIP Code: 77521
C. Physical Location:
D. Nearest City:
E. State:
F. ZIP Code:

**Federal Operating Permit Program
Site Information Summary
Form OP-1 (Page 5)
Texas Commission on Environmental Quality**

X. Application Area Information (continued)
G. Latitude (nearest second): 29° 48' 47"
H. Longitude (nearest second): 94° 56' 19"
I. Are there any emission units that were not in compliance with the applicable requirements identified in the application at the time of application submittal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
J. Indicate the estimated number of emission units in the application area: >100
K. Are there any emission units in the application area subject to the Acid Rain Program? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
L. Affected Source Plant Code (or ORIS/Facility Code):
XI. Public Notice <i>(Complete this section for SOP Applications and Acid Rain Permit Applications only.)</i>
A. Name of a public place to view application and draft permit: Sterling Municipal Library
B. Physical Address: 1 Mary Elizabeth Wilbanks Avenue
City: Baytown
ZIP Code: 77520
C. Contact Person (Someone who will answer questions from the public during the public notice period):
Contact Name Prefix: (<input type="checkbox"/> Mr. <input type="checkbox"/> Mrs. <input checked="" type="checkbox"/> Ms. <input type="checkbox"/> Dr.):
Contact Person Full Name: Julie Hicks
Contact Mailing Address: 9500 East Fwy
City: Baytown
State: TX
ZIP Code: 77521
Territory:
Country: USA
Foreign Postal Code:
Internal Mail Code:
Telephone No.: 281-421-6331

**Federal Operating Permit Program
Site Information Summary
Form OP-1 (Page 6)
Texas Commission on Environmental Quality**

XII. Delinquent Fees and Penalties
Notice: This form will not be processed until all delinquent fees and/or penalties owed to TCEQ or the Office of Attorney General on behalf of TCEQ are paid in accordance with the "Delinquent Fee and Penalty Protocol."
Complete Sections XIII and XIV for Acid Rain Permit and CSAPR applications only. Please include a copy of the Certificate of Representation submitted to EPA.
XIII. Designated Representative (DR) Identifying Information
DR Name Prefix: (<input type="checkbox"/> Mr. <input type="checkbox"/> Mrs. <input type="checkbox"/> Ms. <input type="checkbox"/> Dr.)
DR Full Name:
DR Title:
Employer Name:
Mailing Address:
City:
State:
ZIP Code:
Territory:
Country:
Foreign Postal Code:
Internal Mail Code:
Telephone No.:
Fax No.:
Email:

**Federal Operating Permit Program
Site Information Summary
Form OP-1 (Page 7)
Texas Commission on Environmental Quality**

Complete Sections XIII and XIV for Acid Rain Permit and CSAPR applications only. Please include a copy of the Certificate of Representation submitted to EPA.

XIV. Alternate Designated Representative (ADR) Identifying Information

ADR Name Prefix: (☐ Mr. ☐ Mrs. ☐ Ms. ☐ Dr.)

ADR Full Name:

ADR Title:

Employer Name:

Mailing Address:

City:

State:

ZIP Code:

Territory:

Country:

Foreign Postal Code:

Internal Mail Code:

Telephone No.:

Fax No.:

Email:

**Federal Operating Permit Program
Application for Permit Revision/Renewal
Form OP-2-Table 1
Texas Commission on Environmental Quality**

Date:	9/8/2025												
Permit No.:	02114												
Regulated Entity No.:	RN103919817												
Company Name:	Chevron Phillips Chemical Company, LP												
For Submissions to EPA													
Has an electronic copy of this application been submitted (or is being submitted) to EPA?										X	YES	NO	
I. Application Type													
the type of application:													
	Renewal												
X	Streamlined Revision (Must include provisional terms and conditions as explained in the instructions.)												
	Significant Revision												
	Revision Requesting Prior Approval												
	Administrative Revision												
	Response to Reopening												
II. Qualification Statement													
For SOP Revisions Only										X	YES	NO	
For GOP Revisions Only											YES	NO	
III. Major Source Pollutants (Complete this section if the permit revision is due to a change at the site or change in regulations.)													
Indicate all pollutants for which the site is a major source based on the site's potential to emit:													
<i>(Check the appropriate box(es).)</i>													
X	VOC	X	NO _x	X	SO ₂	X	PM ₁₀	X	CO		Pb	X	HAPS
Other:													
IV. Reference Only Requirements (For reference only)													
Has the applicant paid emissions fees for the most recent agency fiscal year (September 1 - August 31)?													
										X	YES	NO	N/A
V. Delinquent Fees and Penalties													
Notice: 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 are paid in accordance with the Delinquent Fee and penalty protocol.													

**Federal Operating Permit Program
Application for Permit Revision/Renewal
Form OP-2-Table 2
Texas Commission on Environmental Quality**

Date:	9/8/2025
Permit No.:	02114
Regulated Entity No.:	RN103919817
Company Name:	Chevron Phillips Chemical Company, LP

Using the table below, provide a description of the revision.

Revision No.	Revision Code	Unit/Group/Process			NSR Authorization	Description of Change and Provisional Terms and Conditions
		New Unit	ID No.	Applicable Form		
1	MS-C	NO	1594-VENT, 1595-VENT	OP-UA15	N/A	To incorporate the revised AMOC No. 32, Index R5720-LP-AMOC32 is being added under 30 TAC 115 HRVOC Vent Gas and Index R5121-LP-AMOC32 and R5121-LP2AMOC32 are being added under 30 TAC 115 Vent Gas Control.
2	MS-C	NO	PK-905	OP-UA7	N/A	To incorporate the revised AMOC No. 32, Index R5720-LP-AMOC32 is being added under 30 TAC 115 HRVOC Vent Gas.
3	MS-C	NO	PK-905	OP-UA7	N/A	Remove Index R5720-1-LP under 30 TAC 115 HRVOC Vent Gas from the permit. This Index was replaced with R5720-LP-AMOC32.
4	MS-C	NO	1594-VENT	OP-UA15	N/A	Remove Index R5720-LP under 30 TAC 115 HRVOC Vent Gas from the permit. This Index was replaced with R5720-LP-AMOC32.
5	MS-C	NO	1594-VENT	OP-UA15	N/A	Remove Index R5121-LP under 30 TAC 115 Vent Gas Control from the permit. This Index was replaced with R5121-LP-AMOC32.
6	MS-C	NO	1594-VENT	OP-UA15	N/A	Remove Index R5121-LP-2 under 30 TAC 115 Vent Gas Control from the permit. This Index was replaced with R5121-LP2AMOC32.
7	MS-C	NO	1595-VENT	OP-UA15	N/A	Remove Index R5720-LP under 30 TAC 115 HRVOC Vent Gas from the permit. This Index was replaced with R5720-LP-AMOC32.
8	MS-C	NO	1595-VENT	OP-UA15	N/A	Remove Index R5121-LP under 30 TAC 115 Vent Gas Control from the permit. This Index was replaced with R5121-LP-AMOC32.
9	MS-C	NO	1595-VENT	OP-UA15	N/A	Remove Index R5121-LP-2 under 30 TAC 115 Vent Gas Control from the permit. This Index was replaced with R5121-LP2AMOC32.

3. UNIT ATTRIBUTE FORMS

This section contains the following Unit Attribute Forms:

- ▶ OP-UA7 – Flare Attributes
- ▶ OP-UA15 – Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes

Texas Commission on Environmental Quality
Flare Attributes

Form OP-UA7 (Page 5)

Federal Operating Permit Program

Table 5a: Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115)

Subpart H, Division 1: Highly-Reactive Volatile Organic Compounds-Vent Gas Control

Date		Permit No.	Regulated Entity No.	
9/8/2025		02114	RN103919817	

Unit ID No.	SOP/GOP Index No.	Out of Service	Total Gas Stream	Gas Stream Concentration	Exempt Date	Alternative Monitoring Approach	Modifications to Testing/Monitoring	Modifications to Testing/Monitoring ID	Flare Type
PK-905	R5720-LP-AMOC32	NO	YES	YES		OTHER	ALT	AMOC32	MULTI

Texas Commission on Environmental Quality
Flare Attributes
Form OP-UA7 (Page 6)

Table 5b: Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115)
Subpart H, Division 1: Highly-Reactive Volatile Organic Compounds-Vent Gas Control

Date		Permit No.	Regulated Entity No.	
9/8/2025		02114	RN103919817	

Unit ID No.	SOP/GOP Index No.	Monitoring Requirements	§115.725(e) Requirements	Multi-Purpose Usage	Flow Rate	Physical Seal	Monitoring Option	§115.725(h)(4) Alternative	Tank Service
PK-905	R5720-LP-AMOC32	YES							NO

Emission Point/Stationsary Vent/Distillation Operation Vent/Process Vent Attributes

Form OP-UA15 (Page 3)

Federal Operating Permit Program

Table 2a: Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115)

Subchapter B: Vent Gas Control

Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
9/8/2025	02114	RN103919817

Emission Point ID No.	SOP/GOP Index No.	Chapter 115 Division	Combustion Exhaust	Vent Type	Total Uncontrolled VOC Weight	Combined 24-Hour VOC Weight	VOC Concentration	VOC Concentration or Emission Rate at Maximum Operating Conditions
1594-VENT	R5121-LP-AMOC32	NO	NO	REGVAPPL				
1594-VENT	R5121-LP2AMOC32	NO	NO	DISTOPER				
1595-VENT	R5121-LP-AMOC32	NO	NO	REGVAPPL				
1595-VENT	R5121-LP2AMOC32	NO	NO	DISTOPER				

Emission Point/Stationary Vent/Distillation Operation Vent/Process Vent Attributes

Form OP-UA15 (Page 4)

Federal Operating Permit Program

Table 2b: Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115)

Subchapter B: Vent Gas Control

Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
9/8/2025	02114	RN103919817

Emission Point ID No.	SOP Index No.	Alternate Control Requirement	ACR ID No.	Control Device Type	Control Device ID No.
1594-VENT	R5121-LP-AMOC32	ALTED	AMOC32		
1594-VENT	R5121-LP2AMOC32	ALTED	AMOC32		
1595-VENT	R5121-LP-AMOC32	ALTED	AMOC32		
1595-VENT	R5121-LP2AMOC32	ALTED	AMOC32		

Emission Point/Stationary Vent/Distillation Operation Vent/Process Vent Attributes

Form OP-UA15 (Page 5)

Federal Operating Permit Program

Table 2c: Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115)

Subchapter B: Vent Gas Control

Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
9/8/2025	02114	RN103919817

Emission Point ID No.	SOP Index No.	Total Design Capacity	Flow Rate / Concentration	40 CFR Part 60, Subpart NNN Requirements	40 CFR Part 60, Subpart RRR Requirements
1594-VENT	R5121-LP-AMOC32				
1594-VENT	R5121-LP2AMOC32	1100+	500+	NO	NO
1595-VENT	R5121-LP-AMOC32				
1595-VENT	R5121-LP2AMOC32	1100+	500+	NO	NO

Emission Point/Stationary Vent/Distillation Operation Vent/Process Vent Attributes
Form OP-UA 15 (Page 30)

Federal Operating Permit Program

Table 12a: Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115)
Subchapter H, Division 1: Highly-Reactive Volatile Organic Compounds-Vent Gas Control
Texas Commission on Environmental Quality

Date		Permit No.	Regulated Entity No.
9/8/2025		02114	RN103919817

Emission Point ID No.	SOP Index No.	HRVOC Concentration	Max Flow Rate	Exempt Date	Vent Gas Stream Control
1594-VENT	R5720-LP-AMOC32	NO	NO		FLARE
1595-VENT	R5720-LP-AMOC32	NO	NO		FLARE

4. APPLICABLE REQUIREMENTS SUMMARY FORMS

This section contains the following forms and information:

- ▶ Form OP-REQ3 – Applicable Requirements Summary
- ▶ Revised AMOC32 issued on 9/5/2025

**Applicable Requirements Summary
Form OP-REQ3 (Page 1)
Federal Operating Permit Program**

Table 1a: Additions

Date: 09/08/2025			Regulated Entity No.: RN103919817		Permit No.: 02114	
Company Name: Chevron Phillips Chemical Company, LP			Area Name: Olefin Units			
Revision No.	Unit/Group/Process ID No.	Unit/Group/Process Applicable Form	SOP/GOP Index No.	Pollutant	Applicable Regulatory Requirement Name	Applicable Regulatory Requirement Standard(s)
2	PK-905	OP-UA7	R5720-LP-AMOC32	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§115.722(d)(1), (d)(2) [G]§115.725(d)(1), (d)(2), (d)(2)(A)(i) [G]§115.725(d)(2)(A)(ii), (d)(2)(A)(iii)-(iv) §115.725(d)(2)(B), (d)(2)(B)(i)-(iv) [G]§115.725(l) §115.725(n) [G]§115.726(a)(2) ** See Alternative Requirement
1	1594-VENT	OP-UA15	R5720-LP-AMOC32	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§115.722(c)(1) §115.722(c)(3) §115.725(n) ** See Alternative Requirement
1	1595-VENT	OP-UA15	R5720-LP-AMOC32	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§115.722(c)(1) §115.722(c)(3) §115.725(n) ** See Alternative Requirement
1	1594-VENT	OP-UA15	R5121-LP-AMOC32	VOC	30 TAC Chapter 115, Subchapter B: Vent Gas Control	§115.123(a)(1) §115.910 ** See Alternative Requirement
1	1594-VENT	OP-UA15	R5121-LP2AMOC32	VOC	30 TAC Chapter 115, Subchapter B: Vent Gas Control	§115.123(a)(1) §115.910 ** See Alternative Requirement
1	1595-VENT	OP-UA15	R5121-LP-AMOC32	VOC	30 TAC Chapter 115, Subchapter B: Vent Gas Control	§115.123(a)(1) §115.910 ** See Alternative Requirement
1	1595-VENT	OP-UA15	R5121-LP2AMOC32	VOC	30 TAC Chapter 115, Subchapter B: Vent Gas Control	§115.123(a)(1) §115.910 ** See Alternative Requirement

**Applicable Requirements Summary
Form OP-REQ3 (Page 2)
Federal Operating Permit Program**

Table 1b: Additions

Date: 09/08/2025			Regulated Entity No.: RN103919817		Permit No.: 02114	
Company Name: Chevron Phillips Chemical Company, LP			Area Name: Olefin Units			
Revision No.	Unit/Group/Process ID No.	SOP/GOP Index No.	Pollutant	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
2	PK-905	R5720-LP-AMOC32	Highly Reactive VOC	[G]§115.725(d)(1), (d)(2), (d)(2)(A)(i) [G]§115.725(d)(2)(A)(ii), (d)(2)(A)(iii)-(iv) §115.725(d)(2)(B), (d)(2)(B)(i)-(iv) §115.725(d)(3)-(7) §115.725(k)(1) §115.725(m) ** See Alternative Requirement	§115.726(a)(1), (a)(1)(A) §115.726(d)(1)-(4) §115.726(d)(10) §115.726(i), (j)(1), (j)(2) ** See Alternative Requirement	§115.725(n) §115.726(a)(1)(B), [G](a)(2) ** See Alternative Requirement
1	1594-VENT	R5720-LP-AMOC32	Highly Reactive VOC	** See Alternative Requirement	[G]§115.726(h), (i) §115.726(j)(1), (j)(2) ** See Alternative Requirement	§115.725(n) ** See Alternative Requirement
1	1595-VENT	R5720-LP-AMOC32	Highly Reactive VOC	** See Alternative Requirement	[G]§115.726(h), (i) §115.726(j)(1), (j)(2) ** See Alternative Requirement	§115.725(n) ** See Alternative Requirement
1	1594-VENT	R5121-LP-AMOC32	VOC	[G]§115.125 §115.126(2) ** See Alternative Requirement	§115.126 §115.126(2) ** See Alternative Requirement	** See Alternative Requirement
1	1594-VENT	R5121-LP2AMOC32	VOC	[G]§115.125 §115.126(2) ** See Alternative Requirement	§115.126 §115.126(2) ** See Alternative Requirement	** See Alternative Requirement
1	1595-VENT	R5121-LP-AMOC32	VOC	[G]§115.125 §115.126(2) ** See Alternative Requirement	§115.126 §115.126(2) ** See Alternative Requirement	** See Alternative Requirement
1	1595-VENT	R5121-LP2AMOC32	VOC	[G]§115.125 §115.126(2) ** See Alternative Requirement	§115.126 §115.126(2) ** See Alternative Requirement	** See Alternative Requirement

**Applicable Requirements Summary
Form OP-REQ3 (Page 3)
Federal Operating Permit Program**

Table 2a: Deletions

Date: 09/08/2025			Regulated Entity No.: RN103919817		Permit No.: 02114	
Company Name: Chevron Phillips Chemical Company, LP			Area Name: Olefin Units			
Revision No.	Unit/Group/Process ID No.	Unit/Group/Process Applicable Form	SOP/GOP Index No.	Pollutant	Applicable Regulatory Requirement Name	Applicable Regulatory Requirement Standard(s)
3	PK-905	OP-UA7	R5720-1-LP	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.722(d) § 115.722(d)(1) § 115.722(d)(2) [G]§ 115.725(d)(1) § 115.725(d)(2) § 115.725(d)(2)(A)(i) [G]§ 115.725(d)(2)(A)(ii) § 115.725(d)(2)(A)(iii) § 115.725(d)(2)(A)(iv) § 115.725(d)(2)(B) § 115.725(d)(2)(B)(i) § 115.725(d)(2)(B)(ii) § 115.725(d)(2)(B)(iii) § 115.725(d)(2)(B)(iv) [G]§ 115.725(l) [G]§ 115.726(a)(2)
4	1594-VENT	OP-UA15	R5720-LP	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.722(c)(1) § 115.722(c)(3) § 115.725(n)
7	1595-VENT	OP-UA15	R5720-LP	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.722(c)(1) § 115.722(c)(3) § 115.725(n)
5	1594-VENT	OP-UA15	R5121-LP	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(B) § 60.18

**Applicable Requirements Summary
Form OP-REQ3 (Page 4)
Federal Operating Permit Program**

Table 2b: Deletions

Date: 09/08/2025				Regulated Entity No.: RN103919817		Permit No.: 02114	
Company Name: Chevron Phillips Chemical Company, LP				Area Name: Olefin Units			
Revision No.	Unit/Group/Process ID No.	SOP/GOP Index No.	Pollutant	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements	
3	PK-905	R5720-1-LP	Highly Reactive VOC	[G]§ 115.725(d)(1) § 115.725(d)(2) § 115.725(d)(2)(A)(i) [G]§ 115.725(d)(2)(A)(ii) § 115.725(d)(2)(A)(iii) § 115.725(d)(2)(A)(iv) § 115.725(d)(2)(B) § 115.725(d)(2)(B)(i) § 115.725(d)(2)(B)(ii) § 115.725(d)(2)(B)(iii) § 115.725(d)(2)(B)(iv) § 115.725(d)(3) § 115.725(d)(4) § 115.725(d)(5) § 115.725(d)(6) § 115.725(d)(7) § 115.725(k)(1) [G]§ 115.725(l) § 115.725(n)	§ 115.726(a)(1) § 115.726(a)(1)(A) § 115.726(d)(1) § 115.726(d)(10) § 115.726(d)(2) § 115.726(d)(3) § 115.726(d)(4) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	§ 115.725(n) § 115.726(a)(1)(B) [G]§ 115.726(a)(2)	
4	1594-VENT	R5720-LP	Highly Reactive VOC	None	[G]§ 115.726(h) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	§ 115.725(n)	
7	1595-VENT	R5720-LP	Highly Reactive VOC	None	[G]§ 115.726(h) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	§ 115.725(n)	
5	1594-VENT	R5121-LP	VOC	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None	

**Applicable Requirements Summary
Form OP-REQ3 (Page 3)
Federal Operating Permit Program**

Table 2a: Deletions

Date: 09/08/2025				Regulated Entity No.: RN103919817		Permit No.: 02114
Company Name: Chevron Phillips Chemical Company, LP				Area Name: Olefin Units		
Revision No.	Unit/Group/Process ID No.	Unit/Group/Process Applicable Form	SOP/GOP Index No.	Pollutant	Applicable Regulatory Requirement Name	Applicable Regulatory Requirement Standard(s)
6	1594-VENT	OP-UA15	R5121-LP-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(A) § 60.18
8	1595-VENT	OP-UA15	R5121-LP	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(B) § 60.18
9	1595-VENT	OP-UA15	R5121-LP-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(A) § 60.18

Applicable Requirements Summary
Form OP-REQ3 (Page 4)
Federal Operating Permit Program

Table 2b: Deletions

Date: 09/08/2025			Regulated Entity No.: RN103919817		Permit No.: 02114	
Company Name: Chevron Phillips Chemical Company, LP			Area Name: Olefin Units			
Revision No.	Unit/Group/Process ID No.	SOP/GOP Index No.	Pollutant	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
6	1594-VENT	R5121-LP-2	VOC	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) § 115.126(7) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None
8	1595-VENT	R5121-LP	VOC	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None
9	1595-VENT	R5121-LP-2	VOC	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) § 115.126(7) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None

Brooke T. Paup, *Chairwoman*
Bobby Janecka, *Commissioner*
Catarina R. Gonzales, *Commissioner*
Kelly Keel, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

September 5, 2025

MS JULIE HICKS
ENVIRONMENTAL SUPERINTENDENT
CHEVRON PHILLIPS CHEMICAL COMPANY LP
9500 I-10 EAST, EXIT 796
BAYTOWN TX 77521-9570

Re: Alternative Method of Control (AMOC) No. 32
Multipoint Ground Flare Revision
Regulated Entity Number: RN103919817
Customer Reference Number: CN600303614
Associated Permit Numbers: 1504A, N178, N148M2, PSDTX748M1, and O1274, O2113, O2114, O2115, O2370 and O3247

Dear Ms. Hicks:

This correspondence is in response to Chevron Phillips Chemical Company LP's (CPChem's) December 18, 2024 request to update the AMOC conditions for the Multipoint Ground Flare (MPGF) controlling emissions at the new Ethylene Plant. This AMOC authorizes the MPGF system and associated compliance methods as an alternative to complying with 30 TAC Chapter 115, Subchapter B: General Volatile Organic Compound Sources, Division 2: Vent Gas Control.

We understand you are requesting the following updates for the MPGF (EPN PK-905):

- Incorporation of the low-pressure (LP) stage of the flare and establish vent gas net heating value (NHVvg) and maximum tip velocity (Vtip) for consistency with amended and applicable federal regulations.
- Update hydrogen (H₂) NHV for consistency with amended and applicable federal regulations for LP and high-pressure (HP) stages.
- Confirm maintaining the lower flammability limit (LFL) operating compliance option established in Alternate Means of Emission Limit (AMEL) application to EPA (EPA Docket #EPA-HQ-OAR-2014-0738 approved June 19, 2017), and AMOC 32 (issued June 27, 2017) due to the nature of waste streams.

The Texas Commission on Environmental Quality (TCEQ) Executive Director has made a final decision to approve your AMOC Revision request. Enclosed you will find the authorized AMOC Plan and Provisions.

This AMOC approval may supersede certain requirements or representations in Permit Nos. 1504A, N148M2, and PSDTX748M1. To ensure effective and consistent enforceability, we request that CPChem incorporate this AMOC into the pending Amendment application, Project No. 385401 no later than 90 days after this approval.

This approval may also change applicable requirements for the site, which are identified in the site operating permits (SOPs) O1274, O2113, O2114, O2115, O2370 and O3247. The TCEQ recommends the submittal of a SOP administrative revision if any changes are necessary. Changes meeting the criteria for an administrative revision can be operated before issuance of the revision if a complete application is submitted to the TCEQ and this information is maintained with the SOP records at the site.

September 5, 2025

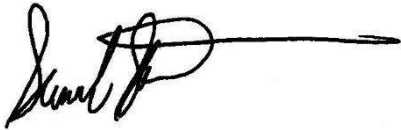
Page 2

MS JULIE HICKS

Re: AMOC 32

If you need further information or have any questions, please contact Ms. Anne Inman, P.E. at (512) 239-1276 or write to the Texas Commission on Environmental Quality, Office of Air, Air Permits Division, MC-163, P.O. Box 13087, Austin, Texas 78711-3087.

Sincerely,

A handwritten signature in black ink, appearing to read 'Samuel Short', followed by a long horizontal line extending to the right.

Samuel Short, Deputy Director
Air Permits Division
Office of Air
Texas Commission on Environmental Quality

cc: Neal Nygaard, P.E., Project Manager, Trinity Consultants, Austin
Director, Harris County, Pollution Control Services, Pasadena
Air Section Manager, Region 12 - Houston
Becky Tsuchiya, Manager, Chemical New Source Review Permits Section, Air Permits Division,
OA: MC-163
Rhyan Stone, Manager, Operating Permits Section, Air Permits Division, OA: MC-163
Air Permits Section Chief, New Source Review Section (6PD-R), U.S. Environmental Protection
Agency, Region 6, Dallas

Project Number: 386769

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



Alternative Method of Control (AMOC) Plan
AMOC No.: AMOC-32
Chevron Phillips Chemical Company, L.P.
Ethylene Plant Multi-Point Ground Flare (MPGF) System
Baytown, Harris County
Regulated Entity Number: RN103919817

- A. This AMOC Plan Authorization shall apply at the Chevron Phillips Chemical Company, L.P. (CPCHEM) Cedar Bayou plant for ethylene production, located in Baytown, Harris County identified by Regulated Entity Number RN103919817 under Title 30 Texas Administrative Code Section 115.910 (30 TAC § 115.910) for the low-pressure (LP) and high-pressure (HP) stages of the multi-point ground flare (MPGF) system which is used during routine operations, planned maintenance, start-ups and shut-downs (MSS), and unplanned emergency and upset situations.
- B. A copy of the AMOC application and the AMOC Plan provisions must be kept on-site or at a centralized location and made available at the request of personnel from the TCEQ or any pollution control agency with jurisdiction. The AMOC application is defined by the application received October 1, 2015, and supporting documentation submitted through January 13, 2017, as well as the subsequent revision application received December 18, 2024 and supporting documentation submitted through August 13, 2025.
- C. This authorization is granted under § 115.910 for emissions sources regulated by 30 TAC Chapter 115, Subchapter B: General Volatile Organic Compound Sources, Division 2: Vent Gas Control and Subchapter H: Highly Reactive Volatile Organic Compounds, Division 1: Vent Gas Control. This AMOC shall apply in lieu of the requirements of 30 TAC §§ 115.122(a) and 115.722(d), as applicable.

Compliance with this AMOC is independent of CPCHEM's obligation to comply with all other applicable requirements of 30 TAC Chapter 115, TCEQ permits and applicable state and federal law. The monitoring and testing requirements of 30 TAC §§ 115.125 and 115.725 shall continue to apply even though the flare is no longer subject to 30 TAC §§ 115.122(a) and 115.722(d).

Compliance with the requirements of this plan does not ensure compliance with requirements of an applicable New Source Performance Standard, an applicable National Emission Standard for Hazardous Air Pollutants or an Alternative Means of Emission Limitation and does not constitute approval of alternative standards for these regulations.

- D. In accordance with 30 TAC § 115.913(c), all representations submitted for this plan, as well as the provisions listed here, become conditions upon which this AMOC Plan is issued. It is unlawful to vary from the emission limits, control requirements, monitoring, testing, reporting or recordkeeping requirements of this Plan.
 - E. The single LP stage (Stage 0) and HP stages (Stages 1 – 17) of the MPGF system identified as EPN PK-905 in Permit Nos. 1504A, PSDTX48M1, and N148 is subject to this AMOC plan. The system collects and combusts hydrocarbon streams during routine operations, planned MSS activities, and emergencies. Operations of all stages will achieve a reduction in emissions at least equivalent to the reduction in emissions being controlled by a steam-assisted, air-assisted, or non-assisted flare complying with the requirements of §115.122(a), §115.722(d), or 40 CFR 60.18(b).
- 1. The MPGF system LP stage (Stage 0) shall be designed and operated such that the following are met when regulated material is routed to that stage of burners:

- i. The net heating value of the flare combustion zone (NHV_{cz}) must be greater than or equal to 270 British thermal units per standard cubic foot (Btu/scf) demonstrated by continuously complying based on a 15-minute block average in accordance with § 63.670(e)(1).
 - ii. The actual flare tip exit velocity (V_{tip}) must comply with the limits of § 63.670(d).
2. The MPGF HP stages (Stages 1 -17) must be designed and operated such that the following are met when regulated material is routed to that stage of burners:
 - i. The NHV_{cz} must be greater than or equal to 800 Btu/scf demonstrated by continuously complying based on a 15-minute block average in accordance with § 63.670(e)(2); or
 - ii. The combustion zone gas lower flammability limit (LFL_{cz}) must be less than or equal to 6.5 percent by volume (6.5 %_{vol}). The LFL_{cz} compliance method is included as an alternative to the NHV_{cz} compliance method due to the unique potential for high-hydrogen gas streams routed to the flare.
 - iii. No V_{tip} applies to the HP stages.
 3. The owner or operator must demonstrate compliance with the NHV_{cz} or LFL_{cz} metric by continuously complying with a 15-minute block average in accordance with § 63.670(e). The operator must calculate and monitor for the NHV_{cz} or LFL_{cz} according to the following:
 - i. Calculation of the net heating value of vent gas (NHV_{vg}) composition is determined by the concentration of individual components or the NHV in the flare vent gas using methods in 40 CFR §§ 63.670(j), 63.670(l) and Table 12 of 40 CFR 63 Subpart CC. Different monitoring methods may be used to determine vent gas composition for different gaseous streams that contribute to the flare vent gas.

$$NHV_{vg} = \sum_{i=1}^n x_i NHV_i$$

Where: NHV_{vg} = Net heating value of flare vent gas, British thermal units per standard cubic foot (Btu/scf). *Flare vent gas* means all gas found just prior to the MPGF. This gas includes all flare waste gas (*i.e.*, gas from facility operations that is directed to a flare for the purpose of disposing of the gas), flare sweep gas, flare purge gas and flare supplemental gas, but does not include pilot gas.

i = Individual component in flare vent gas.

n = Number of components in flare vent gas.

x_i = Concentration of component i in flare vent gas, volume fraction.

NHV_i = Net heating value of component i determined as the heat of combustion where the net enthalpy per mole of offgas is based on combustion at 25 degrees Celsius (°C) and 1 atmosphere (or constant pressure) with water in the gaseous state from values published in the literature, and then the values converted to a volumetric basis using 20 °C for “standard temperature.” Table 1 (Appendix) summarizes component properties including net heating values.

- ii. Calculation of NHV_{cz}
 - a. The LP stage shall calculate NHV_{cz} following §63.670(m).
 - b. For the 17 HP stages, $NHV_{vg} = NHV_{cz}$.
- iii. Calculation of LFL_{cz}
 - a. The owner or operator shall determine LFL_{cz} from compositional analysis data by using the following equation:

$$LFL_{vg} = \frac{1}{\sum_{i=1}^n \left[\frac{\chi_i}{LFL_i} \right]} * 100 \%$$

Where: LFL_{vg} = Lower flammability limit of flare vent gas, volume percent (vol %)

n = Number of components in the vent gas.

i = Individual component in the vent gas.

χ_i = Concentration of component i in the vent gas, vol %.

LFL_i = Lower flammability limit of component i as determined using values published by the U.S. Bureau of Mines (Zabetakis, 1965), vol %. All inerts, including nitrogen, are assumed to have an infinite LFL (e.g., $LFL_{N_2} = \infty$, so that $c_{N_2}/LFL_{N_2} = 0$). LFL values for common flare vent gas components are provided in Table 1 (Appendix).

b. For the 17 HP stages, $LFL_{vg} = LFL_{cz}$.

4. The operator shall install, operate, calibrate and maintain monitoring systems per the following:

- i. A monitoring system capable of continuously measuring flare vent gas flow rate.
- ii. The operator shall install, operate, calibrate and maintain a monitoring system capable of continuously measuring temperature consistent with the applicable requirements in 30 TAC §115 for purposes of correcting flow rate to standard conditions. The monitor must meet the accuracy and calibration specifications annually.
- iii. The operator shall install, operate, calibrate and maintain a monitoring system capable of continuously measuring (i.e., at least once every 15- minutes), calculating, and recording the individual component concentrations present in the flare vent gas or install, operate, calibrate and maintain a monitoring system capable of continuously measuring, calculating and recording NHV_{vg} (in Btu/scf).
- iv. For each measurement produced by the monitoring system, the operator shall determine the 15-minute block average of all measurements made by the monitoring system within the 15-minute period in accordance with § 63.670(k), § 63.670(l), and § 63.670(e), as applicable.
- v. The operator must follow the calibration and maintenance procedures according to Table 2 (Appendix). Monitor downtime associated with maintenance periods, instrument adjustments or checks to maintain precision and accuracy. Zero and span adjustments may not exceed 5 percent of the time the flare is receiving regulated material. Calibration and maintenance procedures conducted when the flare is not receiving regulated material are excluded from the monitor downtime calculation.

F. Pilot Flame Requirements: The MPGF system shall be operated with a flame present at all times when regulated material is routed to that stage of burners and meet 40 CFR §63.670(b). Each stage of HP MPGF burners must be equipped with at least two pilots with a continuously lit pilot flame or flare flame. The pilot flame or flare flame must be continuously monitored by a thermocouple or any other equivalent device used to detect the presence of a flame. The time, date and duration of any complete loss of pilot flame or flare flame on any stage of MPGF burners must be recorded when regulated material is routed to that stage of burners. Each monitoring device must be maintained or replaced at a frequency in accordance with the manufacturer's specifications.

G. Visible Emission Requirements: When the flare is receiving regulated material, the MPGF system shall be operated with no visible emissions except for periods not to exceed a total of 5 minutes during any 2 consecutive hours and meet 40 CFR § 63.670(c) and (h).

H. Monitor Requirements: The operator of a MPGF system shall install and operate pressure monitor(s) on the main flare header, as well as a valve position indicator monitoring system for each staging valve to ensure that the MPGF operates within the range of tested conditions or within the range of the manufacturer's specifications. The pressure monitor shall meet the requirements in Table 2 (Appendix).

Monitor downtime associated with maintenance periods, instrument adjustments or checks to maintain precision and accuracy and zero and span adjustments may not exceed 5 percent of the time the flare is receiving regulated material. Calibration and maintenance procedures conducted when the flare is not receiving regulated material are excluded from the monitor downtime calculation.

- I. Closed Vent Capture Systems. Streams vented to the MPGF must be routed through a closed vent system that meets the requirements of NSR Permit No. 1504A.
- J. Continuous Monitoring Requirements: Follow the specifications, calibration, and maintenance procedures according to the following:
 - 1. General.
 - i. At all times, all monitoring equipment must operate and be maintained in a manner consistent with 40 CFR §§ 60.11(d), 63.6(e)(1)(i), 63.671(a), and Table 13 of MACT CC with the TCEQ as the Administrator.
 - ii. Any monitor downtime must comply with 40 CFR §§ 63.671(a)(4) and 63.671(c). The individual monitors and analyzers shall operate as required at least 95% of the time when any stage of the MPGF is operational, averaged over a rolling 12-month period. Periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments) are excluded from the monitor downtime calculation. Unless otherwise specified, for each measurement produced by the monitoring systems shall comply with 40 CFR §63.671(d) and Table 2 (Appendix).
 - 2. Composition or Net Heating Values. Install, operate, calibrate, and maintain a monitoring system specified in (i) and may elect to supplement the monitoring as specified in (ii) or (iii).
 - i. A calorimeter capable of continuously measuring, calculating, and recording the net heating value, *NHVvg*, present in the flare vent gas according to 40 CFR § 63.670(j)(3). The monitor shall meet the accuracy and calibration requirements of Table 13 of MACT CC.
 - ii. A gas chromatograph or gas chromatograph / mass spectrograph system may be used to Determine *NHVvg* as specified in 40 CFR § 63.670(j)(1) or (2). Component properties determinations must follow 40 CFR § 63.670(l)(1) through (7) and Table 12 of MACT CC, as applicable. The system used to determine compositional analysis shall follow 40 CFR §§ 63.671(e) or 63.671(f), as applicable.
 - iii. An optional hydrogen monitoring system may be used if capable of meeting 40 CFR §63.670(j)(4). The hydrogen analyzer must meet accuracy and calibration requirements of Table 13, MACT CC.
 - 3. Flow Rates.
 - i. Different flow monitoring methods may be used to measure different gaseous streams and steam provided that 40 CFR §63.670(i) is followed.
 - ii. The measurement location must be selected following Table 13 of MACT CC.
 - iii. All flow monitors shall meet the accuracy and calibration requirements of Table 13 of MACT CC.
 - 4. Pilots.
 - i. The pilot flame continuous monitoring must meet 40 CFR § 63.670(b).
 - ii. Loss of pilot flame or flare flame is determined by and must meet 40 CFR §63.670(b) and records must follow 40 CFR § 63.655(i)(9)(i).
 - iii. A video camera that meets 40 CFR §63.670(h)(2) may be used to demonstrate compliance.

5. Pressure. Any pressure monitor used for flow measurements must meet the accuracy and calibration requirements of Table 13 of MACT CC.
 6. Temperature. Any temperature monitor used for flow measurements must meet the accuracy and calibration requirements of Table 13 of MACT CC.
- K. Recordkeeping Requirements: Records shall follow requirements in 40 CFR §63.655(i)(9), as applicable. All data must be recorded and maintained for a minimum of five years or for as long as applicable rule subpart(s) specify flare records should be kept, whichever is longer. Records must be maintained onsite and made available upon request by authorized representatives of the executive director, U.S. EPA, and any local air pollution control agency with jurisdiction.
- L. Reporting Requirements:
1. The information specified in (b) and (c) below should be reported in the timeline specified by the applicable rules for which the MPGF will control emissions.
 2. Owners or operators should include the following information in their initial Monitoring Plan:
 - i. Specify flare design as LP steam-assisted for Stage 0 and HP for Stages 1-17 pressure assisted MPGF.
 - ii. All visible emission readings, actual and maximum *Vtip* determinations, *NHVvg*, *NHVcz*, and/or *LFLcz* determinations, and flow rate measurements. For HP stages, exit velocity determinations do not need to be reported.
 - iii. All periods during the compliance determination when a complete loss of pilot flame on any stage of MPGF burners occurs.
 - iv. All periods during the compliance determination when the pressure monitor(s) on the main flare header show the MPGF burners operating outside the range of tested conditions or outside the range of the manufacturer's specifications.
 - v. All periods during the compliance determination when the staging valve position indicator monitoring system indicates a HP stage of the MPGF should not be in operation, but is; or when a stage of the MPGF should be in operation, but is not.
 - vi. All periods during the compliance determination when the staging valve position indicator monitoring system indicates an LP stage of the MPGF should be in operation, but is not.
 3. The owner or operator shall notify the executive director of periods of excess emissions in their Title V Periodic Reports. These periods of excess emissions shall include:
 - i. Each 15-minute block during which there was at least one minute when regulated material was routed to the MPGF and a complete loss of pilot flame on a stage of burners occurred.
 - ii. Periods of visible emissions events that are time and date stamped and exceed more than 5 minutes in any 2 hour consecutive period.
 - iii. Each 15-minute block period for which an applicable combustion zone operating limit (*i.e.*, *NHVcz* or *LFLcz*) is not met for the MPGF when regulated material is being combusted in the flare. Indicate the date and time for each period, the *NHVcz* and/or *LFLcz* operating parameter for the period, the type of monitoring system used to determine compliance with the operating parameters (*e.g.*, gas chromatograph or calorimeter), and the MPGF stages which were in use.
 - iv. Periods when the pressure monitor(s) on the main flare header show the HP MPGF burners are operating outside the range of tested conditions or outside the range of the manufacturer's specifications. Indicate the date and time for each period, the pressure measurement, the stage(s) and number of MPGF burners affected and the range of tested conditions or manufacturer's specifications.

- v. Periods when the staging valve position indicator monitoring system indicates a stage of the HP MPGF should not be in operation but is; or when an HP stage of the MPGF should be in operation but is not. Indicate the date and time for each period, whether the stage was supposed to be open but was closed or vice versa and the stage(s) and number of MPGF burners affected.

M. Emission Determinations.

Calculations of hourly and annual emissions to determine compliance with the MAERT limitations shall be determined and recorded using the monitoring data collected pursuant to this AMOC Plan applying the best data of the parameters measured during each 15-minute block period and the appropriate emission factors based on the approach represented in the Permits. Annual emissions shall be calculated by the end of the current month for the previous rolling 12-month period.

APPENDIX Table 1 — Individual Component Properties

<u>Component</u>	<u>Molecular Formula</u>	<u>MWi (lb/ lb mol)</u>	<u>NHVi (Btu/scf)</u>	<u>LFLi (volume %)</u>
Acetylene	C2H2	26.04	1,404	2.5
Benzene	C6H6	78.11	3,591	1.3
1,2- Butadiene	C4H6	54.09	2,794	2.0
1,3- Butadiene	C4H6	54.09	2,690	2.0
iso-Butane	C4H10	58.12	2,957	1.8
n-Butane	C4H10	58.12	2,968	1.8
cis-Butene	C4H8	56.11	2,830	1.6
iso-Butene	C4H8	56.11	2,928	1.8
trans-Butene	C4H8	56.11	2,826	1.7
Carbon Dioxide	CO2	44.01	0	∞
Carbon Monoxide	CO	28.01	316	12.5
Cyclopropane	C3H6	42.08	2,185	2.4
Ethane	C2H6	30.07	1,595	3.0
Ethylene	C2H4	28.05	1,477	2.7
Hydrogen	H2	2.02	1,212	4.0
Hydrogen Sulfide	H2S	34.08	587	4.0
Methane	CH4	16.04	896	5.0
MethylAcetylene	C3H4	40.06	2,088	1.7
Nitrogen	N2	28.01	0	∞
Oxygen	O2	32.00	0	∞
Pentane+ (C5+)	C5H12	72.15	3,655	1.4
Propadiene	C3H4	40.06	2,066	2.16
Propane	C3H8	44.10	2,281	2.1
Propylene	C3H6	42.08	2,150	2.4
Water	H2O	18.02	0	∞

APPENDIX Table 2 — Accuracy and Calibration Requirements

Parameter	Accuracy requirements	Calibration requirements
Flare Vent Gas Flow Rate	±20 percent of flow rate at velocities ranging from 0.1 to 1 feet per second. ±5 percent of flow rate at velocities greater than 1 foot per second.	Performance evaluation biennially (every two years) and following any period of more than 24 hours throughout which the flow rate exceeded the maximum rated flow rate of the sensor, or the data recorder was off scale. Checks of all mechanical connections for leakage monthly. Visual inspections and checks of system operation every 3 months, unless the system has a redundant flow sensor. Select a representative measurement location where swirling flow or abnormal velocity distributions due to upstream and downstream disturbances at the point of measurement are minimized.
Pressure	±5 percent over the normal range measured or 0.12 kilopascals (0.5 inches of water column), whichever is greater.	Review pressure sensor readings at least once a week for straight-line (unchanging) pressure and perform corrective action to ensure proper pressure sensor operation if blockage is indicated. Performance evaluation annually and following any period of more than 24 hours throughout which the pressure exceeded the maximum rated pressure of the sensor, or the data recorder was off scale. Checks of all mechanical connections for leakage monthly. Visual inspection of all components for integrity, oxidation and galvanic corrosion every 3 months, unless the system has a redundant pressure sensor. Select a representative measurement location that minimizes or eliminates pulsating pressure, vibration, and internal and external corrosion.
Net Heating Value by Calorimeter	±2 percent of span	Calibration requirements should follow manufacturer's recommendations at a minimum. Temperature control (heated and/or cooled as necessary) the sampling system to ensure proper year-round operation. Where feasible, select a sampling location at least two equivalent diameters downstream from and 0.5 equivalent diameters upstream from the nearest disturbance. Select the sampling location at least two equivalent duct diameters from the nearest control device, point of pollutant generation, air in leakages, or other point at which a change in the pollutant concentration or emission rate occurs.
Net Heating Value by Gas Chromatograph	As specified in Performance Specification 9 of 40 CFR part 60 Appendix B.	Follow the procedure in Performance Specification 9 of 40 CFR Part 60 Appendix B, except that a single daily mid-level calibration check can be used, a triplicate mid-level check weekly, and the multi-point calibration can be conducted quarterly (rather than monthly), and the sampling line temperature must be maintained at a minimum temperature of 60 °C (rather than 120 °C).

APPENDIX 3 — Acronyms and Abbreviations

The AMOC uses multiple acronyms and terms, defined here (please note this list is not exhaustive):

AMEL	alternative means of emission limitation
AMOC	Alternate Method of Compliance or Control
Btu/scf	British thermal units per standard cubic foot
CAA	Clean Air Act
CBI	confidential business information
CFR	Code of Federal Regulations
CPCHEM	Chevron Phillips Chemical Company LP
EPA	Environmental Protection Agency
EPN	Emission Point Number
Eqn	equation
HAP	hazardous air pollutants
HP	high pressure
LFL	lower flammability limit
<i>LFLcz</i>	lower flammability limit of combustion zone gas
<i>LFLvg</i>	lower flammability limit of flare vent gas
MPGF	multi-point ground flares
MSS	planned maintenance, start-ups and shut-downs
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHV	net heating value
<i>NHVcz</i>	net heating value of combustion zone gas
<i>NHVvg</i>	net heating value of flare vent gas
NSPS	New Source Performance Standards
OAQPS	Office of Air Quality Planning and Standards
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
scf	standard cubic feet
VOC	volatile organic compounds
Vtip	actual flare tip velocity

Texas Commission on Environmental Quality

Title V Existing

2114

Site Information (Regulated Entity)

What is the name of the permit area to be authorized?	OLEFIN UNITS
Does the site have a physical address?	Yes
Physical Address	
Number and Street	9500 INTERSTATE 10 E
City	BAYTOWN
State	TX
ZIP	77521
County	HARRIS
Latitude (N) (##.#####)	29.813055
Longitude (W) (-###.#####)	94.938611
Primary SIC Code	2869
Secondary SIC Code	
Primary NAICS Code	32511
Secondary NAICS Code	
Regulated Entity Site Information	
What is the Regulated Entity's Number (RN)?	RN103919817
What is the name of the Regulated Entity (RE)?	CHEVRON PHILLIPS CHEMICAL CEDAR BAYOU PLANT
Does the RE site have a physical address?	Yes
Physical Address	
Number and Street	9500 INTERSTATE 10 E
City	BAYTOWN
State	TX
ZIP	77521
County	HARRIS
Latitude (N) (##.#####)	29.8175
Longitude (W) (-###.#####)	-94.933888
Facility NAICS Code	
What is the primary business of this entity?	INDUSTRIAL CHEMICAL MANUFACTURING PLANT

Customer (Applicant) Information

How is this applicant associated with this site?	Owner Operator
What is the applicant's Customer Number (CN)?	CN600303614
Type of Customer	Corporation
Full legal name of the applicant:	
Legal Name	Chevron Phillips Chemical Company LP
Texas SOS Filing Number	13487011
Federal Tax ID	731587712
State Franchise Tax ID	17315877120

State Sales Tax ID	
Local Tax ID	
DUNS Number	152975665
Number of Employees	501+
Independently Owned and Operated?	No

Responsible Official Contact

Person TCEQ should contact for questions about this application:

Organization Name	CHEVRON PHILLIPS CHEMICAL COMPANY LP
Prefix	MR
First	BRYAN
Middle	
Last	CANFIELD
Suffix	
Credentials	
Title	EVP OF MANUFACTURING AND PRODUCTS
Enter new address or copy one from list:	
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	9500 LAKESIDE BLVD
Routing (such as Mail Code, Dept., or Attn:)	
City	THE WOODLANDS
State	TX
ZIP	77381
Phone (###-###-####)	8328134445
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	bryan.canfield@cpchem.com

Duly Authorized Representative Contact

Person TCEQ should contact for questions about this application

Select existing DAR contact or enter a new contact.

Organization Name	DIRK PERRIN(CHEVRON PHILLIP...)
Prefix	CHEVRON PHILLIPS CHEMICAL COMPANY LP
First	MR
Middle	DIRK
Last	PERRIN
Suffix	
Credentials	
Title	PLANT MANAGER
Enter new address or copy one from list	
Mailing Address	

Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	9500 INTERSTATE 10 E
Routing (such as Mail Code, Dept., or Attn:)	
City	BAYTOWN
State	TX
Zip	77521
Phone (###-###-####)	2814216578
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	2814216169
E-mail	perrid@cpchem.com

Technical Contact

Person TCEQ should contact for questions about this application:

Select existing TC contact or enter a new contact.

Organization Name

Prefix

First

Middle

Last

Suffix

Credentials

Title

Enter new address or copy one from list:

Mailing Address

Address Type

Mailing Address (include Suite or Bldg. here, if applicable)

Routing (such as Mail Code, Dept., or Attn:)

City

State

ZIP

Phone (###-###-####)

Extension

Alternate Phone (###-###-####)

Fax (###-###-####)

E-mail

New Contact

Chevron Phillips Chemical Company LP

MR

Colton

Cromer

Environmental - Air Team Supervisor

Domestic

9500 EAST FWY

BAYTOWN

TX

77521

2814216741

CBAirGroup@cpchem.com

Title V General Information - Existing

1) Permit Type:

SOP

2) Permit Latitude Coordinate:

29 Deg 48 Min 47 Sec

3) Permit Longitude Coordinate:

94 Deg 56 Min 19 Sec

4) Is this submittal a new application or an update to an existing application?

New Application

4.1. What type of permitting action are you applying for?

Streamlined Revision

4.1.1. Are there any permits that should be voided upon issuance of this permit application through permit conversion?	No
4.1.2. Are there any permits that should be voided upon issuance of this permit application through permit consolidation?	No
5) Who will electronically sign this Title V application?	Duly Authorized Representative
6) Does this application include Acid Rain Program or Cross-State Air Pollution Rule requirements?	No

Title V Attachments Existing

Attach OP-1 (Site Information Summary)

Attach OP-2 (Application for Permit Revision/Renewal)

Attach OP-REQ1 (Application Area-Wide Applicability Determinations and General Information)

Attach OP-REQ2 (Negative Applicable Requirement Determinations)

Attach OP-REQ3 (Applicable Requirements Summary)

Attach OP-PBRSUP (Permits by Rule Supplemental Table)

Attach OP-SUMR (Individual Unit Summary for Revisions)

Attach OP-MON (Monitoring Requirements)

Attach OP-UA (Unit Attribute) Forms

If applicable, attach OP-AR1 (Acid Rain Permit Application)

Attach OP-CRO2 (Change of Responsible Official Information)

Attach OP-DEL (Delegation of Responsible Official)

Attach any other necessary information needed to complete the permit.

An additional space to attach any other necessary information needed to complete the permit.

[File Properties]

File Name	CPChem Cedar SOP O2114 Minor Rev App 2025-0908.pdf
Hash	2C3E3A01815E793E466893F3947724BDE043F2D8F2B385618DF9E93117257552
MIME-Type	application/pdf

Expedite Title V

1) Per Texas Health and Safety Code, Section 382.05155, does the applicant want to expedite	No
---------------------------------------------------------------------------------------------	----

the processing of this application?

Certification

I certify that I am the Duly Authorized Representative for this application and that, based on information and belief formed after reasonable inquiry, the statements and information on this form are true, accurate, and complete.

1. I am Dirk Perrin, the owner of the STEERS account ER075610.
2. I have the authority to sign this data on behalf of the applicant named above.
3. I have personally examined the foregoing and am familiar with its content and the content of any attachments, and based upon my personal knowledge and/or inquiry of any individual responsible for information contained herein, that this information is true, accurate, and complete.
4. I further certify that I have not violated any term in my TCEQ STEERS participation agreement and that I have no reason to believe that the confidentiality or use of my password has been compromised at any time.
5. I understand that use of my password constitutes an electronic signature legally equivalent to my written signature.
6. I also understand that the attestations of fact contained herein pertain to the implementation, oversight and enforcement of a state and/or federal environmental program and must be true and complete to the best of my knowledge.
7. I am aware that criminal penalties may be imposed for statements or omissions that I know or have reason to believe are untrue or misleading.
8. I am knowingly and intentionally signing Title V Existing 2114.
9. My signature indicates that I am in agreement with the information on this form, and authorize its submittal to the TCEC

OWNER OPERATOR Signature: Dirk Perrin OWNER OPERATOR

Account Number:	ER075610
Signature IP Address:	69.94.2.15
Signature Date:	2025-09-09
Signature Hash:	2C540391995D727FA5F51DF20743244E70075C7DD1EC66C9230431593ACFBD5D
Form Hash Code at time of Signature:	43E2D1DC1506BB782ED3B369DE10A6028066F4E2BF9829E8CFDD9570606822E6

Submission

Reference Number:	The application reference number is 816062
Submitted by:	The application was submitted by ER075610/Dirk Perrin
Submitted Timestamp:	The application was submitted on 2025-09-09 at 05:49:55 CDT
Submitted From:	The application was submitted from IP address 69.94.2.15
Confirmation Number:	The confirmation number is 676872
Steers Version:	The STEERS version is 6.92
Permit Number:	The permit number is 2114

Additional Information

Application Creator: This account was created by Lillian Rodriguez