Monitoring Requirements Form OP-MON (Page 1)

Table 1a: CAM/PM Additions

I. Identifying Information

Account No.: GB-0076-J RN No.: RN100219351 CN: CN601688781

Permit No: O1924 Project No.: 37467

Area Name: Vinyl Acetate Unit

Company Name: Union Carbide Corporation

II. Unit/Emission Point/Group/Process Information

Revision No.: N/A

Unit/EPN/Group/Process ID No.: C14A090

Applicable Form: OP-UA15

III. Applicable Regulatory Requirement

Name: 30 TAC Chapter 115, Vent Gas Controls

SOP/GOP Index No.: R5121-01

Pollutant: VOC

Main Standard: 115.122(a)(2) 115.122(a)(3)

IV. Title V Monitoring Information

Monitoring Type: CAM

Unit Size: Small

CAM/PM Option No.: CAM-TI-001

Deviation Limit:

CAM/PM Option No.:

Deviation Limit: Any monitoring data below the minimum limit of 1,551 °F, *or latest stack test result*, shall be considered and reported as a deviation.

V. Control Device Information

Control Device ID No.: C14A090

Device Type: DIRFLM



July 10, 2025

E-MAIL RESPONSE

Texas Commission on Environmental Quality ATTN: Mr. Robert Hunter Air Permits Division, MC-163 P.O. Box 13087 Austin, TX 78711-3087

Union Carbide Corporation, CN601688781 Vinyl Acetate Unit, RN100219351 Title V Operating Permit NOD Response for Vinyl Acetate Unit, O1924 TCEQ Project Number: 37467

Dear Mr. Hunter,

Union Carbide Corporation (UCC) is providing an updated response to the Notice of Deficiency (NOD) items provided on July 7, 2025. The initial response was submitted via email on July 9, 2025.

Please do not hesitate to contact me at (979) 238-1742 or <u>cschmidt6@dow.com</u> if you require additional information regarding this submittal.

Sincerely,

Crystal &chmidt

Crystal Schmidt Air Permit Manager

enclosure

cc:

US EPA Region 6 TCEQ Air Section Manager, Region 12 Galveston County Health District R6AirPermitsTX@epa.gov R12apdmail@tceq.texas.gov jmoore@gchd.com

Additional Information Request

Item 1	OP-REQ1: Section XII.B. Air Quality Permits need to be updated. XII.B.2 was marked Yes and	
	XII.B.3 was answered No, but Standard Permit 173166 is a non-rule Air Quality Standard Permit,	
	so XII.B.2 should be marked No, and XII.B.3 should be marked Yes.	
Item 1 Response	Please see the attached Form OP-REQ1 (Page 86 only) for more information.	
Item 2	CAM OP-MON – In the CAM Summary for Unit ID No. C14A090, the deviation limit needs to	
	include the minimum limit of the Combustion Temperature/ Exhaust Gas Temperature range in	
	degrees Celsius.	
Item 2 Response	Please see the attached Form OP-MON for more information.	

Application Area-Wide Applicability Determinations and General Information Form OP-REQ1 (Page 86)

Federal Operating Permit Program Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
July 10, 2025	O1924	RN100219351

XII.	XII.New Source Review (NSR) Authorizations (continued)				
B.Ai	r Quali	ity Standard Permits			
*	1.	The application area includes at least one Air Quality Standard Permit NSR authorization. If the response to XII.B.1 is "No," go to Section XII.C. If the response to XII.B.1 is "Yes," be sure to include the standard permit's registration numbers in Section XII.H and answer XII.B.2 - B.16 as appropriate.	☐ Yes ⊠ No		
•	2.	The application area includes at least one "State Pollution Control Project" Air Quality Standard Permit NSR authorization under 30 TAC § 116.617.	☐ Yes ⊠ <i>No</i> ☐ Yes ☐ No		
•	3.	The application area includes at least one non-rule Air Quality Standard Permit for Pollution Control Projects NSR authorization.	⊠ Yes □ No □ -Yes ⊠ No		
*	4.	The application area includes at least one "Installation and/or Modification of Oil and Gas Facilities" Air Quality Standard Permit NSR authorization under 30 TAC § 116.620.	☐ Yes ⊠ No		
•	5.	The application area includes at least one non-rule Air Quality Standard Permit for Oil and Gas Handling and Production Facilities NSR authorization.	☐ Yes ⊠ No		
•	6.	The application area includes at least one "Municipal Solid Waste Landfill" Air Quality Standard Permit NSR authorization under 30 TAC § 116.621.	☐ Yes ⊠ No		
*	7.	The application area includes at least one "Municipal Solid Waste Landfill Facilities and Transfer Stations" Standard Permit authorization under 30 TAC Chapter 330, Subchapter U.	☐ Yes ⊠ No		
		8. The application area includes at least one "Concrete Batch Plant" Air Quality Standard Permit NSR authorization.	☐ Yes ⊠ No		
	9.	The application area includes at least one "Concrete Batch Plant with Enhanced Controls" Air Quality Standard Permit NSR authorization.	☐ Yes ⊠ No		
	10.	The application area includes at least one "Hot Mix Asphalt Plant" Air Quality Standard Permit NSR authorization.	☐ Yes ⊠ No		

Monitoring Requirements Form OP-MON (Page 1)

Table 1a: CAM/PM Additions

I. Identifying Information

Account No.: GB-0076-J RN No.: RN100219351 CN: CN601688781

Permit No: O1924 Project No.: 37467

Area Name: Vinyl Acetate Unit

Company Name: Union Carbide Corporation

II. Unit/Emission Point/Group/Process Information

Revision No.: N/A

Unit/EPN/Group/Process ID No.: C14A090

Applicable Form: OP-UA15

III. Applicable Regulatory Requirement

Name: 30 TAC Chapter 115, Vent Gas Controls

SOP/GOP Index No.: R5121-01

Pollutant: VOC

Main Standard: 115.122(a)(2) 115.122(a)(3)

IV. Title V Monitoring Information

Monitoring Type: CAM

Unit Size: Small

CAM/PM Option No.: CAM-TI-001

Deviation Limit:

CAM/PM Option No.:

Deviation Limit: Any monitoring data below the minimum limit of 1,551 °F, *or latest stack test result*, shall be considered and reported as a deviation.

V. Control Device Information

Control Device ID No.: C14A090

Device Type: DIRFLM

From: Schmidt, Crystal (C) < cschmidt6@dow.com>

Sent: Wednesday, June 4, 2025 1:09 PM

To: **Robert Hunter**

Subject: RE: Working Draft Permit -- FOP O1924/Project 37467, Union Carbide

Corporation, Union Carbide Texas City

Attachments: 2025-06-04_WDP_Response_O1924.pdf

Robert,

Please see our attached response. I will work on getting you a Form OP-CRO1 via STEERS by the end of the week. Please let me know if you have any questions. Thanks!

Crystal Schmidt

Crystal Schmidt Air Permit Manager The Dow Chemical Company 332 SH 332 E cell phone: 409.392.5054

phone: 979.238.1742 | email: cschmidt6@dow.com



General Business

From: Robert Hunter < Robert. Hunter@tceq.texas.gov >

Sent: Friday, May 30, 2025 4:42 PM

To: Schmidt, Crystal (C) < cschmidt6@dow.com>

Subject: Working Draft Permit -- FOP 01924/Project 37467, Union Carbide Corporation, Union Carbide

Texas City

you recognize the sender and know the content is safe.

Good afternoon Crystal,

I have attached an updated Working Draft Permit for FOP O1924/Project 37467. Please submit any comments you have to me by **06/05/2025**. Please provide a response by the deadline even if there are no comments.

Application updates may now be submitted through Title V STEERS. Any application updates that are submitted by the RO/DAR through STEERS are certified and do not require the submittal of an

original signature OP-CRO1. Application updates that are provided through email or physical mail require certification using an original signature OP-CRO1.

Please notify me when these updates have been submitted.

As required on Form OP-1, question IV.D, please remember the FOP application and all application updates must be submitted to EPA Region 6 at R6AirPermitsTX@epa.gov and to the TCEQ regional office having jurisdiction. This submittal information can be found on our website at Where to Submit FOP Applications and Permit-Related Documents.

Contact me if you have any questions regarding the guidelines, the project schedule, or any other details regarding your application or permit.

Thank you for your cooperation.

Best Regards,

Robert P. Hunter Title V Permit Reviewer TCEQ – APD – OP Section (Title V) (512) 239-1244

How are we doing? Fill out our online customer satisfaction
survey at <u>www.tceq.texas.gov/customersurvey</u>

General Business

From: Schmidt, Crystal (C) <cschmidt6@dow.com>

Sent: Tuesday, May 27, 2025 11:47 AM

To: Robert Hunter < Robert. Hunter@tceq.texas.gov>

Subject: RE: Technical Review -- FOP O1924/Project 37467, Union Carbide Corporation, Union Carbide

Texas City

Robert,

Please see our attached response and let me know if you have any questions. Thanks!



Crystal Schmidt Air Permit Manager The Dow Chemical Company 332 SH 332 E

cell phone: 409.392.5054

phone: 979.238.1742 | email: cschmidt6@dow.com



General Business

From: Robert Hunter < Robert. Hunter@tceq.texas.gov >

Sent: Monday, May 12, 2025 3:58 PM

To: Schmidt, Crystal (C) < cschmidt6@dow.com>

Subject: FW: Technical Review -- FOP O1924/Project 37467, Union Carbide Corporation, Union Carbide

Texas City

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Crystal,

In reference to the email below, please review the WDP and submit to me any comments you have on the working draft permit by **05/26/2025**.

Sincerely,

Robert T. Hunter

Title V Permit Reviewer
OA/Air Permits Division/OP Section
MC-163, P.O. Box 13087
Austin, TX 78711-3087
robert.hunter@tceq.texas.gov

Phone: (512) 239-1244 Fax: (512) 239-1400

How are we doing? Fill out our online customer satisfaction survey at www.tceq.texas.gov/customersurvey

General Business

From: Robert Hunter

Sent: Monday, May 12, 2025 3:56 PM

To: Schmidt, Crystal (C) < cschmidt6@dow.com>

Subject: RE: Technical Review -- FOP O1924/Project 37467, Union Carbide Corporation, Union Carbide

Texas City

Good afternoon Crystal,

I have conducted a technical review of revision application for Union Carbide Corporation, Union Carbide Texas City, Vinyl Acetate Unit. An electronic copy of the Working Draft Permit (WDP) is attached for your review. This WDP contains the TCEQ determination of applicable requirements based on the information submitted in your application, and any updates provided.

Please review the second portion of the "SOP Technical Review Fact Sheet" located at http://www.tceq.texas.gov/assets/public/permitting/air/Guidance/Title_V/sop_wdp_factsheet.p df. This guidance contains important information regarding WDP review and comment procedures.

Note that a Certification by Responsible Official (Form OP-CRO1) for any uncertified application information, including application updates supporting the WDP comments, is required. After final review of the WDP, additional changes supported by application updates may require certification. I will advise you of these changes at a later date. Prior to transmittal of the Public Notice/Announcement Authorization Package, a duly signed OP-CRO1 form may be required which includes the specific dates or time-period of all submitted application documentation that was not previously certified. I will advise you of this requirement prior to sending the Public Notice/Announcement Authorization.

Application updates may now be submitted through Title V STEERS. Any application updates that are submitted by the RO/DAR through STEERS are certified and do not require the submittal of an original signature OP-CRO1. Application updates that are provided through email or physical mail require certification using an original signature OP-CRO1.

Please notify me when these updates have been submitted.

As required on Form OP-1, question IV.D, please remember the FOP application and all application updates must be submitted to EPA Region 6 at R6AirPermitsTX@epa.gov and to the TCEQ regional office having jurisdiction. This submittal information can be found on our website at Where to Submit FOP Applications and Permit-Related Documents.

Contact me if you have any questions regarding the guidelines, the project schedule, or any other details regarding your application or permit.

Thank you for your cooperation.

Sincerely,

Robert T. Hunter

Title V Permit Reviewer
OA/Air Permits Division/OP Section
MC-163, P.O. Box 13087
Austin, TX 78711-3087
robert.hunter@tceq.texas.gov

Phone: (512) 239-1244 Fax: (512) 239-1400

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From: Schmidt, Crystal (C) < cschmidt6@dow.com>

Sent: Wednesday, April 9, 2025 12:11 PM

To: Robert Hunter < <u>Robert.Hunter@tceq.texas.gov</u>>

Subject: RE: Technical Review -- FOP O1924/Project 37467, Union Carbide Corporation, Union Carbide

Texas City

Robert,

Please see our attached response and let me know if you have any questions. Thanks!

Crystal Schmidt

Crystal Schmidt Air Permit Manager The Dow Chemical Company 332 SH 332 E

cell phone: 409.392.5054

phone: 979.238.1742 | email: cschmidt6@dow.com



From: Robert Hunter < Robert. Hunter@tceq.texas.gov>

Sent: Wednesday, March 26, 2025 5:28 PM

To: Pfeifer, Ben (BJ) < benjamin.pfeifer@dow.com > **Cc:** Schmidt, Crystal (C) < cschmidt6@dow.com >

Subject: RE: Technical Review -- FOP O1924/Project 37467, Union Carbide Corporation, Union Carbide

Texas City

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Mr. Benjamin Pfeifer,

I have started the technical review of the renewal application for Union Carbide Corporation, Union Carbide Texas City and have determined that additional information is necessary to complete the review.

Please provide the following items no later than **April 9, 2025:**

- OP-REQ1 Please review the form instructions and answers submitted in Section XII.B. Our records indicate that NSR Permit 173166 is a Pollution Control Project (PCP) Standard Permit, so question XII.B.1 should be answered "YES". Please review all of section XII.B and submit an updated copy of the OP-REQ1(section XII.B only).
- OP-UA15 Please review the form instructions and the answers submitted for C14A090 on the OP-UA15 addressing MACT G applicability and submit an updated copy. From my review the Performance Test attribute needs an answer.
- OP-MON Emission unit C14A090 index no. R1111-01, is potentially subject to compliance assurance monitoring (CAM) for 30 TAC Chapter 111, Visible Emissions under Main Standard 111.111(a)(1)(B)/ Pollutant: Opacity. Is C14A090 subject to CAM under Main Standard 111.111(a)(1)(B)/ Pollutant: Opacity? If so, please submit form OP-MON for emission unit C14A090/index no. R1111-01
 - Based on the unit attributes submitted for emission unit C14A090 index no. R1111-01, the
 unit is subject to Periodic Monitoring under Main Standard 111.111(a)(1)(B)/ Pollutant:
 Opacity. Please submit form OP-MON for emission unit C14A090/index no. R1111-01.
- OP-MON Emission unit C14A090 index no. R5121-01, is potentially subject to compliance assurance monitoring (CAM) for 30 TAC Chapter 115, Vent Gas Controls under Main Standard 115.122(a)(2)/ Pollutant: VOC. Is C14A090 subject to CAM under Main Standard 115.122(a)(2)/ Pollutant: VOC? If so, please submit form OP-MON for emission unit C14A090/index no. R5121-01.

Application updates may now be submitted through Title V STEERS. Any application updates that are submitted by the RO/DAR through STEERS are certified and do not require the submittal of an original signature OP-CRO1. Application updates that are provided through email or physical mail require certification using an original signature OP-CRO1.

Please notify me when these updates have been submitted.

As required on Form OP-1, question IV.D, please remember the FOP application and all application updates must be submitted to EPA Region 6 at R6AirPermitsTX@epa.gov and to the TCEQ regional office having jurisdiction. This submittal information can be found on our website at Where to Submit FOP Applications and Permit-Related Documents.

Contact me if you have any questions regarding the guidelines, the project schedule, or any other details regarding your application or permit.

Thank you,

Robert T. Hunter

Title V Permit Reviewer
OA/Air Permits Division/OP Section
MC-163, P.O. Box 13087
Austin, TX 78711-3087
robert.hunter@tceq.texas.gov

Phone: (512) 239-1244 Fax: (512) 239-1400

How are we doing? Fill out our online customer satisfaction survey at www.tceq.texas.gov/customersurvey

From: Robert Hunter

Sent: Thursday, March 13, 2025 2:11 PM

To: benjamin.pfeifer@dow.com

Cc: Schmidt, Crystal (C) < cschmidt6@dow.com>

Subject: Technical Review -- FOP O1924/Project 37467, Union Carbide Corporation, Union Carbide Texas

City

Mr. Benjamin Pfeifer,

I have been assigned to the Federal Operating Permit (FOP) revision application of Permit No. O1924 for Union Carbide Corporation, Union Carbide Texas City, Vinyl Acetate Unit. This application has been assigned Project No. 37467. Please address all correspondence pertaining to this permit application, including any updates, to me at the address below, and use both the Permit and Project reference numbers above to facilitate tracking.

In addition, I wanted to let you know that EPA has, on occasion, objected to Title V permits based on the following:

- a. NSR permit and PBR monitoring sufficiency –please refer to our periodic monitoring guidance for reference of monitoring that EPA has, so far, considered sufficient.
- b. Reference to confidential business information (CBI) in NSR permits and PBR submittals.

- c. High level terms in the SOP Applicable Requirement Summary Table. The high level terms are sometimes used in SOPs when unit attribute forms have not yet been updated due to regulatory amendments.
- d. Accuracy of PBR information provided on the supplemental table and in the permit please refer to Forms OP-PBRSUP and OP-REQ1 Instructions.

If you have any questions or concerns on any of these items or think you need to do any additional updates, let me know and we can discuss further.

Application updates may now be submitted through Title V STEERS. Any application updates that are submitted by the RO/DAR through STEERS are certified and do not require the submittal of an original signature OP-CRO1. Application updates that are provided through email or physical mail require certification using an original signature OP-CRO1.

Please notify me when these updates have been submitted.

As required on Form OP-1, question IV.D, please remember the FOP application and all application updates must be submitted to EPA Region 6 at R6AirPermitsTX@epa.gov and to the TCEQ regional office having jurisdiction. This submittal information can be found on our website at Where to Submit FOP Applications and Permit-Related Documents.

Please review the "SOP Technical Review Fact Sheet" located at http://www.tceq.texas.gov/assets/public/permitting/air/Guidance/Title_V/sop_wdp_factsheet.pdf. This guidance contains important information regarding the review process and application update procedures. Contact me if you have any questions regarding the guidelines, the project schedule, or any other details regarding your application or permit.

Thank you for your cooperation.

Sincerely,

Robert P. Hunter
Title V Permit Reviewer
OA/Air Permits Division/OP Section
MC-163, P.O. Box 13087
Austin, TX 78711-3087
robert.hunter@tceq.texas.gov

Phone: (512) 239-1244 Fax: (512) 239-1400

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June 4, 2025

E-MAIL RESPONSE

Texas Commission on Environmental Quality ATTN: Mr. Robert Hunter Air Permits Division, MC-163 P.O. Box 13087 Austin, TX 78711-3087

Union Carbide Corporation, CN601688781 Vinyl Acetate Unit, RN100219351 Title V Operating Permit WDP Response for Vinyl Acetate Unit, O1924 TCEQ Project Number: 37467

Dear Mr. Hunter,

Union Carbide Corporation (UCC) is providing a response comments on the Working Draft Permit (WDP) provided on May 30, 2025.

Please do not hesitate to contact me at (979) 238-1742 or <u>cschmidt6@dow.com</u> if you require additional information regarding this submittal.

Sincerely,

Crystal &chmidt

Crystal Schmidt Air Permit Manager

enclosure

Working Draft Permit (WDP) Comments

Union Carbide Corporation (UCC) has no further comments on this Working Draft Permit (WDP).



May 27, 2025

E-MAIL RESPONSE

Texas Commission on Environmental Quality ATTN: Mr. Robert Hunter Air Permits Division, MC-163 P.O. Box 13087 Austin, TX 78711-3087

Union Carbide Corporation, CN601688781 Vinyl Acetate Unit, RN100219351 Title V Operating Permit WDP Response for Vinyl Acetate Unit, O1924 TCEQ Project Number: 37467

Dear Mr. Hunter,

Union Carbide Corporation (UCC) is providing a response comments on the Working Draft Permit (WDP) provided on May 12, 2025.

Please do not hesitate to contact me at (979) 238-1742 or <u>cschmidt6@dow.com</u> if you require additional information regarding this submittal.

Sincerely,

Crystal &chmidt

Crystal Schmidt Air Permit Manager

enclosure

cc:

US EPA Region 6 TCEQ Air Section Manager, Region 12 Galveston County Health District R6AirPermitsTX@epa.gov R12apdmail@tceq.texas.gov jmoore@gchd.com

Working Draft Permit (WDP) Comments

New Source Review Authorization References by Emissions Unit

1. C14A030: Please add Standard Permit 173166 to the list of authorizations for this unit as requested in Revision #3 in the Minor Revision application that was received by TCEQ on December 6, 2024.



April 9, 2025

E-MAIL RESPONSE

Texas Commission on Environmental Quality ATTN: Mr. Robert Hunter Air Permits Division, MC-163 P.O. Box 13087 Austin, TX 78711-3087

Union Carbide Corporation, CN601688781 Vinyl Acetate Unit, RN100219351 Title V Operating Permit NOD Response for Vinyl Acetate Unit, O1924 TCEQ Project Number: 37467

Dear Mr. Hunter,

Union Carbide Corporation (UCC) is providing a response to the Notice of Deficiency (NOD) items provided on March 26, 2025. UCC is also requesting one revision with this submittal. Please see the Form OP-2 for more information.

Please do not hesitate to contact me at (979) 238-1742 or <u>cschmidt6@dow.com</u> if you require additional information regarding this submittal.

Sincerely,

Crystal &chmidt

Crystal Schmidt Air Permit Manager

enclosure

cc:

US EPA Region 6 TCEQ Air Section Manager, Region 12 Galveston County Health District R6AirPermitsTX@epa.gov R12apdmail@tceq.texas.gov jmoore@gchd.com

Additional Information Request

Item 1	OP-REQ1 – Please review the form instructions and answers submitted in Section XII.B. Our
	records indicate that NSR Permit 173166 is a Pollution Control Project (PCP) Standard Permit, so
	question XII.B.1 should be answered "YES". Please review all of section XII.B and submit an
	updated copy of the OP-REQ1(section XII.B only).
Item 1 Response	Please see the attached Form OP-REQ1 (Pages 86 and 87 only) for more information.
Item 2	OP-UA15 - Please review the form instructions and the answers submitted for C14A090 on the
	OP-UA15 addressing MACT G applicability and submit an updated copy. From my review the
	Performance Test attribute needs an answer.
Item 2 Response	Please see the attached Form OP-UA15/Table 6b for more information.
Item 3	OP-MON – Emission unit C14A090 index no. R1111-01, is potentially subject to compliance
	assurance monitoring (CAM) for 30 TAC Chapter 111, Visible Emissions under Main Standard
	111.111(a)(1)(B)/ Pollutant: Opacity. Is C14A090 subject to CAM under Main Standard
	111.111(a)(1)(B)/ Pollutant: Opacity? If so, please submit form OP-MON for emission unit
	C14A090/index no. R1111-01
	 Based on the unit attributes submitted for emission unit C14A090 index no.
	R1111-01, the unit is subject to Periodic Monitoring under Main Standard
	111.111(a)(1)(B)/ Pollutant: Opacity. Please submit form OP-MON for emission
	unit C14A090/index no. R1111-01.
Item 3 Response	Periodic Monitoring (PM) – Please see the attached Form OP-MON for more information.
	Compliance Assurance Monitoring (CAM) – UCC does not believe this unit is applicable to
	CAM. There is not even a CAM option in the guidance document for this scenario.
Item 4	OP-MON – Emission unit C14A090 index no. R5121-01, is potentially subject to compliance
	assurance monitoring (CAM) for 30 TAC Chapter 115, Vent Gas Controls under Main Standard
	115.122(a)(2)/ Pollutant: VOC. Is C14A090 subject to CAM under Main Standard 115.122(a)(2)/
	Pollutant: VOC? If so, please submit form OP-MON for emission unit C14A090/index no.
	R5121-01.
Item 4 Response	Please see the attached Form OP-MON for more information.

Federal Operating Permit Program Form OP-2 – Application for Permit Revision/Renewal Table 2

Date: April 9, 2025

Permit No.: **O1924**

Regulated Entity No.: RN100219351

Company Name: Union Carbide Corporation

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

Revision No.	Davisian Cada	Non IIni4	Unit/Group	Process	NSR	Description of Change and Provisional Terms and
Revision No.	Revision Code	New Unit	ID No.	Applicable Form	Authorization	Conditions
1	MS-C	NO	N/A	OP-REQ1	N/A	Please add a Special Term and Condition for 40 CFR Part 61, Subpart FF applicability. Form OP-REQ1 (Pages 25 – 30) have been updated accordingly.

Application Area-Wide Applicability Determinations and General Information Form OP-REQ1 (Page 25)

Federal Operating Permit Program Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
April 9, 2025	O1924	RN100219351

VI.	VI. Title 40 Code of Federal Regulations Part 60 - New Source Performance Standards (NSPS) (continued)				
Con	J. Subpart EEEE - Standards of Performance for Other Solid Waste Incineration Units for Which Construction Commenced After December 9, 2004 or for Which Modification or Reconstruction Commenced on or After June 16, 2006 (continued)				
•	8.	All air curtain incinerators constructed before December 9, 2004 and not modified or reconstructed on or after June 16, 2006 combust only wood waste, clean lumber, or yard waste or a mixture of these materials.	☐ Yes ☐ No		
•	9.	The air curtain incinerator is located at an institutional facility and is a distinct operating unit of the institutional facility that generated the waste.	☐ Yes ☐ No		
•	10.	The air curtain incinerator burns less than 35 tons per day of wood waste, clean lumber, or yard waste or a mixture of these materials.	☐ Yes ☐ No		
K. 5	Subpart	OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Tr	ansmission and Distribution		
•	1.	The application area includes one or more of the onshore affected facilities listed in 40 CFR § 60.5365(a)-(g) that are subject to 40 CFR Part 60, Subpart OOOO.	☐ Yes ☐ No		
VII.	Title	40 Code of Federal Regulations Part 61 - National Emission Standards for Hazardo	us Air Pollutants		
	A. Ap	plicability			
•	1.	The application area includes a unit(s) that is subject to one or more 40 CFR Part 61 subparts. If the response to Question VII.A.1 is "No" or "N/A," go to Section VIII.	Yes		
	B. Su	bpart F - National Emission Standard for Vinyl Chloride			
		1. The application area is located at a plant which produces ethylene dichloride by reaction of oxygen and hydrogen chloride with ethylene, vinyl chloride by any process, and/or one or more polymers containing any fraction of polymerized vinyl chloride.	Yes No		
	C. Subpart J - National Emission Standard for Benzene Emissions for Equipment Leaks (Fugitive Emission Sources) of Benzene (Complete this section for GOP applications only)				
♦	1.	The application area includes equipment in benzene service.	Yes No N/A		

Application Area-Wide Applicability Determinations and General Information Form OP-REQ1 (Page 26)

Federal Operating Permit Program Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
April 9, 2025	O1924	RN100219351

VII. Ti	VII. Title 40 Code of Federal Regulations Part 61 - National Emission Standards for Hazardous Air Pollutants (continued)			
D.	Subpart	L - National Emission Standard for Benzene Emissions from Coke By-Produc	ct Recovery Plants	
	1.	The application area is located at a coke by-product recovery plant and includes one or more of the affected sources identified in 40 CFR § 61.130(a) - (b). If the response to Question VII.D.1 is "No," go to Section VII.E.	☐ Yes ⊠ No ☐ Yes ☐ No	
	2.	The application area includes equipment in benzene service as determined by 40 CFR § 61.137(b).	Yes No	
	3.	The application area has elected to comply with the provisions of 40 CFR § 61.243-1 and 40 CFR § 61.243-2.	Yes No	
E.	Subpart	M - National Emission Standard for Asbestos		
Applica	bility			
	1.	The application area includes sources, operations, or activities specified in 40 CFR §§ 61.143, 61.144, 61.146, 61.147, 61.148, or 61.155. If the response to Question VII.E.1 is "No," go to Section VII.F.	☐ Yes ⊠ No ☐ Yes ☐ No	
Roadwa	ay Constru	ction		
	2.	The application area includes roadways constructed or maintained with asbestos tailings or asbestos-containing waste material.	Yes No	
Manufa	cturing Co	ommercial Asbestos		
	3.	The application area includes a manufacturing operation using commercial asbestos. If the response to Question VII.E.3 is "No," go to Question VII.E.4.	☐ Yes ☐ No	
		a. Visible emissions are discharged to outside air from the manufacturing operation	☐ Yes ☐ No	
		b. An alternative emission control and waste treatment method is being used that has received prior U.S. Environmental Protection Agency (EPA) approval.	☐ Yes ☐ No	

Application Area-Wide Applicability Determinations and General Information Form OP-REQ1 (Page 27)

Federal Operating Permit Program Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
April 9, 2025	O1924	RN100219351

VII. Title 40 Code of Federal Regulations Part 61 - National Emission Standards for Hazardous Air Pollutants (continued)			
F. Subpart N	M - Na	tional Emission Standard for Asbestos (continued)	
Manufacturing Co	mmer	cial Asbestos (continued)	
	c.	Asbestos-containing waste material is processed into non-friable forms.	Yes No
	d.	Asbestos-containing waste material is adequately wetted.	Yes No
	e.	Alternative filtering equipment is being used that has received EPA approval.	Yes No
	f.	A high efficiency particulate air (HEPA) filter is being used that is certified to be at least 99.97% efficient for 0.3-micron particles	Yes No
	g.	The EPA has authorized the use of wet collectors designed to operate with a unit contacting energy of at least 9.95 kilopascals.	☐ Yes ☐ No
Asbestos Spray Ap	plicat	ion	
4.	are sp	pplication area includes operations in which asbestos-containing materials ray applied. response to Question VII.E.4 is "No," go to Question VII.E.5.	Yes No
	a. If the	Asbestos fibers are encapsulated with a bituminous or resinous binder during spraying and are not friable after drying. response to Question VII.E.4.a is "Yes," go to Question VII.E.5.	Yes No
	b.	Spray-on applications on buildings, structures, pipes, and conduits do not use material containing more than 1% asbestos.	Yes No
	c.	An alternative emission control and waste treatment method is being used that has received prior EPA approval.	Yes No

Application Area-Wide Applicability Determinations and General Information Form OP-REQ1 (Page 28)

Federal Operating Permit Program Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
April 9, 2025	O1924	RN100219351

VII. Title 40 Code of Federal Regulations Part 61 - National Emission Standards for Hazardous Air Pollutants (continued)			
E. Subpart M - N	ational	l Emission Standard for Asbestos (continued)	
Asbestos Spray Ap	pplicati	ion (continued)	
	d.	Asbestos-containing waste material is processed into non-friable forms.	☐ Yes ☐ No
	e.	Asbestos-containing waste material is adequately wetted.	☐ Yes ☐ No
	f.	Alternative filtering equipment is being used that has received EPA approval.	☐ Yes ☐ No
	g.	A HEPA filter is being used that is certified to be at least 99.97% efficient for 0.3-micron particles.	☐ Yes ☐ No
	h.	The EPA has authorized the use of wet collectors designed to operate with a unit contacting energy of at least 9.95 kilopascals.	☐ Yes ☐ No
Fabricating Comm	nercial	Asbestos	
5.	asbest		☐ Yes ☐ No
	If the	response to Question VII.E.5 is "No," go to Question VII.E.6.	
	a.	Visible emissions are discharged to outside air from the manufacturing operation.	Yes No
	b.	An alternative emission control and waste treatment method is being used that has received prior EPA approval.	☐ Yes ☐ No
	c.	Asbestos-containing waste material is processed into non-friable forms.	☐ Yes ☐ No
	d.	Asbestos-containing waste material is adequately wetted.	☐ Yes ☐ No
	e.	Alternative filtering equipment is being used that has received EPA approval.	☐ Yes ☐ No

Application Area-Wide Applicability Determinations and General Information Form OP-REQ1 (Page 29)

Federal Operating Permit Program Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
April 9, 2025	O1924	RN100219351

VII.	VII. Title 40 Code of Federal Regulations Part 61 - National Emission Standards for Hazardous Air Pollutants (continued)			
E. St	ubpart M - N	National Emission Standard for Asbestos (continued)		
Fabr	icating Com	mercial Asbestos (continued)		
		f. A HEPA filter is being used that is certified to be at least 99.97% efficient for 0.3-micron particles.	Yes No	
		g. The EPA has authorized the use of wet collectors designed to operate with a unit contacting energy of at least 9.95 kilopascals.	☐ Yes ☐ No	
Non-	sprayed Asb	pestos Insulation		
	6.	The application area includes insulating materials (other than spray applied insulating materials) that are either molded and friable or wet-applied and friable after drying.	☐ Yes ☐ No	
Asbestos Conversion				
	7.	The application area includes operations that convert regulated asbestos- containing material and asbestos-containing waste material into nonasbestos (asbestos-free) material.	☐ Yes ☐ No	
	lubpart P - N uction Facili	National Emission Standard for Inorganic Arsenic Emissions from Arsenic Trities	ioxide and Metallic Arsenic	
	1.	The application area is located at a metallic arsenic production plant or at an arsenic trioxide plant that processes low-grade arsenic bearing materials by a roasting condensation process.	Yes No	
G. S	ubpart BB -	National Emission Standard for Benzene Emissions from Benzene Transfer G	Operations	
	1.	The application area is located at a benzene production facility and/or bulk terminal. If the response to Question VII.G.1 is "No," go to Section VII.H.	Yes No	
	2.	The application area includes benzene transfer operations at marine vessel loading racks.	Yes No	

Application Area-Wide Applicability Determinations and General Information Form OP-REQ1 (Page 30)

Federal Operating Permit Program Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
April 9, 2025	O1924	RN100219351

VII.	Title 40 Co	de of Federal Regulations Part 61 - National Emission Standards for Hazardo	us Air Pollutants (continued)	
G.	G. Subpart BB - National Emission Standard for Benzene Emissions from Benzene Transfer Operations (continued)			
	3.	The application area includes benzene transfer operations at railcar loading racks.	☐ Yes ☐ No	
	4.	The application area includes benzene transfer operations at tank-truck loading racks.	☐ Yes ☐ No	
H.	. Subpart	FF - National Emission Standard for Benzene Waste Operations		
Applic	ability			
	1.	The application area includes a chemical manufacturing plant, coke by-product recovery plant, or petroleum refinery facility as defined in § 61.341.	⊠ Yes □ No □ -Yes □ No	
	2.	The application area is located at a hazardous waste treatment, storage, and disposal (TSD) facility site as described in 40 CFR § 61.340(b). If the responses to Questions VII.H.1 and VII.H.2 are both "No," go to Section VIII.	Yes No	
	3.	The application area is located at a site that has no benzene onsite in wastes, products, byproducts, or intermediates. If the response to Question VII.H.3 is "Yes," go to Section VIII.	☐ Yes ⊠ <i>No</i> ☐ Yes ☐ No	
	4.	The application area is located at a site having a total annual benzene quantity from facility waste less than 1 megagram per year (Mg/yr). If the response to Question VII.H.4 is "Yes," go to Section VIII	⊠ Yes □ No □ Yes □ No	
	5.	The application area is located at a site having a total annual benzene quantity from facility waste greater than or equal to 1 Mg/yr but less than 10 Mg/yr. <i>If the response to Question VII.H.5 is "Yes," go to Section VIII.</i>	☐ Yes ☐ No	

Form OP-REQ1 (Page 86) Federal Operating Permit Program Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.	
April 9, 2025	O1924	RN100219351	

XII.	XII.New Source Review (NSR) Authorizations (continued)					
B.Ai	B.Air Quality Standard Permits					
*	1.	The application area includes at least one Air Quality Standard Permit NSR authorization. If the response to XII.B.1 is "No," go to Section XII.C. If the response to XII.B.1 is "Yes," be sure to include the standard permit's registration numbers in Section XII.H and answer XII.B.2 - B.16 as appropriate.	⊠ Yes □ No □ -Yes ⊠ No			
•	2.	The application area includes at least one "State Pollution Control Project" Air Quality Standard Permit NSR authorization under 30 TAC § 116.617.	⊠ Yes □ No □ -Yes -□ No			
•	3.	The application area includes at least one non-rule Air Quality Standard Permit for Pollution Control Projects NSR authorization.	☐ Yes ⊠ <i>No</i> ☐ Yes ☐ No			
•	4.	The application area includes at least one "Installation and/or Modification of Oil and Gas Facilities" Air Quality Standard Permit NSR authorization under 30 TAC § 116.620.	☐ Yes ⊠ No ☐ Yes ☐ No			
•	5.	The application area includes at least one non-rule Air Quality Standard Permit for Oil and Gas Handling and Production Facilities NSR authorization.	☐ Yes ⊠ <i>No</i> ☐ Yes ☐ No			
•	6.	The application area includes at least one "Municipal Solid Waste Landfill" Air Quality Standard Permit NSR authorization under 30 TAC § 116.621.	☐ Yes ⊠ <i>No</i> ☐ Yes ☐ No			
•	7.	The application area includes at least one "Municipal Solid Waste Landfill Facilities and Transfer Stations" Standard Permit authorization under 30 TAC Chapter 330, Subchapter U.	☐ Yes ⊠ No ☐ Yes ☐ No			
		8. The application area includes at least one "Concrete Batch Plant" Air Quality Standard Permit NSR authorization.	☐ Yes ⊠ <i>No</i> ☐ Yes ☐ No			
	9.	The application area includes at least one "Concrete Batch Plant with Enhanced Controls" Air Quality Standard Permit NSR authorization.	☐ Yes ⊠ <i>No</i> ☐ Yes ☐ No			
	10.	The application area includes at least one "Hot Mix Asphalt Plant" Air Quality Standard Permit NSR authorization.	☐ Yes ⊠ No ☐ Yes ☐ No			

Application Area-Wide Applicability Determinations and General Information Form OP-REQ1 (Page 86)

Federal Operating Permit Program Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
April 9, 2025	O1924	RN100219351

XII.	XII.New Source Review (NSR) Authorizations (continued)					
B.Ai	B.Air Quality Standard Permits (continued)					
*	11.	The application area includes at least one "Rock Crusher" Air Quality Standard Permit NSR authorization.	☐ Yes ⊠ No ☐ Yes ☐ No			
*	12.	The application area includes at least one "Electric Generating Unit" Air Quality Standard Permit NSR authorization. If the response to XII.B.12 is "No," go to Question XII.B.15.	☐ Yes ⊠ <i>No</i> ☐ Yes ☐ No			
•	13.	For purposes of "Electric Generating Unit" Air Quality Standard Permit, the application area is located in the East Texas Region.	Yes No			
•	14.	For purposes of "Electric Generating Unit" Air Quality Standard Permit, the application area is located in the West Texas Region.	Yes No			
*	15.	The application area includes at least one "Boiler" Air Quality Standard Permit NSR authorization.	☐ Yes ⊠ No ☐ Yes ☐ No			
•	16.	The application area includes at least one "Sawmill" Air Quality Standard Permit NSR authorization.	☐ Yes ⊠ <i>No</i> ☐ Yes ☐ No			
C.Fle	C.Flexible Permits					
		1. The application area includes at least one Flexible Permit NSR authorization.	☐ Yes ⊠ No			
D.M	D.Multiple Plant Permits					
		1. The application area includes at least one Multi-Plant Permit NSR authorization.	☐ Yes ⊠ No			

Texas Commission on Environmental Quality Emission Point/Stationary Vent/Distillation Operation Vent/Process Vent Attributes Form OP-UA15 (Page 14) Federal Operating Permit Program

Table 6b: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)

Subpart G: National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents

Date	Permit No.:	Regulated Entity No.
April 9, 2025	O1924	RN100219351

Emission Point ID No.	SOP Index No.	Control Device	Control Device ID No.	Halogenated	TRE for Halogenated Vent Stream	Halogen Reduction Device	Installation Date	Performance Test
C14A090	63G-01	INCIN	C14A090	NO				YES

Monitoring Requirements Form OP-MON (Page 1)

Table 1a: CAM/PM Additions

I. Identifying Information							
Account No.: <i>GB-0076-J</i>	RN No.: <i>RN1002</i>		CN: <i>CN601688781</i>				
Permit No: <i>01924</i>	J	Project No.: <i>37467</i>					
Area Name: Vinyl Acetate Unit	area Name: Vinyl Acetate Unit						
Company Name: Union Carbide Corpor	ration						
II. Unit/Emission Point/Group/Proce	ess Information						
Revision No.: <i>N/A</i>							
Unit/EPN/Group/Process ID No.: C14A0	190						
Applicable Form: <i>OP-UA15</i>							
III. Applicable Regulatory Requirem	ent						
Name: 30 TAC Chapter 111, Visible Em	eissions						
SOP/GOP Index No.: R1111-01							
Pollutant: <i>PM (Opacity)</i>							
Main Standard: <i>111.111(a)(1)(B)</i>							
IV. Title V Monitoring Information							
Monitoring Type: <i>PM</i>							
Unit Size:							
CAM/PM Option No.: PM-P-030							
Deviation Limit:							
CAM/PM Option No.:							
Deviation Limit: Use of an alternate fue	l						
V. Control Device Information							
Control Device ID No.: C14A090							

Device Type: **DIRFLM**

Monitoring Requirements Form OP-MON (Page 1)

Table 1a: CAM/PM Additions

I. Identifying Information

Account No.: *GB-0076-J* RN No.: *RN100219351* CN: *CN601688781*

Permit No: *01924* Project No.: *37467*

Area Name: Vinyl Acetate Unit

Company Name: Union Carbide Corporation

II. Unit/Emission Point/Group/Process Information

Revision No.: N/A

Unit/EPN/Group/Process ID No.: C14A090

Applicable Form: *OP-UA15*

III. Applicable Regulatory Requirement

Name: 30 TAC Chapter 115, Vent Gas Controls

SOP/GOP Index No.: R5121-01

Pollutant: VOC

Main Standard: 115.122(a)(3)

IV. Title V Monitoring Information

Monitoring Type: *CAM*

Unit Size: Small

CAM/PM Option No.: CAM-TI-001

Deviation Limit:

CAM/PM Option No.:

Deviation Limit: Any monitoring data below the minimum limit shall be considered and reported as a deviation.

V. Control Device Information

Control Device ID No.: C14A090

Device Type: DIRFLM

Emission Point/Stationary Vent/Distillation Operation Vent/Process Vent Attributes – Form OP-UA15 (Page 1) Federal Operating Permit Program

Table 1a: Title 30 Texas Administrative Code Chapter 111 (30 TAC Chapter 111)
Subchapter A: Visible Emissions

Date	Permit No.:	Regulated Entity No.	
December 3, 2024	O1924	RN100219351	

Emission Point ID No.	SOP/GOP Index No.	Alternate Opacity Limitation	AOL ID No.	Vent Source	Opacity Monitoring System	Construction Date	Effluent Flow Rate
C14A090	R1111-01	NO NO		OTHER	NONE	72+	100-

Emission Point/Stationary 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

Date	Permit No.:	Regulated Entity No.	
December 3, 2024	O1924	RN100219351	

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
C14A090	R5121-01	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

Date	Permit No.:	Regulated Entity No.	
December 3, 2024	O1924	RN100219351	

Emission Point ID No.	SOP Index No.	Alternate Control Requirement	ACR ID No.	Control Device Type	Control Device ID No.
C14A090	R5121-01	NONE		DIRFLM	C14A090

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

Date	Permit No.:	Regulated Entity No.	
December 3, 2024	O1924	RN100219351	

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
C14A090	R5121-01	1100+	500+	NO	NO

Emission Point/Stationary Vent/Distillation Operation Vent/Process Vent Attributes – Form OP-UA15 (Page 13) Federal Operating Permit Program

Table 6a: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)

Subpart G: National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents

Date	Permit No.:	Regulated Entity No.	
December 3, 2024	O1924	RN100219351	

Emission Point ID No.	SOP Index No.	Overlap	Group 1	Regulation	HAP Concentration	Flow Rate	Electing Control	NSPS TRE Index Value	MACT TRE Index Value	Plant Type
C14A090	63G-01	NONE	YES							

Emission Point/Stationary Vent/Distillation Operation Vent/Process Vent Attributes – Form OP-UA15 (Page 14) Federal Operating Permit Program

Table 6b: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)

Subpart G: National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents

Date	Permit No.:	Regulated Entity No.	
December 3, 2024	O1924	RN100219351	

Emission Point ID No.	SOP Index No.	Control Device	Control Device ID No.	Halogenated	TRE for Halogenated Vent Stream	Halogen Reduction Device	Installation Date	Performance Test
C14A090	63G-01	INCIN	C14A090	NO				

Emission Point/Stationary Vent/Distillation Operation Vent/Process Vent Attributes – Form OP-UA15 (Page 15) Federal Operating Permit Program

Table 6c: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)

Subpart G: National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents

Date	Permit No.:	Regulated Entity No.	
December 3, 2024	O1924	RN100219351	

Emission Point ID No.	SOP Index No.	Alternate Monitoring Parameters (AMP)	AMP ID No.	Continuous Monitoring	Continuous Monitoring Alt ID No.	Bypass Lines	Flow Indicator
C14A090	63G-01	NO		NOALT		YES	YES

Emission Point/Stationary Vent/Distillation Operation Vent/Process Vent Attributes – Form OP-UA15 (Page 30) Federal Operating Permit Program

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

Date	Permit No.:	Regulated Entity No.		
December 3, 2024	O1924	RN100219351		

Emission Point ID No.	SOP Index No.	HRVOC Concentration	Max Flow Rate	Exempt Date	Vent Gas Stream Control
C14A090	R5720-01	NO	NO		ОТНСД

Emission Point/Stationary Vent/Distillation Operation Vent/Process Vent Attributes – Form OP-UA15 (Page 31) Federal Operating Permit Program

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

Date	Permit No.:	Regulated Entity No.	
December 3, 2024	O1924	RN100219351	

Emission Point ID No.	SOP Index No.	AM	AM ID No.	Minor Modification	Minor Modification ID No.	Process Knowledge	Waived Testing	Testing Requirements
C14A090	R5720-01	NO		NO		YES	NO	725A

Federal Operating Permit Program Individual Unit Summary for Revisions Form OP-SUMR – Table 1

Date	Permit No.	Regulated Entity No.	
December 3, 2024	O1924	RN100219351	

	Unit/Process Revision No.	Unit/Process ID No.	Unit/Process Applicable Form	Unit/Process Name/ Description	Unit/Process CAM	Preconstruction Authorizations 30 TAC Chapter 116/ 30 TAC Chapter 106	Preconstruction Authorizations Title I
	3	C14A030	OP-UA7	VA-5 UNIT FLARE		1961 173166 106.476/09/04/2000	
A	1	C14A090	OP-UA15	VA-5 THERMAL OXIDIZER		173166	

Application Area-Wide Applicability Determinations and General Information Form OP-REQ1 (Page 89)

Federal Operating Permit Program Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
December 3, 2024	O1924	RN100219351

- For SOP applications, answer ALL questions unless otherwise directed.
- ♦ For GOP applications, answer ONLY these questions unless otherwise directed.
 - XII. NSR Authorizations (continued) (Attach additional sheets if necessary for sections XII.E-J.)
- ♦ H. Title 30 TAC Chapter 116 Permits, Special Permits, Standard Permits, Other Authorizations (Other Than Permits By Rule, PSD Permits, NA Permits) for the Application Area

Authorization No.	Issuance Date	Authorization No.	Issuance Date	Authorization No.	Issuance Date
1961	07/14/2020				
173166	07/03/2024				

♦ I. Permits by Rule (30 TAC Chapter 106) for the Application Area

A list of selected Permits by Rule (previously referred to as standard exemptions) that are required to be listed in the FOP application is available in the instructions.

PBR No.	Version No./Date	PBR No.	Version No./Date	PBR No.	Version No./Date
106.261	11/01/2003				
106.262	11/01/2003				
106.263	11/01/2001				
106.476	09/04/2000				
106.532	09/04/2000				

♦ J. Municipal Solid Waste and Industrial Hazardous Waste Permits with an Air Addendum

Permit No.	Issuance Date	Permit No.	Issuance Date	Permit No.	Issuance Date

Federal Operating Permit Program Application for Permit Revision/Renewal Form OP-2 – Table 1

Date: December 3, 2024					
Permit No.: O1924					
Regulated Entity No.: RN100219351					
Company Name: Union Carbide Corporation					
For Submissions to EPA					
Has an electronic copy of this application been submitted (or is being submitted) to EPA?	⊠ YES □ NO				
I. Application Type					
Indicate the type of application:					
Renewal					
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	⊠ YES □ NO				
For GOP Revisions Only	☐ YES ☐ NO				

Federal Operating Permit Program Application for Permit Revision/Renewal Form OP-2-Table 1 (continued)

III.	I. 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: (Check the appropriate box[es].)						
⊠ vo	\square NO _X	$\boxtimes \mathrm{SO}_2$	\bowtie PM ₁₀	⊠ CO	☐ Pb	⊠ HAP	
Other:	Other:						
IV.	IV. Reference Only Requirements (For reference only)						
Has the	Has the applicant paid emissions fees for the most recent agency fiscal year (September 1 - August 31)?						
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

Date: December 3, 2024

Permit No.: **O1924**

Regulated Entity No.: RN100219351

Company Name: Union Carbide Corporation

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

Davisian Na	Davisian Code	N I I \$4	Unit/Group	Process	NSR	Description of Change and Provisional Terms and
Revision No.	Revision Code	New Unit	ID No.	Applicable Form	Authorization	Conditions
1	MS-C	YES	C14A090	OP-SUMR OP-UA15	N/A	Please add this unit to the Title V Permit. Please add 30 TAC Chapter 111, Visible Emissions; 30 TAC Chapter 115, Vent Gas Control; 30 TAC Chapter 115, HRVOC Vent Gas Control; and 40 CFR Part 63, Subpart G positive applicability to this unit. 30 TAC Chapter 117, Subchapter B negative applicability will be added to this unit during the next renewal process.
2	MS-C	N/A	N/A	OP-REQ1 (Page 89)	N/A	Please add Standard Permit 173166 to the list of authorizations for this permit via Form OP-REQ1 (Page 89)
3	MS-C	NO	C14A030	OP-SUMR	N/A	Please add Standard Permit 173166 to the list of authorizations for this unit.

Federal Operating Permit Program Application for Permit Revision/Renewal Form OP-2-Table 3

Date:	December 3, 2024	
Perm	it No.: O1924	
Regu	lated Entity No.: RN100219351	
Com	pany Name: Union Carbide Corporation	
I.	Significant Revision (Complete this section if you are submitting a significant revision application or a renewal application that includes a significant	et revision.)
A.	Is the site subject to bilingual requirements pursuant to 30 TAC § 122.322?	⊠ YES □ NO
B.	Indicate the alternate language(s) in which public notice is required: Spanish	
C.	Will, there be a change in air pollutant emissions as a result of the significant revision?	☐ YES ⊠ NO

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

Table 1a: Additions

Date: December 3, 2024	Regulated Entity No.: RN100219351	Permit No.: O1924
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Company Name: Union Carbide Corporation Area Name: Vinyl Acetate Unit

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)
1	C14A090	OP-UA15	R1111-01	Opacity	30 TAC Chapter 111, Visible Emissions	111.111(a)(1)(B), 111.111(a)(1)(E)
1	C14A090	OP-UA15	R5720-01	HRVOC	30 TAC Chapter 115, HRVOC Vent Gas	115.727(f), 115.725(a)(2)(A)-(D), (a)(3), [G]115.725(a)(4), [G](l), (n), [G]115.726(a)(2)
1	C14A090	OP-UA15	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	115.122(a)(2), 115.121(a)(2), 115.122(a)(2)(B)
1	C14A090	OP-UA15	63G-01	HAPS	40 CFR Part 63, Subpart G	[G]63.113(a)(2), 63.113(h), [G]63.115(f)

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

Table 1b: Additions

Date: December 3, 2024 Regulated Entity No.: RN100219351 Permit No.: O1924

Company Name: Union Carbide Corporation Area Name: Vinyl Acetate Unit

Revision No.	Unit/Group/Process ID No.	SOP/GOP Index No.	Pollutant	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
1	C14A090	R1111-01	Opacity	[G]111.111(a)(1)(F)	NONE	NONE
1	C14A090	R5720-01	HRVOC	115.725(a), (a)(2)(A)-(D), (a)(3), 115.725(a)(3)(B), [G](a)(4), 115.725(a)(5)	115.726(b)(1)-(3), (i), 115.726(j)(1)-(2)	[G]115.725(a)(4), (a)(5), (n), [G]115.726(a)(2)
1	C14A090	R5121-01	VOC	[G]115.125, 115.126(1), (1)(A), 115.126(1)(A)(i), (2)	115.126, (1), (1)(A), (1)(A)(i), 115.126(2)	NONE
1	C14A090	63G-01	HAPS	63.114(a), (a)(1)(i), (d)(1), (e), [G]63.115(f), [G]63.116(c)	63.114(a)(1), (d)(1), 63.117(a)(4), (a)(4)(i)-(ii), 63.118(a)(1)-(3), [G]63.152(a), [G](f)	63.114(e), 63.117(a)(4), 63.117(a)(4)(i)-(ii), (f), 63.118(f)(1)-(3), [G]63.151(b), (e), [G](e)(1), 63.151(e)(2)-(3), [G](j), [G]63.152(a), (b), [G](b)(1)-(2), 63.152(c)(1), (c)(2), (c)(2)(ii), [G]63.152(c)(2)(ii), (c)(2)(iii), 63.152(c)(3), (c)(3)(i)-(ii), 63.152(c)(4)(ii), [G](c)(6)



December 3, 2024

Electronic Submittal via ePermits

TCEQ Air Permits Initial Review Team (APIRT), MC-161 P.O. Box 13087 Austin, TX 78711-3087

Union Carbide Corporation, CN601688781; RN100219351 Vinyl Acetate Unit - Title V Operating Permit O1924 Permit Minor Revision Application

Dear Mr. Bowers,

Union Carbide Corporation is submitting the Title V Operating Permit O1924 Minor Revision Application for the Vinyl Acetate Unit located in Galveston County, Texas. This Minor Revision application is submitted in accordance with 30 TAC Chapter 122, Subchapter, C §122.215, §122.216, and §122.218.

Please do not hesitate to contact me at <u>cschmidt6@dow.com</u> if you require additional information regarding this submittal.

Sincerely,

Crystal &chmidt

Crystal Schmidt Air Permit Manager

enclosure

cc:

US EPA Region 6 TCEQ Air Section Manager, Region 12 Galveston County Health District R6AirPermitsTX@epa.gov R12apdmail@tceq.texas.gov jmoore@gchd.org

VINYL ACETATE UNIT

Yes

Texas Commission on Environmental Quality

Title V Existing 1924

Site Information (Regulated Entity)

What is the name of the permit area to be

authorized?

Does the site have a physical address?

Physical Address

Number and Street 3301 5TH AVE S
City TEXAS CITY

 State
 TX

 ZIP
 77590

 County
 GALVESTON

 Latitude (N) (##.#####)
 29.376111

 Longitude (W) (-###.#####)
 94.943611

 Primary SIC Code
 2869

Secondary SIC Code

Primary NAICS Code 325199

Secondary NAICS Code

Regulated Entity Site Information

What is the Regulated Entity's Number (RN)? RN100219351
What is the name of the Regulated Entity (RE)? UNION CARBIDE

Does the RE site have a physical address?

Physical Address

Number and Street 3301 5TH AVE S
City TEXAS CITY

 State
 TX

 ZIP
 77590

 County
 GALVESTON

 Latitude (N) (##.#####)
 29.3775

Longitude (W) (-###.######) -94.943055

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

CN601688781

(CN)?

Type of Customer Corporation

Full legal name of the applicant:

Legal Name Union Carbide Corporation

Texas SOS Filing Number1335606Federal Tax ID980626782State Franchise Tax ID11314217305

State Sales Tax ID

Local Tax ID

DUNS Number 1289008

Number of Employees 101-250

Independently Owned and Operated? Yes

Responsible Official Contact

Person TCEQ should contact for questions

about this application:

Organization Name THE DOW CHEMICAL COMPANY

Prefix MS
First LISA

Middle

Last CASHBAUGH-SANCHEZ

Suffix

Credentials

Title SENIOR SITE MANUFACTURING DIRECTOR

Enter new address or copy one from list:

Mailing Address

Address Type Domestic

Mailing Address (include Suite or Bldg. here, if 3301 5TH AVE S

applicable)

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

City TEXAS CITY

 State
 TX

 ZIP
 77590

 Phone (###-####)
 4096414141

Extension

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

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

E-mail Imcashbaugh@dow.com

Duly Authorized Representative Contact

Person TCEQ should contact for questions

about this application

Select existing DAR contact or enter a new FRAN FALCON(THE DOW CHEMICA...)

contact.

Organization Name THE DOW CHEMICAL COMPANY

Prefix MS
First FRAN

Middle

Last FALCON

Suffix

Credentials

Title EH&S REGIONAL LEVERAGED DELIVERY

DIRECTOR

Enter new address or copy one from list

Mailing Address

Address Type Domestic

332 HIGHWAY 332 E

Mailing Address (include Suite or Bldg. here, if

applicable)

Routing (such as Mail Code, Dept., or Attn:) LJ APB 2A145B City LAKE JACKSON

TX State 77566 Zip Phone (###-###) 9792389764

Extension

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

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

FQFALCON@DOW.COM E-mail

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

Title V General Information - Existing

1) Permit Type: 2) Permit Latitude Coordinate:

3) Permit Longitude Coordinate:

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

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

4.1.1. Are there any permits that should be voided upon issuance of this permit application **SCHMIDT**

CRYSTAL

MRS

AIR PERMIT MANAGER

CRYSTAL SCHMIDT(THE DOW CHEMICA...)

THE DOW CHEMICAL COMPANY

Domestic

332 HIGHWAY 332 E

LAKE JACKSON

TX 77566

9792381742

cschmidt6@dow.com

SOP

29 Deg 22 Min 34 Sec 94 Deg 56 Min 37 Sec

New Application

Streamlined Revision

No

1/14/25, 2:47 PM

through permit conversion?

4.1.2. Are there any permits that should be voided upon issuance of this permit application

through permit consolidation?

5) Who will electronically sign this Title V

application?

6) Does this application include Acid Rain Program or Cross-State Air Pollution Rule

requirements?

No

Duly Authorized Representative

No

Title V Attachments Existing

Attach OP-1 (Site Information Summary)

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

[File Properties]

File Name <a href=/ePermitsExternal/faces/file?

fileId=228327>OP_2_Form_OP-2.pdf

Hash 1F955D4E58B519E11C5C457B820881BE0DBAE648690C0063ECED6DB75C83B03E

MIME-Type application/pdf

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

[File Properties]

File Name <a href=/ePermitsExternal/faces/file?

fileId=228328>OP_REQ1_Form_OP-

REQ1.pdf

Hash 82126F25C305F72AD4AA93EB2450FDCF41EDC420406319E646ADDDE16A565615

MIME-Type application/pdf

Attach OP-REQ2 (Negative Applicable Requirement Determinations)

Attach OP-REQ3 (Applicable Requirements Summary)

[File Properties]

File Name <a href=/ePermitsExternal/faces/file?

fileId=228329>OP_REQ3_Form_OP-

REQ3.pdf

Hash 87F4AF5A53966BF3D93E5BECD246DF3BB87B21EEE03D4ED93C775281A2F6C314

MIME-Type application/pdf

Attach OP-PBRSUP (Permits by Rule Supplemental Table)

[File Properties]

File Name <a href=/ePermitsExternal/faces/file?

fileId=228330>OP_PBRSUP_Form_OP-

PBRSUP.pdf

Hash 567F3B682E7248026FB751C423BA6DA984AB105BBCE4505FCB9888FD45FF3657

MIME-Type application/pdf

Attach OP-SUMR (Individual Unit Summary for Revisions)

[File Properties]

File Name <a href=/ePermitsExternal/faces/file?

fileId=228331>OP_SUMR_Form_OP-

SUMR.pdf

Hash 6077F62D9AC21845DD92637A5DD9F9159D6A5129215E21814B32D270A36F30BA

MIME-Type application/pdf

Attach OP-MON (Monitoring Requirements)

Attach OP-UA (Unit Attribute) Forms

[File Properties]

File Name <a href=/ePermitsExternal/faces/file?
 fileId=228332>Form OP-UAs.pdf/a>

Hash DB130A47E711968628FBE351E2BA2E4AA271D1757566B0FF69ACC370784126D0

MIME-Type application/pdf

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.

[File Properties]

File Name <a href=/ePermitsExternal/faces/file?

fileId=228333>Cover_Letter.pdf

Hash 14B0C2D64B458F6AE79D53982E94E24610C5C08694604D58303CB8D6181AAAB0

MIME-Type application/pdf

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

Expedite Title V

1) Per Texas Health and Safety Code, Section 382.05155, does the applicant want to expedite the processing of this application?

No

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 Fran Q Falcon, the owner of the STEERS account ER028176.
- 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 1924.
- 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: Fran Q Falcon OWNER OPERATOR

Account Number: ER028176
Signature IP Address: 165.225.37.10
Signature Date: 2024-12-06

 Signature Hash:
 4725663576DE3F41DE74D82CB21CFB9BFB69E4422881212DCE899ECE17426B81

 Form Hash Code at
 D5EDC4AB09D6ACF3AC84AB0CF2F30735739C36D5B0F79CE90C4A4799321D773E

time of Signature:

Submission

Reference Number: The application reference number is 715253

Submitted by: The application was submitted by

ER028176/Fran Q Falcon

Submitted Timestamp: The application was submitted on 2024-12-06

at 14:11:47 CST

Submitted From: The application was submitted from IP address

165.225.37.10

Confirmation Number: The confirmation number is 591970

Steers Version: The STEERS version is 6.83
Permit Number: The permit number is 1924

Additional Information

Application Creator: This account was created by Crystal Schmidt

Permit By Rule Supplemental Table (Page 1) Table A: Registered Permits by Rule (30 TAC Chapter 106) for the Application Area Texas Commission on Environmental Quality

Date	Permit Number	Regulated Entity Number
December 3, 2024	O1924	RN100219351

Unit ID No.	Registration No.	PBR No.	Registration Date
F14A001	160802	106.261 106.262	04/16/2020
F14A001	164525	106.261 106.262	04/13/2021
F14A001	168496	106.261 106.262	04/15/2022

Permit By Rule Supplemental Table (Page 2) Table B: Claimed (not registered) Permits by Rule (30 TAC Chapter 106) for the Application Area Texas Commission on Environmental Quality

Date	Permit Number	Regulated Entity Number	
December 3, 2024	December 3, 2024 O1924		

Unit ID No.	Unit ID No. PBR No. Version No./Date	
PRO-VA5HON	106.263	11/01/2001
C14A030 F14A001	106.476	09/04/2000

Permit By Rule Supplemental Table (Page 3)

Table C: Claimed (not registered) Permits by Rule (30 TAC Chapter 106) for Insignificant Sources for the Application Area Texas Commission on Environmental Quality

Date	Permit Number	Regulated Entity Number	
December 3, 2024 O1924		RN100219351	

PBR No.	Version No./Date
N/A	N/A

Permit By Rule Supplemental Table (Page 4) Table D: Monitoring Requirements for registered and claimed PBRs for the Application Area Texas Commission on Environmental Quality

Date	Permit Number	Regulated Entity Number	
December 3, 2024	O1924	RN100219351	

Unit ID No.	PBR No.	Version No./Date Or Registration No.	Monitoring Requirement
F14A001	106.261 106.262	04/16/2020	New piping components are managed in accordance with the current Leak Detection and Repair (LDAR) fugitive monitoring program 28VHP as required by NSR 1961 SC #9 (Issuance Date 07/14/2020)
F14A001	106.261 106.262	04/13/2021	New piping components are managed in accordance with the current Leak Detection and Repair (LDAR) fugitive monitoring program 28VHP as required by NSR 1961 SC #9 (Issuance Date 07/14/2020)
F14A001	106.261 106.262	04/15/2022	New piping components are managed in accordance with the current Leak Detection and Repair (LDAR) fugitive monitoring program 28VHP as required by NSR 1961 SC #9 (Issuance Date 07/14/2020)
PRO-VA5HON	106.263	11/01/2001	Track emissions on a rolling 12-month basis
C14A030 F14A001	106.476	09/04/2000	Emissions are routed to a flare