PUBLIC NOTICE
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ)
UNION CARBIDE CORP., ST. CHARLES OPERATIONS, ACRYLICS I UNIT
PROPOSED PART 70 AIR OPERATING PERMIT RENEWAL

The LDEQ, Office of Environmental Services, is accepting written comments on Part 70 air operating permit renewal for Union Carbide Corp., P. O. Box 50, Hahnville, LA 70057 for the Acrylics I Unit at the St. Charles Operations. **The facility is located at 355 Hwy 3142 off Hwy 18, west of Taft in St. Charles Parish Parish.**

Union Carbide Corporation operates a chemical manufacturing facility converting petroleum-based raw materials into a variety chemicals and plastics.

Union Carbide Corporation requested the following updates in this permit:
1) Update of AP-42 factors for combustion sources.
2) Update of Riedel constants for tank source emissions estimates.
3) Increase of average lb/hr acetaldehyde emissions for Emission Point (EP) 2601 (Thermal Oxidizer CAP) based on test data.
4) Addition of General Condition XVII Activities.
5) Name change of Emission Point 224 from 'Vent Scrubber' to 'IPE Distillation Unit (Columns D and E)'.
6) Reevaluation of regulatory applicability for each source.
7) Increased alternate operating scenario to 720 hours (1 month) per year. These emissions are covered under the Thermal Oxidizer CAP. The scenario happens when there is a turnaround at the unit and the sources normally venting to the thermal oxidizers, vent to the flare instead, as the oxidizers are down.
There is no project associated with this renewal permit application. No physical modifications or changes in the method of operation, which would result in an increase of emissions, are being incorporated into the permit. The Unit is currently operating under Part 70 Operating Permit 513-V1 issued January 15, 2002.

Pollutant	Before	After	Change
PM_{10}	9.04	7.02	-2.02
SO_2	0.58	0.55	-0.03
NO_X	205.40	199.20	-6.20
CO	88.44	108.31	+19.87
VOC	54.45	49.59*	-4.86
Sulfuric Acid	-	<0.01	+<0.01
Acetone	-	0.04	+0.04

*Includes 15.68 TPY of VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs).

A technical review of the working draft of the proposed permit was submitted to the facility representative and the LDEQ Surveillance Division. Any remarks received during the technical review will be addressed in the "Worksheet for Technical Review of Working Draft of Proposed Permit". All remarks received by LDEQ are included in the record that is available for public review.

Written comments, written requests for a public hearing or written requests for notification of the final decision regarding this permit action may be submitted to Ms. Soumaya Ghosn at LDEQ, Public Participation Group,

P.O. Box 4313, Baton Rouge, LA 70821-4313. **Written comments and/or written requests must be received by 12:30 p.m., by 12:30 p.m., Thursday, May 10, 2007.** Written comments will be considered prior to a final permit decision.

If LDEQ finds a significant degree of public interest, a public hearing will be held. LDEQ will send notification of the final permit decision to the applicant and to each person who has submitted written comments or a written request for notification of the final decision.

The application, proposed Part 70 air operating permit renewal, environmental assessment questions also known as "Environmental Impact Questions"and statement of basis are available for review at the LDEQ, Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, LA. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). **The available information can also be accessed electronically on the Electronic Document Management System (EDMS) on the DEQ public website at www.deq.louisiana.gov.**

Additional copies may be reviewed at the St. Charles Parish Library, Headquarters, 105 Lakewood Drive, Luling LA 70070.

Inquiries or requests for additional information regarding this permit action should be directed to the Petrochemical Section, LDEQ, Air Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-3127.

Persons wishing to be included on the LDEQ permit public notice mailing list or for other public participation related questions should contact the Public Participation Group in writing at LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, by email at maillistrequest@ldeq.org or contact the LDEQ Customer Service Center at (225) 219-LDEQ (219-5337).

Permit public notices including electronic access to the proposed permit and statement of basis can be viewed at the LDEQ permits public notice webpage at www.deq.state.la.us/news/PubNotice/ and general information related to the public participation in permitting activities can be viewed at www.deq.louisiana.gov/portal/tabid/2198/Default.aspx.

Alternatively, individuals may elect to receive the permit public notices via email by subscribing to the LDEQ permits public notice List Server at http://www.state.la.us/ldbc/listservpage/ldeq_pn_listserv.htm.

All correspondence should specify AI Number 2083, Permit Number 513-V2, and Activity Number PER20040020.

Scheduled Publication Date: April 5, 2007

DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO
GOVERNOR

MIKE D. McDANIEL, Ph.D.
SECRETARY

Certified Mail No.

Activity No.: PER20040020
Agency Interest No. 2083

Sarah Thigpen
Responsible Care Leader
Union Carbide Corporation
St. Charles Operations
P. O. Box 50
Hahnville, LA 70057

RE: Part 70 Operating Permit renewal, Union Carbide Corp - St Charles Operations, Acrylics 1 Unit, Union Carbide Corp, Taft, St. Charles Parish, Louisiana

Dear Ms. Thigpen:

This is to inform you that the permit renewal for the above referenced facility has been approved under LAC 33:III.501. The permit is both a state preconstruction and Part 70 Operating Permit. The submittal was approved on the basis of the emissions reported and the approval in no way guarantees the design scheme presented will be capable of controlling the emissions as to the types and quantities stated. A new application must be submitted if the reported emissions are exceeded after operations begin. The synopsis, data sheets and conditions are attached herewith.

It will be considered a violation of the permit if all proposed control measures and/or equipment are not installed and properly operated and maintained as specified in the application.

Operation of this facility is hereby authorized under the terms and conditions of this permit. This authorization shall expire at midnight on the ___ of _____, 2012, unless a timely and complete renewal application has been submitted six months prior to expiration. Terms and conditions of this permit shall remain in effect until such time as the permitting authority takes final action on the application for permit renewal. The permit number and agency interest number cited above should be referenced in future correspondence regarding this facility.

Done this _____ day of _____, 2007.

Permit No.: 513-V2

Sincerely,

Chuck Carr Brown Ph.D.
Assistant Secretary
CCB:LND
c: EPA Region VI

ENVIRONMENTAL **SERVICES**
: PO BOX 4313, BATON ROUGE, LA 70821-4313
P:225-219-3181 F:225-219-3309
WWW.DEQ.LOUISIANA.GOV

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There is no project associated with this renewal permit application. No physical modifications or changes in the method of operation, which would result in an increase of emissions, are being incorporated into the permit. The Unit is currently operating under Part 70 Operating Permit 513-V1 issued January 15, 2002.

Pollutant	Before	After	Change
PM_{10}	9.04	7.02	-2.02
SO_2	0.58	0.55	-0.03
NO_X	205.40	199.20	-6.20
CO	88.44	108.31	+19.87
VOC	54.45	49.59*	-4.86
Sulfuric Acid	-	<0.01	+<0.01
Acetone	-	0.04	+0.04

*Includes 15.68 TPY of VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs).

A technical review of the working draft of the proposed permit was submitted to the facility representative and the LDEQ Surveillance Division. Any remarks received during the technical review will be addressed in the "Worksheet for Technical Review of Working Draft of Proposed Permit". All remarks received by LDEQ are included in the record that is available for public review.

Written comments, written requests for a public hearing or written requests for notification of the final decision regarding this permit action may be submitted to Ms. Soumaya Ghosn at LDEQ, Public Participation Group,

P.O. Box 4313, Baton Rouge, LA 70821-4313. **Written comments and/or written requests must be received by 12:30 p.m., by 12:30 p.m., Thursday, May 10, 2007.** Written comments will be considered prior to a final permit decision.

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All correspondence should specify AI Number 2083, Permit Number 513-V2, and Activity Number PER20040020.

Scheduled Publication Date: April 5, 2007

AIR PERMIT BRIEFING SHEET
AIR PERMITS DIVISION
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Union Carbide Corp - St Charles Operations, Acrylics I Unit
Agency Interest No.: 2083 Activity No. PER20040020
Union Carbide Corp
Taft, St. Charles Parish, Louisiana

I. Background

Union Carbide Corporation (UCC), a subsidiary of the Dow Chemical Company, operates Taft/Star Manufacturing Complex's Oxide II Unit, an existing chemical manufacturing facility that began operation prior to 1969. The Unit is currently operating under Part 70 Operating Permit 513-V1 issued January 15, 2002.

This is the permit renewal for the Acrylics 1 Unit.

II. Origin

A permit application and Emission Inventory Questionnaire was submitted by UCC on September 20, 2004 requesting a Part 70 operating permit renewal. Additional information dated August 17, October 10, 31, and November 3, 2006 was also received.

III. Description

The Acrylic 1 Unit consists of the "sub units" acrylic acid and acrolein. The production unit produces acrylic acid and acrolein by catalytic oxidation of propylene.

Propylene, air and steam are mixed in prescribed rations and fed to the reaction section. The outlet gas from the reaction system is a mixture of acrylic acid, by-products, and unreacted propylene and propane.

There is no project associated with this renewal permit application. No physical modifications or changes in the method of operation that would result in an increase of emissions are being incorporated into the permit. The following updates have been included in this permit.

- Update of AP-42 factors for combustion sources.
- Update of Riedel constants for tank source emissions estimates.
- Increase of average lb/hr acetaldehyde emissions for Thermal Oxidizer CAP, GRP141, (Emission Point (EP) 2601) based on test data. This cap will include emissions from the thermal oxidizers, EQT779 & EQT780 (EPs 253 & 2600).
- Addition of General Condition XVII Activities.
- Name change of GRP145 (Emission Point 224), from 'Vent Scrubber' to '224 - IPE Distillation Unit Common Vent (Columns D & E Jet Cases)'.
- Name change of RLP085 from 'Column A' to 'Acid Scrubber'.
- Reevaluation of regulatory applicability for each source.
- Increased alternate operating scenario to 720 hours (1 month) per year. These emissions are covered under the Thermal Oxidizer CAP, or the flare. The scenario happens during

times that the thermal oxidizers are down (such as during turnarounds, oxidizer maintenance, malfunctions, upsets, etc.) and the sources normally venting to the thermal oxidizers, vent to the flare instead as the oxidizers are down.

- The following sources from Acrylic 2 Unit are controlled by the thermal oxidizers at the Acrylic 1 Unit.

1. 271 - AE2 Tank 3514
2. 272 - AE2 Tank 3515
3. 273 - AE2 Tank 3516
4. 274 - AE2 Tank 3517
5. 275 - AE2 Tank 3519 (insignificant activity)
6. 276 - AE2 Tank 3518 (insignificant activity)
7. 277 - AE2 Tank 3520
8. 278- AE2 Tank 3522
9. 286- AE2 Tank 3530
10. 287- AE2 Tank 3531
11. 293- AE2 Tank 3537
12. 293A- AE2 Tank 3536
13. 303- AE2 Tank 3510
14. 304- AE2 Tank 3511
15. 310- AE2 Tank 3527
16. 279 - AE2 Tank 3500
17. 280 - AE2 Tank 3501
18. 281 - AE2 Tank 3502
19. 282 - AE2 Tank 3509 (insignificant activity)
20. 283 - AE2 Tank 3512
21. 284 - A- AE2 Tank 3513
22. 285 - AE2 Tank 3503
23. 288- AE2 Tank 3532 (insignificant activity)
24. 289 - AE2 Tank 3533 (insignificant activity)
25. 290 - AE2 Tank 3534 (insignificant activity)
26. 292 - AE2 Tank 3529
27. 295/295A- AE2 Tank 3539 (insignificant activity)
28. 296- AE2 Tank 3540 (insignificant activity)
29. 297- AE2 Tank 3541 (insignificant activity)
30. 300 - AE2 Tank 3506
31. 301- AE2 Tank 3507
32. 302- AE2 Tank 3508
33. 305 - AE2 Tank 3521
34. 306- AE2 Tank 3523
35. 307- AE2 Tank 3525
36. 308- AE2 Tank 3528
37. 309- AE2 Tank 3526
38. 311- AE2 Pump Out Tank (insignificant activity)
39. 261/261A - AE2 Column 1
40. 262/262A - AE2 Column 2
41. 263/263A - AE2 Column 3
42. 264/264A - AE2 Column 4
43. 265/265A - AE2 Column 5
44. 266/266A - AE2 Column 6
45. 267- AE2 Column 7
46. 268- AE2 Column 8
47. 269- AE2 Column 9
48. 270- AE2 Column 10
49. 270A- AE2 Column 11

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Union Carbide Corp - St Charles Operations, Acrylics I Unit
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Union Carbide Corp
Taft, St. Charles Parish, Louisiana

Estimated emissions in tons per year are as follows:

Pollutant	Before	After	Change
PM_{10}	9.04	7.02	-2.02
SO_2	0.58	0.55	-0.03
NO_X	205.40	199.20	-6.20
CO	88.44	108.31	+19.87
VOC	54.45	49.59	-4.86
Sulfuric Acid	-	<0.01	+<0.01
Acetone	-	0.04	+0.04

VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

Pollutant	Before	After	Change
Acetaldehyde	0.58	2.22	+1.64
Acetophenone	-	<0.01	+<0.01
Acrolein	3.00	3.90	+0.90
Acrylic Acid	13.44	5.22	-8.22
Benzene	<0.01	<0.01	-
Biphenyl	1.30	2.31	+1.01
Ethyl Acrylate	0.16	0.20	+0.04
Ethylene Glycol	0.04	0.44	+0.40
Formaldehyde	1.70	1.30	-0.40
Hydroquinone	0.10	0.01	-0.09
Methanol	-	<0.01	+<0.01
Naphthalene	-	<0.01	+<0.01
n-Butyl Alcohol	0.01	0.01	-
o-Phenylenediamine	-	0.07	+0.07
Phenol	<0.01	<0.01	-
Phthalic Anhydride	<0.01	<0.01	-
Propionaldehyde	<0.01	<0.01	-
Total	20.33	15.68	-4.65

Other VOC (TPY): 33.59

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Taft, St. Charles Parish, Louisiana

IV. Type of Review

This permit was reviewed for compliance with 40 CFR 70, and the Louisiana Air Quality Regulations. New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) are applicable. Prevention of Significant Deterioration (PSD) does not apply.

This facility is a major source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51.

V. Credible Evidence

Notwithstanding any other provisions of any applicable rule or regulation or requirement of this permit that state specific methods that may be used to assess compliance with applicable requirements, pursuant to 40 CFR Part 70 and EPA's Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997), any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed shall be considered for purposes of Title V compliance certifications. Furthermore, for purposes of establishing whether or not a person has violated or is in violation of any emissions limitation or standard or permit condition, nothing in this permit shall preclude the use, including the exclusive use, by any person of any such credible evidence or information.

VI. Public Notice

A notice requesting public comment on the permit was published in *The Advocate*, Baton Rouge, on **XXXXXXX XX**, 2006; and in the *St. Charles Herald Guide*, Boutte, on **XXXXXXX XX**, 2006. A copy of the public notice was mailed to concerned citizens listed in the Office of Environmental Services Public Notice Mailing List on **XXXXXXX XX**, 2006. The draft permit was also submitted to US EPA Region VI on **XXXXXXX XX**, 2006. All comments will be considered prior to the final permit decision.

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VII. Effects on Ambient Air

Dispersion Model Used: ISCST3

Pollutant	Time Period	Calculated Maximum Ground Level Concentration	Louisiana Toxic Air Pollutant Ambient Air Quality Standard or (National Ambient Air Quality Standard {NAAQS})
Acrylic Acid *	8 Hour Avg.	*	140.00 $\mu g/m^3$

* To determine compliance with the Louisiana Ambient Air Standards (AAS) for acrylic acid, permittee shall establish ambient monitoring for this pollutant in accordance with a monitoring plan and operating procedures to be approved by the Office of Environmental Assessment. The monitoring plan and operating procedures shall be submitted within 45 days of the permit issuance, and the monitoring should commence as soon as practical but no later than 90 days from the date of permit issuance. Monitoring sites should be based upon consideration of the maximum off site concentrations as predicted by dispersion modeling of Union Carbide's permitted emissions alone and of permitted emissions from all sources in the Union Carbide Area of Inclusion (AOI). If monitoring indicates off-site levels of acrylic acid above the AAS, further remedial action will be required to achieve compliance with the ambient air standards; permittee shall submit an application for permit modification within 60 days after completion of monitoring.

The monitoring plan was submitted April 27, 2006 and the first monitoring sample was collected June 10, 2006.

VIII. General Condition XVII Activities

Work Activity	Schedule	Emission Rates - tons				
		PM_{10}	SO_2	NO_X	CO	VOC
Raw material hose disconnection for trucks and railcars	800 events/year 10-liter cavity, 1,000 ppm VOC contamination	-	-	-	-	<0.001
Raw material hose disconnection for totes	2,400 events/year 1-liter cavity, 1,000 ppm VOC contamination	-	-	-	-	<0.001

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		Emission Rates - tons				
Work Activity	Schedule	PM_{10}	SO_2	NO_X	CO	VOC
Catalyst Recharging	4 events/year 45,000 lbs charged per event	0.09	-	-	-	-
Inhibitor Charges	925 events/year 1.2 MM lbs/yr charged	-	-	-	-	0.60
Strainer Cleanouts	572 events/year	-	-	-	-	0.002
Seal Flush Bleed	730 events/year	-	-	-	-	0.13
Sampling	10,465 events/year	-	-	-	-	0.008
Heat Transfer Liquid Loading	17,000 gals/yr loading	-	-	-	-	0.006

IX. Insignificant Activities

ID No.:	Description	Citation
1.	Lab Hood Vents	Insignificant Activity per LAC 33:III.501.B.5.A.6.

STATE ONLY SPECIFIC CONDITIONS

Union Carbide Corp - St Charles Operations, Acrylics I Unit
Agency Interest No.: 2083 Activity No. PER20040020
Union Carbide Corp
Taft, St. Charles Parish, Louisiana

Failure to comply with the following conditions will represent a violation of this permit.

1. Permittee shall operate the Thermal Oxidation Unit, Emission Point 2600 (EQT 780), as follows to achieve a minimum destruction and removal efficiency (DRE) of 99.97% (for all nonhalogenated hydrocarbon feed, including acrolein and acrylic acid).

   (a) Oxidation unit shall operate under the following conditions:
   *(1) minimum of 1652 °F at the combustion chamber
   (2) minimum of 0.5 second contact time
   *(3) 5,774 lb moles/hr maximum flue gas flow rate from thermal oxidizer
   *(4) 2% minimum O_2
   *(5) maximum 100 ppmv CO corrected to 7% O_2 (dry). CO limits shall be based on a one hour rolling average of CO concentrations taken at one minute intervals.

   Permittee shall take corrective action if any operating variable preceded by an * is out of the specified range for any continuous 15 minute averaging period, except that for stack CO and feed rate the averaging period shall be as specified in (3) and (5).

   Alarms shall be set to sound when the thermal oxidizer temperature, oxygen concentration, stack CO concentration, and feed rate are out of the parameter values specified above. The permittee should have installed such alarms on or before June 30, 2000. Once installed, corrective action shall be taken any time an alarm is sounded. Monitoring records and records of alarm and corrective action shall be maintained on site and available for inspection by the Office of Environmental Compliance, Surveillance Division. Frequent or excessive instances of operating parameter excursions may be considered as indicative of failure to properly maintain or operate the equipment, and may be considered a violation of this permit.

   (b) Bypassing of the thermal oxidation units is not allowed, except in emergencies, which shall be reported as required by LAC 33:III.5107.B.

   (c) Permittee shall use a flare as backup control for the thermal oxidation unit when it is not in service.

   (d) Permittee shall develop and implement a written startup, shutdown, and malfunction plan. Permittee shall notify Surveillance Division if any deviations from the written plan occur. The written notification shall be made within 7 days after occurrence.

STATE ONLY SPECIFIC CONDITIONS

Union Carbide Corp - St Charles Operations, Acrylics I Unit
Agency Interest No.: 2083 Activity No. PER20040020
Union Carbide Corp
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2. Permittee shall operate the Thermal Oxidation Unit, Emission Point 253 (EQT 779), as follows to achieve a minimum destruction and removal efficiency (DRE) of 99.97% (for all nonhalogenated hydrocarbon feed, including acrolein and acrylic acid).

   (a) Oxidation unit shall operate under the following conditions:
   - *(1) minimum of 1616 °F at the combustion chamber
   - (2) minimum of 0.5 second contact time
   - *(3) 9,000 lb moles/hr maximum flue gas flow rate from thermal oxidizer
   - *(4) 2% minimum O_2
   - *(5) maximum 100 ppmv CO corrected to 7% O_2 (dry). CO limits shall be based on a one hour rolling average of CO concentrations taken at one minute intervals.

   Permittee shall take corrective action if any operating variable preceded by an * is out of the specified range for any continuous 15 minute averaging period, except that for stack CO and feed rate the averaging period shall be as specified in (3) and (5).

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   (b) Bypassing of the thermal oxidation units is not allowed, except in emergencies, which shall be reported as required by LAC 33:III.5107.B.

   (c) Permittee shall develop and implement a written startup, shutdown, and malfunction plan. Permittee shall notify Surveillance Division if any deviations from the written plan occur. The written notification shall be made within 7 days after occurrences.

   (d) Permittee shall develop and implement a written startup, shutdown, and malfunction plan. Permittee shall notify Surveillance Division if any deviations from the written plan occur. The written notification shall be made within 7 days after occurrence.

STATE ONLY SPECIFIC CONDITIONS

Union Carbide Corp - St Charles Operations, Acrylics I Unit
Agency Interest No.: 2083 Activity No. PER20040020
Union Carbide Corp
Taft, St. Charles Parish, Louisiana

3. Permittee shall perform a stack test on the oxidizer stack, Emission Point 253 (EQT779), for PM_{10} (including toxic metals), NOx, CO, THC/VOC/TAP (using methods in 40 CFR 60, Appendix A) to determine compliance with the emission limits of this permit and Louisiana Air Quality Regulations. Record of this test shall be maintained on site and available for inspection by the Office of Environmental Compliance, Surveillance Division.

4. Permittee shall perform a stack test on the oxidizer stack, Emission Point 2600 (EQT780), for PM_{10} (including toxic metals), NOx, CO, THC/VOC/TAP (using methods in 40 CFR 60, Appendix A) to determine compliance with the emission limits of this permit and Louisiana Air Quality Regulations. Record of this test shall be maintained on site and available for inspection by the Office of Environmental Compliance, Surveillance Division.

5. Permittee shall install continuous emission monitors (CEM) for O2, and CO, in the flue of the permitted combustion device (Emission Points 253 (EQT779) and 2600 (EQT780)), which meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 3, and 4. In lieu of a CO CEM, a range of excess air and CO concentrations shall be established during stack test required in Specific Conditions 4 and 5. The range shall be the oxygen content associated with NOx, CO, THC/VOC/TAP emission rates, temperature, and feed rate in the state permit. The range shall be determined such that the appropriate NOx, CO, THC/VOC/TAP limits are not exceeded.

6. Permittee shall submit a permit modification within 75 days of test completion if emissions are more than 15% less than permitted or comply with General Condition XI if emissions are above permit limits.

7. Permittee shall determine the relationship between steam production and BTU input for each thermal oxidizer during the compliance tests. Steam production shall be used to limit BTU input into the incinerators. Records of steam production shall be maintained on site and available for inspection by the Office of Environmental Compliance, Surveillance Division.

8. Permittee shall submit a permit modification or administrative amendment request to correct any discrepancies in permit conditions from actual test conditions.

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Union Carbide Corp - St Charles Operations, Acrylics I Unit
Agency Interest No.: 2083 Activity No. PER20040020
Union Carbide Corp
Taft, St. Charles Parish, Louisiana

X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.:	Description	LAC 33:III.Chapter																	
		2	5▲	9	11	13	15	2103	2107	2111	2113	2115	2121	22	29*	51*	53*	56	59*
AI-2083	Facility Wide		1	1	1														
GRP140	Unit	1	1			1					1				1	1		1	1
EQT774	222-Heat Transfer Furnace		1		1	1	2									1			
EQT775	223A-Surge Tank (MS-106)							1								1			
EQT776	223B- Surge Tank (MS-306)							3								1			
EQT778	228-Process Flare		1		1		2		1			1				1			
EQT779	253-Thermal Oxidizer		1		1	1	2									1			
EQT780	2600 Thermal Oxidizer		1		1	1	2									1			
EQT781	229-Tank 3544							3								1			
EQT782	230-Tank 3545							3								1			
EQT783	231-Tank 3564							1								1			
EQT784	232-Tank 3542							3								1			
EQT785	233-Tank 3543							3								1			
EQT786	234-Tank 3550							3								1			
EQT787	235-Tank 3551							3								1			
EQT788	236-Tank 3553							3								1			
EQT789	237-Tank 3552							1								1			
EQT790	238-Tank 3557							3								1			
EQT791	239-Tank 3558							3								3			
EQT792	241-Tank 3554							3								1			
EQT793	242-Tank 3555							3								1			
EQT794	243-Tank 3556	1	1			1		3		1						1		1	1

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Union Carbide Corp - St Charles Operations, Acrylics I Unit
Agency Interest No.: 2083 Activity No. PER20040020
Union Carbide Corp
Taft, St. Charles Parish, Louisiana

X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.:	Description	LAC 33:III.Chapter																	
		2	5▲	9	11	13	15	2103	2107	2111	2113	2115	2121	22	29*	51*	53*	56	59*
EQT795	246-Tank 3570							3								1			
EQT796	250-Tank 3562							1								1			
EQT797	259-Tank 2306							3								1			
EQT798	260-Tank MS-756C							3								1			
EQT799	260A-Tank 3571							1								1			
EQT800	260B-Tank 3572							1								1			
EQT801	260C-Tank 3573							1								1			
EQT802	260D-Tank 3574							1								1			
EQT804	260E-Tank 3575							1								1			
EQT805	260F-Tank 3576							3								1			
EQT806	260H-Tank 3559							1								1			
EQT807	2602-Tank MS-789							3								3			
EQT808	Reactor A															1			
EQT809	Reactor B															1			
EQT810	Reactor C															1			
EQT811	Reactor D															1			
EQT812	Reactor E															1			
EQT813	Reactor F															1			
EQT816	Wastewater Streams (A1-R, A1-01, A1-02, A1-03, A1-05)															1			
EQT817	223-Heat Transfer Fluid Tank (ACE2-173) w/condenser							3								1			
EQT826	Dowtherm Heat Exchange System																		
FUG016	196A-Equipment Fugitive Emissions									1			1			1			

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Union Carbide Corp - St Charles Operations, Acrylics I Unit
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Union Carbide Corp
Taft, St. Charles Parish, Louisiana

X. *Table 1. Applicable Louisiana and Federal Air Quality Requirements*

ID No.:	Description	LAC 33:III.Chapter																	
		2	5▲	9	11	13	15	2103	2107	2111	2113	2115	2121	22	29*	51*	53*	56	59*
RLP055	Column D (Vacuum Pump Case)											2				1			
RLP056	Column E (Vacuum Pump Case)											2				1			
RLP057	Column D (Jet Case)											2				1			
RLP058	Column E (Jet Case)											2				1			
RLP059	254-Column H (Jet Case)											2				1			
RLP060	Column H (Vacuum Case)											2				1			
RLP061	Column B											1				1			
RLP062	Column C											1				1			
RLP063	Column I											1				1			
RLP064	Column J											2				1			
RLP065	Column K											2				1			
RLP066	Column L											1				1			
RLP067	Column M											1				1			
RLP068	Column N											1				1			
RLP081	226-Column F (Jet Case)											2				1			
RLP082	Column F (Vacuum Case)											2				1			
RLP083	227-Column G (Jet Case)											2				1			
RLP084	Column G (Vacuum Case)											2				1			
RLP085	Acid Scrubber (Process Vessel)											1				1			
GRP141	2601-CAP EQT779 & EQT780 (TOXs 253, 2600)																		
GRP145	224 – IPE Distillation Unit (Columns D & E)											2				1			

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Union Carbide Corp - St Charles Operations, Acrylics I Unit
Agency Interest No.: 2083 Activity No. PER20040020
Union Carbide Corp
Taft, St. Charles Parish, Louisiana

X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.:	Description	LAC 33:III.Chapter																	
		2	5▲	9	11	13	15	2103	2107	2111	2113	2115	2121	22	29*	51*	53*	56	59*

* The regulations indicated above are State Only regulations.
▲ All LAC 33:III Chapter 5 citations are federally enforceable including LAC 33:III.501.C.6 citations, except when the requirement found in the "Specific Requirements" report specifically states that the regulation is State Only.

KEY TO MATRIX

1 -The regulations have applicable requirements that apply to this particular emission source.
-The emission source may have an exemption from control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.
2 -The regulations have applicable requirements that apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.
3 -The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.

Blank – The regulations clearly do not apply to this type of emission source.

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Union Carbide Corp - St Charles Operations, Acrylics I Unit
Agency Interest No.: 2083 Activity No. PER20040020
Union Carbide Corp
Taft, St. Charles Parish, Louisiana

X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.:	Description	40 CFR 60 NSPS							40 CFR 61			40 CFR 63 NESHAP						40 CFR			
		A	Kb	VV	Dc	III	NNN	RRR	A	M	FF	A	F	G	H	EEEE	DDDDD	64	68	70	82
AI-2083	Facility Wide								1	1	1								1		1
GRP140	Unit	1										1	1	1						1	
EQT774	222-Heat Transfer Furnace				3												1				
EQT775	223A-Surge Tank (MS-106)		3											3		2					
EQT776	223B- Surge Tank (MS-306)		3											3		2					
EQT778	228-Process Flare											1		1				2			
EQT779	253-Thermal Oxidizer													1				2			
EQT780	2600 Thermal Oxidizer													1				2			
EQT781	229-Tank 3544		3											3							
EQT782	230-Tank 3545		3											3							
EQT783	231-Tank 3564		3											3							
EQT784	232-Tank 3542		3											3							
EQT785	233-Tank 3543		3											3							
EQT786	234-Tank 3550		3											1							
EQT787	235-Tank 3551		3											1							
EQT788	236-Tank 3553		3											1							
EQT789	237-Tank 3552		1											1							
EQT790	238-Tank 3557		3											1							
EQT791	239-Tank 3558		3											3							
EQT792	241-Tank 3554		3											3							
EQT793	242-Tank 3555		3											3							

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Union Carbide Corp - St Charles Operations, Acrylics I Unit
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Union Carbide Corp
Taft, St. Charles Parish, Louisiana

X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.:	Description	40 CFR 60 NSPS							40 CFR 61			40 CFR 63 NESHAP						40 CFR			
		A	Kb	VV	Dc	III	NNN	RRR	A	M	FF	A	F	G	H	EEEE	DDDDD	64	68	70	82
EQT794	243-Tank 3556		3											3							
EQT795	246-Tank 3570		3											2							
EQT796	250-Tank 3562		3											2							
EQT797	259-Tank 2306		3											3							
EQT798	260-Tank MS-756C		3											1							
EQT799	260A-Tank 3571		1											1							
EQT800	260B-Tank 3572		1											1							
EQT801	260C-Tank 3573		1											1							
EQT802	260D-Tank 3574		3											3							
EQT804	260E-Tank 3575		3											1							
EQT805	260F-Tank 3576		3											3							
EQT806	260H-Tank 3559		3											1							
EQT807	2602-Tank MS-789		3																		
EQT808	Reactor A					3		3						1							
EQT809	Reactor B					3		3						1							
EQT810	Reactor C					3		3						1							
EQT811	Reactor D					3		3						1							
EQT812	Reactor E					1		3						1							
EQT813	Reactor F					3		3						1							
EQT816	Wastewater Streams (A1-R, A1-01, A1-02, A1-03, A1-05)													1							

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Union Carbide Corp - St Charles Operations, Acrylics I Unit
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Union Carbide Corp
Taft, St. Charles Parish, Louisiana

X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.:	Description	40 CFR 60 NSPS							40 CFR 61			40 CFR 63 NESHAP						40 CFR			
		A	Kb	VV	Dc	III	NNN	RRR	A	M	FF	A	F	G	H	EEEE	DDDDD	64	68	70	82
EQT817	223-Heat Transfer Fluid Tank (ACE2-173) w/condenser		3											3		3					
EQT826	Dowtherm Heat Exchange System												2								
FUG016	196A-Equipment Fugitive Emissions			3											1						
RLP055	Column D (Vacuum Pump Case)						3							1							
RLP056	Column E (Vacuum Pump Case)						3							1							
RLP057	Column D (Jet Case)						3							1							
RLP058	Column E (Jet Case)						3							1							
RLP059	254-Column H (Jet Case)						3							1							
RLP060	Column H (Vacuum Case)						3							1							
RLP061	Column B						3							1							
RLP062	Column C						3							1							
RLP063	Column I						3							1							
RLP064	Column J						3							1							
RLP065	Column K						3							1							
RLP066	Column L						2							1							
RLP067	Column M						3							1							
RLP068	Column N						2							1							
RLP081	226-Column F (Jet Case)						3							1							
RLP082	Column F (Vacuum Case)						3							1							
RLP083	227-Column G (Jet Case)						3							1							

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X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.:	Description	40 CFR 60 NSPS							40 CFR 61			40 CFR 63 NESHAP						40 CFR			
		A	Kb	VV	Dc	III	NNN	RRR	A	M	FF	A	F	G	H	EEEE	DDDDD	64	68	70	82
RLP084	Column G (Vacuum Case)						3							1							
RLP085	Acid Scrubber (Process Vessel)						3							1							
GRP141	2601-CAP EQT779 & EQT780 (TOXs 253, 2600)																				
GRP145	224 – IPE Distillation Unit (Columns D & E)						3							1							

KEY TO MATRIX

1 -The regulations have applicable requirements that apply to this particular emission source.
-The emission source may have an exemption from control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.

2 -The regulations have applicable requirements that apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.

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Blank – The regulations clearly do not apply to this type of emission source.

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Union Carbide Corp - St Charles Operations, Acrylics I Unit
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Taft, St. Charles Parish, Louisiana

XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
GRP140 Unit	NESHAP Subpart EEEE (OLD) – National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline) [40 CFR 63.2330]	DOES NOT APPLY: The unit is applicable to SOCMI HON Subparts F, G, and H. As per 40 CFR 63.2338I(1), storage tanks, transfer racks, transport vehicles, containers, and equipment leak components that are part of an affected source under another 40 CFR Part 63 NESHAP are excluded as affected sources under OLD.
	NESHAP Subpart FFFF (MON) - National Emission Standard for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing. [40 CFR 63.2430]	DOES NOT APPLY: The unit is applicable to SOCMI HON Subparts F, G, and H. The unit is not an affected source under MON MACT, as another NESHAP Part 63 applies.
FUG016 (196A-Equipment Fugitive Emissions)	NSPS Subpart VV –Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry. [40 CFR 60.480]	DOES NOT APPLY. All streams are applicable to SOCMI HON Subparts H which subsumes this subpart. All streams will comply with HON MACT..
EQT774 (222-Heat Transfer Furnace)	Emission Standards for Particular Matter [LAC 33:III.1301.B]	DOES NOT APPLY. Furnace is an indirect heating device.
	Emission Standards for Particular Matter [LAC 33:III.1503.C]	EXEMPT. Unit emits < 250 TPY.
	NSPS Subpart Dc – Small Industrial – Commercial – Institutional Steam Generating Units. [40 CFR 60.40C]	DOES NOT APPLY. Furnace was constructed prior to June 9, 1989.

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XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
EQT817 223 Heat Transfer Fluid Tank (ACE2-173) w/condenser	Storage of Volatile Organic Compounds. [LAC 33:III.2103]	DOES NOT APPLY. Tank stores material with vapor pressure < 1.5 psia. Vapor pressure = 0.16 psia.
	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b]	DOES NOT APPLY. Storage tanks have not been constructed, reconstructed or modified since July 23, 1984. Tank was constructed in 1971.
	NESHAP (HON) Part 63 Subparts F and G – National Emission Standards for Organic Hazardous Air Pollutants From Synthetic Organic Chemical Manufacturing Industry Process Vents, Storage Vessels, Transfer Operations, and Wastewater. [40 CFR 63.110]	DOES NOT APPLY. Heat transfer medium is a utility for the AE 1 Process. It is not subject to the HON since the heat transfer medium is not used as a reactant or manufactured as a product or co-product in the CMPU.
	NESHAP (OLD) Part 63 Subpart EEEE – National Emission Standard for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). [40 CFR 63.2330]	DOES NOT APPLY. The heat transfer medium does not meet the definition of Organic Liquid per 40 CFR 63.2406(3)(vi). Biphenyl has a vapor pressure < 0.1 psia (0.0005 psia)

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XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
EQT775 223A-Surge Tank (MS-106) EQT776 223B- Surge Tank (MS-306)	NESHAP (HON) Part 63 Subparts F and G – National Emission Standards for Organic Hazardous Air Pollutants From Synthetic Organic Chemical Manufacturing Industry Process Vents, Storage Vessels, Transfer Operations, and Wastewater. [40 CFR 63.110]	DOES NOT APPLY. Heat transfer medium is a utility for the AE 1 Process. It is not subject to the HON since the heat transfer medium is not used as a reactant or manufactured as a product or co-product in the CMPU.
	NESHAP (OLD) Part 63 Subpart EEEE – National Emission Standard for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). [40 CFR 63.2330]	DOES NOT APPLY. The heat transfer medium does not meet the definition of Organic Liquid per 40 CFR 63.2406(3)(vi). Biphenyl has a vapor pressure < 0.1 psia (0.0005 psia)
	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b]	DOES NOT APPLY. Storage tanks have not been constructed, reconstructed or modified since July 23, 1984.
RLP055 (Column D Vacuum Pump Case) RLP056 (Column E Vacuum Pump Case) RLP057 (Column D Jet Case) RLP058 (Column E Jet Case)	NESHAP Subpart NNN – Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations [40 CFR 60.661]	DOES NOT APPLY. No construction or modification of distillation columns after Dec 30, 1983.
	Control of Emissions of Organic Compounds – Waste Disposal. [LAC 33:III.2115]	EXEMPT per LAC 33:2115.H.1.c. Emits less than 100 lb VOC per 24 hours period.

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XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
RLP082, (Column F Vacuum Case) RLP084 (Column G Vacuum Case) RLP060 (Column H Vacuum Case) RLP081, (226-Column F Jet Case) RLP083, (227-Column G Jet Case) RLP059, (254-Column H Jet Case)	NSPS Subpart NNN – Standards of Performance for Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations [40 CFR 60.660]	DOES NOT APPLY. No construction or modification of distillation columns after December 30, 1983.
	Control of Emissions of Organic Compounds – Waste Gas Disposal [LAC 33:III.2115]	EXEMPT as per LAC 33:III.2115.H.1.C. Emits less than 100 lbs VOC per 24 hour period.
EQT 778 228 Process Flare	Compliance Assurance Monitoring [40 CFR Part 64]	EXEMPT per 40 CFR 64.2(b)(i). Flare complies with 40 CFR 63.11 promulgated after November 15, 1990.
	Emission Standards for Sulfur Dioxide: Emission Limitations, All Other Sources [LAC 33:III.1503.C]	EXEMPT. Discharge gases shall not exceed 2,000 ppmv for 3 hr. avg. Exemption available for units that emit < 250 TPY SO_2. Unit emits less than 250 TPY of SO_2.

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Union Carbide Corp
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XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
EQT781 229-Tank 3544 EQT782 230-Tank 3545 EQT784 232-Tank 3542 EQT785 233-Tank 3543 EQT792 241-Tank 3554 EQT793 242-Tank 3555 EQT794 243-Tank 3556 EQT797 259-Tank 2306 EQT805 260F-Tank 3576	NESHAP (HON) Part 63 Subparts F and G – Storage Vessel Provisions. [40 CFR 63.119(a)]	DOES NOT APPLY. Capacities < 38 m^3, which by definition are not *storage vessels* per 40 CFR 63.101.
	Storage of Volatile Organic Compounds. [LAC 33:III.2103]	DOES NOT APPLY. Tanks store material with vapor pressure < 1.5 psia.
	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b]	DOES NOT APPLY. No construction, reconstruction, or modifications after July 23, 1984. All tanks have a capacity < 75 m^3.

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XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
EQT783 231-Tank 3564 EQT802 260D-Tank 3574	NESHAP (HON) Part 63 Subparts F and G – Storage Vessel Provisions. [40 CFR 63.119(a)]	DOES NOT APPLY. Capacities < 38 m^3, which by definition are not *storage vessels* per 40 CFR 63.101.
	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b]	DOES NOT APPLY. No construction, reconstruction, or modifications after July 23, 1984. All tanks have a capacity < 75 m^3.
EQT786 234-Tank 3550 EQT887 235-Tank 3551 EQT788 236-Tank 3553 EQT790 238-Tank 3557 EQT795 246-Tank 3570	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b]	DOES NOT APPLY. No construction, reconstruction, or modifications after July 23, 1984.
	Storage of Volatile Organic Compounds. [LAC 33:III.2103]	DOES NOT APPLY. Tanks store material with vapor pressure < 1.5 psia.
EQT789 237-Tank 3552 EQT799 260A-Tank 3571 EQT799 260B-Tank 3572 EQT799 260C-Tank 3573	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b]	EXEMPT as per 40 CFR 63.110(b)(1).

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XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
EQT791 239-Tank 3558	Storage of Volatile Organic Compounds. [LAC 33:III.2103]	DOES NOT APPLY. Tank stores material with vapor pressure < 1.5 psia.
	Comprehensive Toxic Air Pollutant Emission Control Program [LAC 33:III.5109]	DOES NOT APPLY. Storage vessel does not contain TAPs.
	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b]	DOES NOT APPLY. Capacity < 75 m^3.
	NESHAP (HON) Part 63 Subparts F and G – Storage Vessel Provisions. [40 CFR 63.119(a)]	DOES NOT APPLY. Capacity is less than 38 m^3 which by definition is not a storage vessel as per 40 CFR 63.101.
EQT796 250-Tank 3562 EQT804 260E-Tank 3575 EQT806 260H-Tank 3559	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b]	DOES NOT APPLY. Capacity < 75 m^3.

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XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
EQT779 253-Thermal Oxidizer	Emissions Standards for Sulfur Dioxide [LAC 33:III.1503]	EXEMPT. Unit emits < 250 TPY of SO_2.
	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b]	DOES NOT APPLY. Capacity < $75m^3$.
	Compliance Assurance Monitoring [40 CFR Part 64]	EXEMPT per 40 CFR 64.2(b)(i). Oxidizer complies with NESHAP 40 CFR 63 Subpart G which specifies a continuous compliance determination method for emission limitations or standards and was promulgated after November 15, 1990.
EQT798 260-Tank MS-756 C	Storage of Volatile Organic Compounds. [LAC 33:III.2103]	DOES NOT APPLY. Tank stores material with vapor pressure < 1.5 psia.

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Taft, St. Charles Parish, Louisiana

XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
EQT780 2600-Thermal Oxidizer	Compliance Assurance Monitoring [40 CFR Part 64]	EXEMPT per 40 CFR 64.2(b)(i). Oxidizer complies with NESHAP 40 CFR 63 Subpart G which specifies a continuous compliance determination method for emission limitations or standards and was promulgated after November 15, 1990.
	Emissions Standards for Sulfur Dioxide [LAC 33:III.1503]	EXEMPT. Unit emits < 250 TPY of SO_2.
EQT807 2602-Tank MS-789	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b]	DOES NOT APPLY. Tank has a capacity < 75 m^3.
	Storage of Volatile Organic Compounds. [LAC 33:III.2103]	DOES NOT APPLY. Tanks store material with vapor pressure < 1.5 psia.
	Comprehensive Toxic Air Pollutant Emission Control Program [LAC 33:III.5109]	DOES NOT APPLY. Storage vessel does not contain TAPs.

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XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
RLP061 Column B RLP062 Column C RLP063 Column I RLP085 Acid Scrubber (process vessel)	NSPS Subpart NNN – Standards of Performance for Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations [40 CFR 60.660]	DOES NOT APPLY. No construction or modification after December 30, 1983.
RLP064 Column J RLP065 Column K RLP067 Column M	NSPS Subpart NNN – Standards of Performance for Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations [40 CFR 60.660]	DOES NOT APPLY. No construction or modification after December 30, 1983.
	Control of Emissions of Organic Compounds – Waste Disposal. [LAC 33:III.2115]	EXEMPT. Per LAC 33:III.2115, the requirements of LAC 33:III.2115 does not apply to streams subject to a more stringent standard. Columns comply with Group 1 controls under the HON.
RLP066 Column L RLP068 Column N	NSPS Subpart NNN – Standards of Performance for Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations [40 CFR 60.660]	EXEMPT. The columns were installed in 1996, but as per 40 CFR 63.110(d)(4) of Subpart G, a Group 1 process vent that is also subject to the provisions of 40 CFR part 60, Subpart NNN is required to comply only with the provisions of the HON.
	Control of Emissions of Organic Compounds – Waste Disposal. [LAC 33:III.2115]	EXEMPT. Per LAC 33:III.2115, the requirements of LAC 33:III.2115 does not apply to streams subject to a more stringent standard. Columns comply with Group 1 controls under the HON.

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Union Carbide Corp - St Charles Operations, Acrylics I Unit
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Union Carbide Corp
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XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
EQT808 Reactor A EQT809 Reactor B EQT810 Reactor C EQT811 Reactor D EQT813 Reactor F	NSPS Subpart III – SOCMI Air Oxidation Unit Processes [40 CFR 60.610]	DOES NOT APPLY. No construction or modification after October 21, 1983.
	NSPS Subpart RRR – SOCMI Reactor Processes [40 CFR 60.700]	DOES NOT APPLY. No construction, reconstruction, or modification after October 21, 1983.
EQT812 Reactor E	NSPS Subpart III – SOCMI Air Oxidation Unit Processes [40 CFR 60.610]	EXEMPT. After the compliance dates specified in §63.100 of subpart F of this part, a Group 1 process vent that is also subject to the provisions of 40 CFR part 60, subpart III is required to comply only with the provisions of this subpart.
	NSPS Subpart RRR – SOCMI Reactor Processes [40 CFR 60.700]	DOES NOT APPLY. Does not meet the definition of a reactor process. It uses air as a reactant.
EQT826 Dowtherm Heat Exchange System	NESHAP (HON) Part 63 Subparts F. [40 CFR 63.104]	EXEMPT as per 40 CFR 63.104(a)(4).

The above table provides explanation for both the exemption status, or non-applicability of a source cited by 1, 2 or 3 in the matrix presented in Section X (Table 1) of this permit.

40 CFR PART 70 GENERAL CONDITIONS

A. The term of this permit shall be five (5) years from date of issuance. An application for a renewal of this 40 CFR Part 70 permit shall be submitted to the administrative authority no later than six months prior to the permit expiration date. Should a complete permit application not be submitted six months prior to the permit expiration date, a facility's right to operate is terminated pursuant to 40 CFR Section 70.7(c)(ii). Operation may continue under the conditions of this permit during the period of the review of the application for renewal. [LAC 33:III.507.E.1, E.3, E.4, reference 40 CFR 70.6(a)(2)]

B. The conditions of this permit are severable; and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby. [Reference 40 CFR 70.6(a)(5)]

C. Permittee shall comply with all conditions of the 40 CFR Part 70 permit. Any permit noncompliance constitutes a violation of the Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [LAC 33:III.507.B.2, reference 40 CFR 70.6(a)(6)(i) & (iii)]

D. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [Reference 40 CFR 70.6(a)(6)(ii)]

E. This permit does not convey any property rights of any sort, or an exclusive privilege. [Reference 40 CFR 70.6(a)(6)(iv)]

F. The permittee shall furnish to the permitting authority, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking, and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the permitting authority copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality. A claim of confidentiality does not relieve the permittee of the requirement to provide the information. [LAC 33:III.507.B.2, 517.F, reference 40 CFR 70.6(a)(6)(v)]

G. Permittee shall pay fees in accordance with LAC 33:III.Chapter 2 and 40 CFR Section 70.6(a)(7). [LAC 33:III.501.C.2, reference 40 CFR 70.6(a)(7)]

40 CFR PART 70 GENERAL CONDITIONS

H. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the permitting authority or authorized representative to perform the following:

1. enter upon the permittee's premises where a 40 CFR Part 70 source is located or emission-related activity is conducted, or where records must be kept under the conditions of the permit [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(i)];

2. have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(ii)];

3. inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(iii)]; and

4. as authorized by the Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(iv)]

I. All required monitoring data and supporting information shall be kept available for inspection at the facility or alternate location approved by the agency for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Supporting information includes calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and all reports required by the permit.
[Reference 40 CFR 70.6(a)(3)(ii)(B)]

J. Records of required monitoring shall include the following:

1. the date, place as defined in the permit, and time of sampling or measurements;
2. the date(s) analyses were performed;
3. the company or entity that performed the analyses;
4. the analytical techniques or methods used;
5. the results of such analyses; and
6. the operating conditions as existing at the time of sampling or measurement.

[Reference 40 CFR 70.6(a)(3)(ii)(A)]

K. Permittee shall submit at least semiannually, reports of any required monitoring, clearly identifying all instances of deviations from permitted monitoring requirements, certified by a responsible company official. For previously reported deviations, in lieu of attaching the individual deviation reports, the semiannual report may clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. The semiannual reports shall be submitted to the Office of Environmental Compliance, Enforcement Division by March 31 for the preceding period encompassing July through December and September 30 for the preceding period encompassing January through June. Any quarterly deviation report required to be submitted by March 31 or September 30 in accordance with Part 70 General Condition R may be consolidated with the semi-annual reports required by this general condition as long as the report clearly indicates this and all required information is included and clearly delineated in the consolidated report. [LAC 33:III.507.H, reference 40 CFR 70.6(a)(3)(iii)(A)]

L. The permittee shall submit at least semiannual reports on the status of compliance pursuant to 40 CFR Section 70.5 (c) (8) and a progress report on any applicable schedule of compliance pursuant to 40 CFR Section 70.6 (c) (4). [LAC 33:III.507.H.1, reference 40 CFR 70.6(c)(4)]

M. Compliance certifications per LAC 33:III.507.H.5 shall be submitted to the

Administrator as well as the permitting authority. For previously reported compliance deviations, in lieu of attaching the individual deviation reports, the annual report may clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. The compliance certifications shall be submitted to the Office of Environmental Compliance, Enforcement Division by March 31 for the preceding calendar year. [LAC 33:III.507.H.5, reference 40 CFR 70.6(c)(5)(iv)]

N. If the permittee seeks to reserve a claim of an affirmative defense as provided in LAC 33:III.507.J.2, the permittee shall, in addition to any emergency or upset provisions in any applicable regulation, notify the permitting authority within 2 working days of the time when emission limitations were exceeded due to the occurrence of an upset. In the event of an upset, as defined under LAC 33:III.507.J, which results in excess emissions, the permittee shall demonstrate through properly signed, contemporaneous operating logs, or other relevant evidence that: 1) an emergency occurred and the cause was identified; 2) the permitted facility was being operated properly at the time; and 3) during the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standard or requirement of the permit. [LAC 33:III.507.J.2, reference 40 CFR 70.6(g)(3)(iv) & (i-iii)]

O. Permittee shall maintain emissions at a level less than or equal to that provided for under the allowances that the 40 CFR Part 70 source lawfully holds under Title IV of the Clean Air Act or the regulations promulgated thereunder. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement. Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Clean Air Act. [Reference 40 CFR 70.6(a)(4)]

P. Any permit issued pursuant to 40 CFR Part 70 may be subject to reopening prior to the expiration of the permit for any of the conditions specified in 40 CFR Section 70.7(f) or LAC 33:III.529. [LAC 33:III.529.A-B, reference 40 CFR 70.7(f)]

Q. Permittee may request an administrative amendment to the permit to incorporate test results from compliance testing if the following criteria are met:

1. the changes are a result of tests performed upon start-up of newly constructed, installed, or modified equipment or operations;

2. increases in permitted emissions will not exceed five tons per year for any regulated pollutant;

3. increases in permitted emissions of Louisiana toxic air pollutants or of federal hazardous air pollutants would not constitute a modification under LAC 33:III. Chapter 51 or under Section 112 (g) of the Clean Air Act;

4. changes in emissions would not require new source review for prevention of significant deterioration or nonattainment and would not trigger the applicability of any federally applicable requirement;

5. changes in emissions would not qualify as a significant modification; and

6. the request is submitted no later than 12 months after commencing operation. [LAC 33:III.523.A, reference 40 CFR 70.7(d)]

40 CFR PART 70 GENERAL CONDITIONS

R. Permittee shall submit prompt reports of all permit deviations as specified below to the Office of Environmental Compliance, Enforcement Division. All such reports shall be certified by a responsible official in accordance with 40 CFR 70.5(d).

1. A written report shall be submitted within 7 days of any emission in excess of permit requirements by an amount greater than the Reportable Quantity established for that pollutant in LAC 33.I.Chapter 39.

2. A written report shall be submitted within 7 days of the initial occurrence of any emission in excess of permit requirements, regardless of the amount, where such emission occurs over a period of seven days or longer.

3. A written report shall be submitted quarterly to address all permit deviations not included in paragraphs 1 or 2 above. Unless required by an applicable reporting requirement, a written report is not required during periods in which there is no deviation. The quarterly deviation reports submitted on March 31 and September 30 may be consolidated with the semi-annual reports required by Part 70 General Condition K as long as the report clearly indicates this and all required information is included and clearly delineated in the consolidated report. For previously reported permit deviations, in lieu of attaching the individual deviation reports, the quarterly report may clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. The schedule for submittal of quarterly reports shall be no later than the dates specified below for any permit deviations occurring during the corresponding specified calendar quarter:

   a. Report by June 30 to cover January through March
   b. Report by September 30 to cover April through June
   c. Report by December 31 to cover July through September
   d. Report by March 31 to cover October through December

4. Any written report submitted in advance of the timeframes specified above, in accordance with an applicable regulation, may serve to meet the reporting requirements of this condition provided such reports are certified in accordance with 40 CFR 70.5(d) and contain all information relevant to the permit deviation. Reporting under this condition does not relieve the permittee from the reporting requirements of any applicable regulation, including LAC 33.I.Chapter 39, LAC 33.III.Chapter 9, and LAC 33.III.5107. [Reference 40 CFR 70.6(a)(3)(iii)(B)]

S. Permittee shall continue to comply with applicable requirements on a timely basis, and will meet on a timely basis applicable requirements that become effective during the permit term. [Reference 40 CFR 70.5(c)(8)(iii)]

40 CFR PART 70 GENERAL CONDITIONS

T. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156;

2. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158;

3. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161;

4. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to 40 CFR 82.166. ("MVAC-like appliance" as defined at 40 CFR 82.152);

5. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR 82.156; and

6. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166. [Reference 40 CFR 82, Subpart F]

U. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant. [Reference 40 CFR 82, Subpart B]

V. Data availability for continuous monitoring or monitoring to collect data at specific intervals: Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the emissions unit is operating. For purposes of reporting monitoring deviations under Part 70 General Conditions K and R, and unless otherwise provided for in the Specific Requirements (or Table 3) of this permit, the minimum degree of data availability shall be at least 90% (based on a monthly average) of the operating time of the emissions unit or activity being monitored. This condition does not apply to Leak Detection and Repair (LDAR) programs for fugitive emissions (e.g., 40 CFR 60 Subpart VV, 40 CFR 63 Subpart H).

LOUISIANA AIR EMISSION PERMIT
GENERAL CONDITIONS

I. This permit is issued on the basis of the emissions reported in the application for approval of emissions and in no way guarantees that the design scheme presented will be capable of controlling the emissions to the type and quantities stated. Failure to install, properly operate and/or maintain all proposed control measures and/or equipment as specified in the application and supplemental information shall be considered a violation of the permit and LAC 33:III.501. If the emissions are determined to be greater than those allowed by the permit (e.g. during the shakedown period for new or modified equipment) or if proposed control measures and/or equipment are not installed or do not perform according to design efficiency, an application to modify the permit must be submitted. All terms and conditions of this permit shall remain in effect unless and until revised by the permitting authority.

II. The permittee is subject to all applicable provisions of the Louisiana Air Quality Regulations. Violation of the terms and conditions of the permit constitutes a violation of these regulations.

III. The Emission Rates for Criteria Pollutants, Emission Rates for TAP/HAP & Other Pollutants, and Specific Requirements sections or, where included, Emission Inventory Questionnaire sheets establish the emission limitations and are a part of the permit. Any operating limitations are noted in the Specific Requirements or, where included, Tables 2 and 3 of the permit. The synopsis is based on the application and Emission Inventory Questionnaire dated September 20, 2004, along with supplemental information dated August 17, October 10, 31, and November 3, 2006.

IV. This permit shall become invalid, for the sources not constructed, if:

A. Construction is not commenced, or binding agreements or contractual obligations to undertake a program of construction of the project are not entered into, within two (2) years (18 months for PSD permits) after issuance of this permit, or;

B. If construction is discontinued for a period of two (2) years (18 months for PSD permits) or more.

The administrative authority may extend this time period upon a satisfactory showing that an extension is justified.

This provision does not apply to the time period between construction of the approved phases of a phased construction project. However, each phase must commence construction within two (2) years (18 months for PSD permits) of its projected and approved commencement date.

V. The permittee shall submit semiannual reports of progress outlining the status of construction, noting any design changes, modifications or alterations in the construction schedule which have or may have an effect on the emission rates or ambient air quality levels. These reports shall continue to be submitted until such time as construction is certified as being complete. Furthermore, for any significant change in the design, prior approval shall be obtained from the Office of Environmental Services, Air Permits Division.

VI. The permittee shall notify the Department of Environmental Quality, Office of Environmental Services, Air Permits Division within ten (10) calendar days from the date that construction is certified as complete and the estimated date of start-up of operation. The appropriate Regional Office shall also be so notified within the same time frame.

VII. Any emissions testing performed for purposes of demonstrating compliance with the limitations set forth in paragraph III shall be conducted in accordance with the methods described in the Specific Conditions and, where included, Tables 1, 2, 3, 4, and 5 of this

permit. Any deviation from or modification of the methods used for testing shall have prior approval from the Office of Environmental Assessment, Air Quality Assessment Division.

VIII. The emission testing described in paragraph VII above, or established in the specific conditions of this permit, shall be conducted within sixty (60) days after achieving normal production rate or after the end of the shakedown period, but in no event later than 180 days after initial start-up (or restart-up after modification). The Office of Environmental Assessment, Air Quality Assessment Division shall be notified at least (30) days prior to testing and shall be given the opportunity to conduct a pretest meeting and observe the emission testing. The test results shall be submitted to the Air Quality Assessment Division within sixty (60) days after the complete testing. As required by LAC 33:III.913, the permittee shall provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits.

IX. The permittee shall, within 180 days after start-up and shakedown of each project or unit, report to the Office of Environmental Compliance, Enforcement Division any significant difference in operating emission rates as compared to those limitations specified in paragraph III. This report shall also include, but not be limited to, malfunctions and upsets. A permit modification shall be submitted, if necessary, as required in Condition I.

X. The permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in the specific conditions of this permit for a minimum of at least five (5) years.

XI. If for any reason the permittee does not comply with, or will not be able to comply with, the emission limitations specified in this permit, the permittee shall provide the Office of Environmental Compliance, Enforcement Division with a written report as specified below.

A. A written report shall be submitted within 7 days of any emission in excess of permit requirements by an amount greater than the Reportable Quantity established for that pollutant in LAC 33.I.Chapter 39.

B. A written report shall be submitted within 7 days of the initial occurrence of any emission in excess of permit requirements, regardless of the amount, where such emission occurs over a period of seven days or longer.

C. A written report shall be submitted quarterly to address all emission limitation exceedances not included in paragraphs A or B above. The schedule for submittal of quarterly reports shall be no later than the dates specified below for any emission limitation exceedances occurring during the corresponding specified calendar quarter:

1. Report by June 30 to cover January through March
2. Report by September 30 to cover April through June
3. Report by December 31 to cover July through September
4. Report by March 31 to cover October through December

D. Each report submitted in accordance with this condition shall contain the following information:

1. Description of noncomplying emission(s);
2. Cause of noncompliance;

3. Anticipated time the noncompliance is expected to continue, or if corrected, the duration of the period of noncompliance;
4. Steps taken by the permittee to reduce and eliminate the noncomplying emissions; and
5. Steps taken by the permittee to prevent recurrences of the noncomplying emissions.

E. Any written report submitted in advance of the timeframes specified above, in accordance with an applicable regulation, may serve to meet the reporting requirements of this condition provided all information specified above is included. For Part 70 sources, reports submitted in accordance with Part 70 General Condition R shall serve to meet the requirements of this condition provided all specified information is included. Reporting under this condition does not relieve the permittee from the reporting requirements of any applicable regulation, including LAC 33.I.Chapter 39, LAC 33.III.Chapter 9, and LAC 33.III.5107.

XII. Permittee shall allow the authorized officers and employees of the Department of Environmental Quality, at all reasonable times and upon presentation of identification, to:

A. Enter upon the permittee's premises where regulated facilities are located, regulated activities are conducted or where records required under this permit are kept;

B. Have access to and copy any records that are required to be kept under the terms and conditions of this permit, the Louisiana Air Quality Regulations, or the Act;

C. Inspect any facilities, equipment (including monitoring methods and an operation and maintenance inspection), or operations regulated under this permit; and

D. Sample or monitor, for the purpose of assuring compliance with this permit or as otherwise authorized by the Act or regulations adopted thereunder, any substances or parameters at any location.

XIII. If samples are taken under Section XII.D. above, the officer or employee obtaining such samples shall give the owner, operator or agent in charge a receipt describing the sample obtained. If requested prior to leaving the premises, a portion of each sample equal in volume or weight to the portion retained shall be given to the owner, operator or agent in charge. If an analysis is made of such samples, a copy of the analysis shall be furnished promptly to the owner, operator or agency in charge.

XIV. The permittee shall allow authorized officers and employees of the Department of Environmental Quality, upon presentation of identification, to enter upon the permittee's premises to investigate potential or alleged violations of the Act or the rules and regulations adopted thereunder. In such investigations, the permittee shall be notified at the time entrance is requested of the nature of the suspected violation. Inspections under this subsection shall be limited to the aspects of alleged violations. However, this shall not in any way preclude prosecution of all violations found.

XV. The permittee shall comply with the reporting requirements specified under LAC 33:III.919 as well as notification requirements specified under LAC 33:III.927.

XVI. In the event of any change in ownership of the source described in this permit, the permittee and the succeeding owner shall notify the Office of Environmental Services, Air Permits Division, within ninety (90) days after the event, to amend this permit.

LOUISIANA AIR EMISSION PERMIT
GENERAL CONDITIONS

XVII. Very small emissions to the air resulting from routine operations, that are predictable, expected, periodic, and quantifiable and that are submitted by the permitted facility and approved by the Air Permits Division are considered authorized discharges. Approved activities are noted in the General Condition XVII Activities List of this permit. To be approved as an authorized discharge, these very small releases must:

1. Generally be less than 5 TPY
2. Be less than the minimum emission rate (MER)
3. Be scheduled daily, weekly, monthly, etc., or
4. Be necessary prior to plant startup or after shutdown [line or compressor pressuring/depressuring for example]

These releases are not included in the permit totals because they are small and will have an insignificant impact on air quality. This general condition does not authorize the maintenance of a nuisance, or a danger to public health and safety. The permitted facility must comply with all applicable requirements, including release reporting under LAC 33:I.3901.

XVIII. Provisions of this permit may be appealed in writing pursuant to La. R.S. 30:2024(A) within 30 days from receipt of the permit. Only those provisions specifically appealed will be suspended by a request for hearing, unless the secretary or the assistant secretary elects to suspend other provisions as well. Construction cannot proceed except as specifically approved by the secretary or assistant secretary. A request for hearing must be sent to the following:

Attention: Office of the Secretary, Legal Services Division
La. Dept. of Environmental Quality
Post Office Box 4302
Baton Rouge, Louisiana 70821-4302

XIX. Certain Part 70 general conditions may duplicate or conflict with state general conditions. To the extent that any Part 70 conditions conflict with state general conditions, then the Part 70 general conditions control. To the extent that any Part 70 general conditions duplicate any state general conditions, then such state and Part 70 provisions will be enforced as if there is only one condition rather than two conditions.

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SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

AI2083

1 Do not construct or modify any stationary source subject to any standard set forth in LAC 33:III.Chapter 51.Subchapter A without first obtaining written authorization from DEQ in accordance with LAC 33:III.Chapter 51.Subchapter A, after the effective date of the standard. [LAC 33:III.5105.A.1]

2 Do not cause a violation of any ambient air standard listed in LAC 33:III.Table 51.2, unless operating in accordance with LAC 33:III.5109. [LAC 33:III.5105.A.2]

3 Do not build, erect, install, or use any article, machine, equipment, process, or method, the use of which conceals an emission that would otherwise constitute a violation of an applicable standard. [LAC 33:III.5105.A.3]

4 Do not fail to keep records, notify, report or revise reports as required under LAC 33:III.Chapter 51.Subchapter A. [LAC 33:III.5105.A.4]

5 Submit Annual Emissions Report (TEDI): Due annually, by the 1st of July, to the Office of Environmental Assessment, Air Quality Assessment Division, in a format specified by DEQ. Identify the quantity of emissions in the previous calendar year for any toxic air pollutant listed in Table 51.1 or Table 51.3. [LAC 33:III.5107.A.2]

6 Include a certification statement with initial and subsequent annual emission reports and revisions to any emission report to attest that the information contained in the emission report is true, accurate, and complete, and signed by a responsible official, as defined in LAC 33:III.502. Include the full name of the responsible official, title, signature, date of signature and phone number of the responsible official. The certification statement shall read: "I certify, under penalty of perjury, that the emissions data provided is accurate to the best of my knowledge, information, and belief, and I understand that submitting false or misleading information will expose me to prosecution under state regulations" [LAC 33:III.5107.A.3]

7 Submit notification: Due to the Department of Public Safety 24-hour Louisiana Emergency Hazardous Materials Hotline at (225) 925-6595 immediately, but no later than 1 hour, after any discharge of a toxic air pollutant into the atmosphere which results or threatens to result in an emergency condition (a condition which could reasonably be expected to endanger the health and safety of the public, cause significant adverse impact to the land, water or air environment, or cause severe damage to property). [LAC 33:III.5107.B.1]

8 Submit notification: Due to the Office of Environmental Compliance, Emergency and Radiological Services Division, Single Point of Contact (SPOC), except as provided in LAC 33:III.5107.B.6, no later than 24 hours after the beginning of any unauthorized discharge into the atmosphere of a toxic air pollutant as a result of bypassing an emission control device, when the emission control bypass was not the result of an upset, and the quantity of the unauthorized bypass is greater than or equal to the lower of the Minimum Emission Rate (MER) in LAC 33:III.5112, Table 51.1, or a reportable quantity (RQ) in LAC 33:I.3931, or the quantity of the unauthorized bypass is greater than one pound and there is no MER or RQ for the substance in question. Submit notification in the manner provided in LAC 33:I.3923. [LAC 33:III.5107.B.2]

9 Submit written report: Due within seven calendar days of learning of any such discharge or equipment bypass as referred to in LAC 33:III.5107.B.1 through 3. Submit report to the Office of Environmental Compliance by certified mail. Include the information specified in LAC 33:III.5107.B.4.a.i through viii. [LAC 33:III.5107.B.4]

10 Report all discharges to the atmosphere of a toxic air pollutant from a safety relief device, a line or vessel rupture, a sudden equipment failure, or a bypass of an emission control device, regardless of quantity, in the annual emissions report and where otherwise specified. Include the identity of the source, the date and time of the discharge, and the approximate total loss during the discharge. [LAC 33:III.5107.B.5]

11 Submit to DEQ a compliance plan for achieving compliance with MACT requirements in accordance with LAC 33:III.5109.D. Include the elements listed under LAC 33:III.5109.E. [LAC 33:III.5109.A.1]

12 Submit to DEQ a certification of compliance with all MACT requirements, in accordance with LAC 33:III.5109.D. Include the elements listed in LAC 33:III.5109.E. [LAC 33:III.5109.A.2]

13 Submit to DEQ a compliance plan for achieving compliance with the ambient air standard(s), in accordance with LAC 33:III.5109.D. Include the elements listed under LAC 33:III.5109.E. [LAC 33:III.5109.B.1]

14 Submit to DEQ a certification of compliance with all ambient air standards, in accordance with LAC 33:III.5109.D. Include the elements listed under LAC 33:III.5109.E. [LAC 33:III.5109.B.2]

15 Achieve compliance with ambient air standards unless it can be demonstrated to the satisfaction of DEQ that compliance with an ambient air standard would be economically infeasible; that emissions could not reasonably be expected to pose a threat to public health or the environment; and that emissions would be controlled to a level that is Maximum Achievable Control Technology. [LAC 33:III.5109.B.3]

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16 Determine the status of compliance, beyond the property line, with applicable ambient air standards listed in LAC 33:III.5112.Table 51.2. [LAC 33:III.5109.B]

17 Develop a standard operating procedure (SOP) within 120 days after achieving or demonstrating compliance with the standards specified in LAC 33:III.Chapter 51. Detail in the SOP all operating procedures or parameters established to ensure that compliance with the applicable standards is maintained and address operating procedures for any monitoring system in place, specifying procedures to ensure compliance with LAC 33:III.5113.C.5. Make a written copy of the SOP available on site or at an alternate approved location for inspection by DEQ. Provide a copy of the SOP within 30 days upon request by the department. [LAC 33:III.5109.C]

18 Obtain a Louisiana Air Permit in accordance with LAC 33:III.5111.B and C and in accordance with LAC 33:I.1701, before commencement of the construction of any new source. [LAC 33:III.5111.A.1]

19 Obtain a permit modification in accordance with LAC 33:III.5111.B and C before commencement of any modification not specified in a compliance plan submitted under LAC 33:III.5109.D, if the modification will result in an increase in emissions of any toxic air pollutant or will create a new point source. [LAC 33:III.5111.A.2.a]

20 Obtain written authorization from DEQ before commencement of any modification specified in a compliance plan submitted pursuant to LAC 33:III.5109. [LAC 33:III.5111.A.3]

21 Submit letter: Due to the Office of Environmental Services, Air Permits Division, concurrently with the submittal of the compliance plan. Indicate that the necessary permit modification (or new permit if no existing permit is in place) will be applied for by a date specified in the compliance schedule and request written authorization to construct; or, Submit permit application: Due to the Office of Environmental Services, Permits Division in accordance with LAC 33:III.5111.B, concurrently with the submittal of the compliance plan. [LAC 33:III.5111.A.3]

22 Do not commence construction or modification of any major source without first obtaining written authorization from DEQ, as specified. [LAC 33:III.5111.A]

23 Submit notification in writing: Due to the Office of Environmental Compliance, Emergency and Radiological Services Division, SPOC, not more than 60 days nor less than 30 days prior to initial start-up. Submit the anticipated date of the initial start-up. [LAC 33:III.5113.A.1]

24 Submit notification in writing: Due to the Office of Environmental Compliance, Emergency and Radiological Services Division, SPOC, within 10 working days after the actual date of initial start-up of the source. Submit the actual date of initial start-up of the source. [LAC 33:III.5113.A.2]

25 Ensure that all testing done to determine the emission of toxic air pollutants, upon request by the department, is conducted by qualified personnel. [LAC 33:III.5113.B.1]

26 Provide necessary sampling and testing facilities, exclusive of instruments and sensing devices, as needed to properly determine the emission of toxic air pollutants, upon request of the department. [LAC 33:III.5113.B.3]

27 Provide emission testing facilities as specified in LAC 33:III.5113.B.4.a through e. [LAC 33:III.5113.B.4]

28 Analyze samples and determine emissions within 30 days after each emission test has been completed. [LAC 33:III.5113.B.5]

29 Submit certified letter: Due to the Office of Environmental Assessment, Air Quality Assessment Division, before the close of business on the 45th day following the completion of the emission test. Report the determinations of the emission test. [LAC 33:III.5113.B.5]

30 Equipment/operational data recordkeeping by electronic or hard copy upon each occurrence of emissions testing. Retain records of emission test results and other data needed to determine emissions. Retained records at the source, or at an alternate location approved by DEQ for a minimum of two years, and make available upon request for inspection by DEQ. [LAC 33:III.5113.B.6]

31 Submit notification: Due to the Office of Environmental Assessment, Air Quality Assessment Division, at least 30 days before the emission test. Submit notification of emission test to allow DEQ the opportunity to have an observer present during the test. [LAC 33:III.5113.B.7]

32 Maintain and operate each monitoring system in a manner consistent with good air pollution control practices for minimizing emissions. Repair or adjust any breakdown or malfunction of the monitoring system as soon as practicable after its occurrence. [LAC 33:III.5113.C.1]

33 Conduct performance evaluation of the monitoring system when required at any other time requested by DEQ. [LAC 33:III.5113.C.2]

34 Submit performance evaluation report: Due to the Office of Environmental Assessment, Air Quality Assessment Division, within 60 days of the monitoring system performance evaluation. [LAC 33:III.5113.C.2]

35 Submit notification in writing: Due to the Office of Environmental Assessment, Environmental Technology Division at least 30 days before a performance evaluation of the monitoring system is to begin. [LAC 33:III.5113.C.2]

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36 Install a monitoring system on each effluent or on the combined effluent, when monitoring is required and the effluents from a single source, or from two or more sources subject to the same emission standards, are combined before being released to the atmosphere. If two or more sources are not subject to the same emission standards, install a separate monitoring system on each effluent, unless otherwise specified. If the applicable standard is a mass emission standard and the effluent from one source is released to the atmosphere through more than one point, install a monitoring system at each emission point unless DEQ approves the installation of fewer systems. [LAC 33:III.5113.C.3]

37 Evaluate the performance of continuous monitoring systems, upon request by DEQ, in accordance with the requirements and procedures contained in the applicable performance specification of 40 CFR Part 60, appendix B. [LAC 33:III.5113.C.5.a]

38 Submit report: Due to DEQ within 60 days of the performance evaluation of the CMS, if requested. Furnish DEQ with two or more copies of a written report of the test results within 60 days. [LAC 33:III.5113.C.5.a]

39 Install all continuous monitoring systems or monitoring devices to make representative measurements under variable process or operating parameters, if required to install a CMS. [LAC 33:III.5113.C.5.d]

40 Collect and reduce all data as specified in LAC 33:III.5113.C.5.e.i and ii, if required to install a CMS. [LAC 33:III.5113.C.5.e]

41 Submit plan: Due to the Office of Environmental Assessment, Air Quality Assessment Division, within 90 days after DEQ requests either the initial plan or an updated plan, if required by DEQ to install a continuous monitoring system. Submit for approval a plan describing the affected sources and the methods for ensuring compliance with the continuous monitoring system. [LAC 33:III.5113.C.5]

42 Maintain records of monitoring data, monitoring system calibration checks, and the occurrence and duration of any period during which the monitoring system is malfunctioning or inoperative. Maintain these records at the source, or at an alternative location approved by DEQ, for a minimum of three years and make available, upon request, for inspection by DEQ. [LAC 33:III.5113.C.7]

43 An individual or company contracted to perform a demolition or renovation activity which disturbs RACM must be recognized by the Licensing Board for Contractors to perform asbestos abatement, and shall meet the requirements of LAC 33:III.5151.F.2 and F.3 for each demolition or renovation activity. [LAC 33:III.5151.F.1.f]

44 Submit Emission Inventory (EI)/Annual Emissions Statement: Due annually, by the 1st of July to the Department of Environmental Quality, Office of Environmental Services, Air Permits Division. Include the information in LAC 33:III.5307.A for the preceding calendar year. [LAC 33:III.5307.B]

45 Activate the preplanned abatement strategy listed in LAC 33:III.5611.Table 5 when the administrative authority declares an Air Pollution Alert. [LAC 33:III.5609.A.1.b]

46 Activate the preplanned strategy listed in LAC 33:III.5611.Table 6 when the administrative authority declares an Air Pollution Warning. [LAC 33:III.5609.A.2.b]

47 Activate the preplanned abatement strategy listed in LAC 33:III.5611.Table 7 when the administrative authority declares an Air Pollution Emergency. [LAC 33:III.5609.A.3.b]

48 Prepare standby plans for the reduction of emissions during periods of Air Pollution Alert, Air Pollution Warning and Air Pollution Emergency. Design standby plans to reduce or eliminate emissions in accordance with the objectives as set forth in LAC 33:III.5611.Tables 5, 6, and 7. [LAC 33:III.5609.A]

49 Submit standby plan for the reduction or elimination of emissions during an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency: Due within 30 days after requested by the administrative authority. [LAC 33:III.5611.A]

50 During an Air Pollution Alert, Air Pollution Warning or Air Pollution Emergency, make the standby plan available on the premises to any person authorized by the department to enforce these regulations. [LAC 33:III.5611.B]

51 Submit Emission Inventory (EI)/Annual Emissions Statement: Due annually, by the 31st of March for the period January 1 to December 31 of the previous year unless otherwise directed. Submit emission inventory data in the format specified by the Office of Environmental Assessment, Air Quality Assessment Division. Include all data applicable to the emissions source(s), as specified in LAC 33:III.919.A-D. [LAC 33:III.919.D]

52 Report the unauthorized discharge of any air pollutant into the atmosphere in accordance with LAC 33:I.Chapter 39, Notification Regulations and Procedures for Unauthorized Discharges. Submit written reports to the department pursuant to LAC 33:I.3925. Submit timely and appropriate follow-up reports detailing methods and procedures to be used to prevent similar atmospheric releases. [LAC 33:III.927]

53 Provide DEQ with written notice of intention to demolish or renovate prior to performing activities to which 40 CFR 61 Subpart M applies. Delivery of the notice by U.S. Postal Service, commercial delivery service, or hand delivery is acceptable. Subpart M. [40 CFR 61.145(b)(1)]

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54 Do not install or reinstall on a facility component any insulating materials that contain commercial asbestos if the materials are either molded and friable or wet-applied and friable after drying. Subpart M. [40 CFR 61.148]

55 As part of the waiver application submitted under 40 CFR 61.342(b)(1), the owner or operator shall submit to the DEQ a plan under 40 CFR 61.10(b)(3) that is an enforceable commitment to obtain environmental benefits to mitigate the benzene emissions that result from extending the compliance date. The plan shall include the information specified in 40 CFR 61.342(b)(2)(i-iii). [40 CFR 61.342(b)(2)]

56 Comply with the requirements of 40 CFR 61.342(c) through (h) no later than 90 days following the effective date, unless a waiver of compliance has been obtained under 40 CFR 61.11, or by the initial startup for a new source with an initial startup after the effective date. Subpart FF. [40 CFR 61.342(b)]

57 Waste streams containing benzene: Remove or destroy the benzene contained in the waste using a treatment process or wastewater treatment system that complies with the standards specified in 40 CFR 61.348. Subpart FF. [40 CFR 61.342(c)(1)(i)]

58 Determine compliance with 40 CFR 61 Subpart FF using the test methods and procedures specified in 40 CFR 61.355(a) through (i), as applicable. Subpart FF. [40 CFR 61.355]

59 Equipment/operational data recordkeeping by electronic or hard copy continuously Maintain records as specified in 40 CFR 61.356(a) through (n). Maintain each record in a readily accessible location at the facility site for a period not less than two years from the date the information is recorded unless otherwise specified. Subpart FF. [40 CFR 61.356]

60 Submit report: Due annually, beginning on the date that equipment necessary to comply with 40 CFR 61 Subpart FF has been certified in accordance with 40 CFR 61.357(d)(1). Submit updates to the information listed in 40 CFR 61.357(a)(1) through (a)(3) or, if the information in 40 CFR 61.357(a)(1) through (3) is not changed in the following year, a statement to that effect. Subpart FF. [40 CFR 61.357(d)(2)]

61 Submit report: Due quarterly, beginning three months after the date that the equipment necessary to comply with 40 CFR 61 Subpart FF has been certified in accordance with 40 CFR 61.357(d)(1). Submit a certification that all of the required inspections have been carried out in accordance with the requirements of 40 CFR 61 Subpart FF. Subpart FF. [40 CFR 61.357(d)(6)]

62 Submit report: Due quarterly, beginning three months after the date that the equipment necessary to comply with 40 CFR 61 Subpart FF has been certified in accordance with 40 CFR 61.357(d)(1). Include the information specified in 40 CFR 61.357(d)(7)(i) through (d)(7)(v). Subpart FF. [40 CFR 61.357(d)(7)]

63 Submit report: Due annually, beginning one year after the date that the equipment necessary to comply with 40 CFR 61 Subpart FF has been certified in accordance with 40 CFR 61.357(d)(1). Submit a report that summarizes all inspections required by 40 CFR 61.342 through 61.354 during which detectable emissions are measured or a problem that could result in benzene emissions is identified, including information about the repairs or corrective action taken. Subpart FF. [40 CFR 61.357(d)(8)]

64 All affected facilities shall comply with all applicable provisions in 40 CFR 61 Subpart A. [40 CFR 61]

65 Develop a management system to oversee the implementation of the risk management program elements. [40 CFR 68.15(a)]

66 Assign a qualified person or position that has the overall responsibility for the development, implementation, and integration of the risk management program elements. [40 CFR 68.15(b)]

67 Define the lines of authority through an organization chart or similar document when responsibility for implementing individual requirements of 40 CFR 68 is assigned to persons other than the person identified under 68.15(b). [40 CFR 68.15(c)]

68 Equipment/operational data recordkeeping by electronic or hard copy continuously. Document the names or positions of the people, other than the person identified under 68.15(b), who are assigned responsibility for implementing individual requirements of 40 CFR 68. [40 CFR 68.15(c)]

69 Provide in the RMP an executive summary that includes a brief description of the elements listed in 68.155(a) through (g). [40 CFR 68.155]

70 Complete a single registration form and include in the RMP. Cover all regulated substances handled in covered processes. Include in the registration the information specified in 68.160(b)(1) through (13). [40 CFR 68.160]

71 Submit in the RMP information the release scenarios specified in 68.165(a)(2). Include the data listed in 68.165(b)(1) through (13). [40 CFR 68.165]

72 Submit in the RMP the information provided in 68.42(b) on each accident covered by 68.42(a). [40 CFR 68.168]

73 Provide in the RMP the information indicated in 68.175(b) through (p). [40 CFR 68.175]

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74 Provide in the RMP the emergency response information listed in 68.180(a) through (c). [40 CFR 68.180]
75 Submit in the RMP a single certification that, to the best of the signer's knowledge, information, and belief formed after reasonable inquiry, the information submitted is true, accurate, and complete. [40 CFR 68.185(b)]
76 Submit revised registration to EPA: Due within six months after a stationary source is no longer subject to 40 CFR 68. Indicate that the stationary source is no longer covered. [40 CFR 68.190(c)]
77 Review and update the RMP as specified in 68.190(b) and submit it in a method and format to a central point specified by EPA prior to June 21, 1999. [40 CFR 68.190]
78 Maintain records supporting the implementation of 40 CFR 68 for five years unless otherwise provided. [40 CFR 68.200]
79 Use the endpoints specified in 68.22(a) through (g) for analyses of offsite consequences. [40 CFR 68.22]
80 Analyze the release scenarios in 68.25, as specified in 68.25(a) through (h). [40 CFR 68.25]
81 Identify and analyze at least one alternative release scenario for each regulated toxic substance held in a covered process(es) and at least one alternative release scenario to represent all flammable substances held in covered processes, as specified in 68.28(b) through (e). [40 CFR 68.28]
82 Estimate in the RMP the population within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in 68.22(a). [40 CFR 68.30]
83 List in the RMP environmental receptors within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in 68.22(a). [40 CFR 68.33]
84 Submit revised RMP: Due within six months after changes in processes, quantities stored or handled, or any other aspect of the stationary source increase or decrease the distance to the endpoint by a factor of two or more. [40 CFR 68.36(b)]
85 Review and update the offsite consequence analyses at least once every five years. Complete a revised analysis within six months if changes in processes, quantities stored or handled, or any other aspect of the stationary source might reasonably be expected to increase or decrease the distance to the endpoint by a factor of two or more. [40 CFR 68.36]
86 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain the records specified in 68.39(a) through (e) on the offsite consequence analyses. [40 CFR 68.39]
87 Include in the five-year accident history all accidental releases from covered processes that resulted in deaths, injuries, or significant property damage on site, or known offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage. Include the information specified in 68.42(b)(1) through (10) for each accidental release. [40 CFR 68.42]
88 Compile written process safety information, which includes information pertaining to the hazards of the regulated substances used or produced by the process, information pertaining to the technology of the process, and information pertaining to the equipment in the process, before conducting any process hazard analysis required by 40 CFR 68. [40 CFR 68.65(a)]
89 Equipment/operational data recordkeeping by electronic or hard copy continuously. Document that equipment complies with recognized and generally accepted good engineering practices. [40 CFR 68.65(d)(2)]
90 Determine that existing equipment, designed and constructed in accordance with codes, standards, or practices that are no longer in general use, is designed, maintained, inspected, tested, and operating in a safe manner. [40 CFR 68.65(d)(3)]
91 Equipment/operational data recordkeeping by electronic or hard copy continuously. Document that existing equipment, designed and constructed in accordance with codes, standards, or practices that are no longer in general use, is designed, maintained, inspected, tested, and operating in a safe manner. [40 CFR 68.65(d)(3)]
92 Determine the priority order for conducting process hazard analyses based on a rationale which includes such considerations as extent of the process hazards, number of potentially affected employees, age of the process, and operating history of the process. [40 CFR 68.67(a)]
93 Equipment/operational data recordkeeping by electronic or hard copy continuously. Document the priority order for conducting process hazard analyses based on a rationale which includes such considerations as extent of the process hazards, number of potentially affected employees, age of the process, and operating history of the process. [40 CFR 68.67(a)]

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94 Use one or more of the methodologies in Sec. 68.67(b)(1) through (b)(7) to determine and evaluate the hazards of the process being analyzed. [40 CFR 68.67(b)]

95 Use a team with expertise in engineering and process operations to perform the process hazard analysis. Include at least one employee who has experience and knowledge specific to the process being evaluated, and at least one employee who is knowledgeable in the specific process hazard analysis methodology being used. [40 CFR 68.67(d)]

96 Establish a system to promptly address the team's findings and recommendations; assure that the recommendations are resolved in a timely manner and that the resolution is documented; document what actions are to be taken; complete actions as soon as possible; develop a written schedule of when these actions are to be completed; communicate the actions to operating, maintenance and other employees whose work assignments are in the process and who may be affected by the recommendations or actions. [40 CFR 68.67(e)]

97 Equipment/operational data recordkeeping by electronic or hard copy continuously. Document the resolution of the recommendations of the team performing the process hazard analysis, and what actions are to be taken. [40 CFR 68.67(e)]

98 Update and revalidate the process hazard analysis at least every five years after the completion of the initial process hazard analysis, to assure that the process hazard analysis is consistent with the current process. Use a team that meets the requirements in Sec. 68.67(d). [40 CFR 68.67(f)]

99 Retain process hazards analyses and updates or revalidations for each process covered by this section, as well as the documented resolution of recommendations described in Sec. 68.67(e), for the life of the process. [40 CFR 68.67(g)]

100 Perform an initial process hazard analysis (hazard evaluation) on processes covered by 40 CFR 68 as soon as possible, but not later than June 21, 1999. The process hazard analysis shall identify, evaluate, and control the hazards involved in the process, and address the information in 40 CFR 68.67(c)(1) through (7). [40 CFR 68.67]

101 Develop and implement written operating procedures that provide clear instructions for safely conducting activities involved in each covered process consistent with the process safety information. Address steps for each operating phase, operating limits, safety and health considerations, and safety systems and their functions in the procedures. [40 CFR 68.69(a)]

102 Make operating procedures readily accessible to employees who work in or maintain a process. [40 CFR 68.69(b)]

103 Review operating procedures as often as necessary to assure that they reflect current operating practice, including changes that result from changes in process chemicals, technology, and equipment, and changes to stationary sources. Certify annually that these operating procedures are current and accurate. [40 CFR 68.69(c)]

104 Develop and implement safe work practices to provide for the control of hazards during specific operations. [40 CFR 68.69(d)]

105 Train each employee presently involved in operating a process, and each employee before being involved in operating a newly assigned process, in an overview of the process and in the operating procedures as specified in Sec. 68.69. Emphasize the specific safety and health hazards, emergency operations including shutdown, and safe work practices applicable to the employee's job tasks. [40 CFR 68.71(a)(1)]

106 Provide refresher training at least every three years, and more often if necessary, to each employee involved in operating a process to assure that the employee understands and adheres to the current operating procedures of the process. [40 CFR 68.71(b)]

107 Ascertain that each employee involved in operating a process has received and understood the training required by Sec. 68.71. [40 CFR 68.71(c)]

108 Equipment/operational data recordkeeping by electronic or hard copy continuously. Prepare a record which contains the identity of the employee, the date of training required by 40 CFR 68.71, and the means used to verify that the employee understood the training. [40 CFR 68.71(c)]

109 Establish and implement written procedures to maintain the ongoing integrity of process equipment listed in Sec. 68.73(a). [40 CFR 68.73(b)]

110 Train each employee involved in maintaining the ongoing integrity of process equipment in an overview of that process and its hazards and in the procedures applicable to the employee's job tasks to assure that the employee can perform the job tasks in a safe manner. [40 CFR 68.73(c)]

111 Equipment/operational data recordkeeping by electronic or hard copy continuously. Document each inspection and test that has been performed on process equipment. Maintain records of the information specified in Sec. 68.73(d)(4). [40 CFR 68.73(d)(4)]

112 Perform inspections and tests following recognized and generally accepted good engineering practices on process equipment listed in 40 CFR 68.73(a). Make the frequency of inspections and tests consistent with applicable manufacturer's recommendations and good engineering practices, and more frequently if determined to be necessary by prior operating experience. [40 CFR 68.73(d)]

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113 Correct deficiencies in equipment that are outside acceptable limits before further use or in a safe and timely manner when necessary means are taken to assure safe operation. [40 CFR 68.73(e)]

114 Assure that equipment as it is fabricated is suitable for the process application for which it will be used, in the construction of new plants and equipment. Perform appropriate checks and inspections to assure that equipment is installed properly and consistent with design specifications and the manufacturer's instructions. Assure that maintenance materials, spare parts and equipment are suitable for the process application for which they will be used. [40 CFR 68.73(f)]

115 Inform employees involved in operating a process, and maintenance and contract employees whose job tasks will be affected, of a change in the process and train them in the change, prior to start-up of the process or affected part of the process. [40 CFR 68.75(c)]

116 Update the process safety information required by Sec. 68.65 if a change covered by 68.75 results in a change in the process safety information. [40 CFR 68.75(d)]

117 Update the operating procedures or practices required by Sec. 68.69 if a change covered by 68.75 results in a change in the operating procedures or practices. [40 CFR 68.75(e)]

118 Establish and implement written procedures to manage changes to process chemicals, technology, equipment, and procedures; and, changes to stationary sources that affect a covered process. Assure that the considerations specified in Sec. 68.75(b)(1) through (b)(5) are addressed prior to any change. [40 CFR 68.75]

119 Perform a pre-startup safety review for new stationary sources and for modified stationary sources when the modification is significant enough to require a change in the process safety information. Safety review must confirm the information specified in Sec. 68.77(b)(1) through (b)(4) prior to the introduction of regulated substances to a process. [40 CFR 68.77]

120 Develop a report of the findings of the compliance audit required by 40 CFR 68.79(a). [40 CFR 68.79(c)]

121 Determine an appropriate response to each of the findings of the compliance audit. [40 CFR 68.79(d)]

122 Equipment/operational data recordkeeping by electronic or hard copy continuously. Document the appropriate response to each of the findings of the compliance audit, and document that deficiencies have been corrected. [40 CFR 68.79(d)]

123 Retain the two (2) most recent compliance audit repots. [40 CFR 68.79(e)]

124 Conduct compliance audit: Due at least every three years. Certify compliance with the provisions of the prevention program to verify that procedures and practices developed under 40 CFR 68 are adequate and are being followed. Conduct compliance audit by at least one person knowledgeable in the process. [40 CFR 68.79]

125 Establish an incident investigation team consisting of at least one person knowledgeable in the process involved, including a contract employee if the incident involved work of the contractor, and other persons with appropriate knowledge and experience to thoroughly investigate and analyze the incident. [40 CFR 68.81(c)]

126 Establish a system to promptly address and resolve the incident report findings and recommendations. [40 CFR 68.81(e)]

127 Equipment/operational data recordkeeping by electronic or hard copy continuously. Document resolutions and corrective actions of the incident report findings and recommendations. [40 CFR 68.81(e)]

128 Conduct incident investigation: Due as promptly as possible, but not later than 48 hours following each incident which resulted in, or could reasonably have resulted in a catastrophic release of a regulated substance. [40 CFR 68.81]

129 Prepare a report at the conclusion of the incident investigation which includes, at a minimum, the information specified in 40 CFR 68.81(d)(1) through (5). Review the report with all affected personnel whose job tasks are relevant to the incident findings including contract employees where applicable. Retain the incident investigation reports for five years. [40 CFR 68.81]

130 Develop a written plan of action regarding the implementation of the employee participation required by 40 CFR 68. [40 CFR 68.83(a)]

131 Consult with employees and their representatives on the conduct and development of process hazards analyses and on the development of the other elements of process safety management. [40 CFR 68.83(b)]

132 Provide to employees and their representatives access to process hazard analyses and to all other information required to be developed under 40 CFR 68. [40 CFR 68.83(c)]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

AI2083

133 Issue a hot work permit for hot work operations conducted on or near a covered process. Document in the permit that the fire prevention and protection requirements in 29 CFR 1910.252(a) have been implemented prior to beginning the hot work operations; indicate the date(s) authorized for hot work; and identify the object on which hot work is to be performed. Keep permit on file until completion of the hot work operations. [40 CFR 68.85]

134 Obtain and evaluate information regarding the contract owner or operator's safety performance and programs, when selecting a contractor. [40 CFR 68.87(b)(1)]

135 Inform contract owner or operator of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process. [40 CFR 68.87(b)(2)]

136 Explain to the contract owner or operator the applicable provisions of 40 CFR 68 Subpart E. [40 CFR 68.87(b)(3)]

137 Develop and implement safe work practices consistent with Sec. 68.69(d), to control the entrance, presence, and exit of the contract owner or operator and contract employees in covered process areas. [40 CFR 68.87(b)(4)]

138 Periodically evaluate the performance of the contract owner or operator in fulfilling their obligations as specified in 40 CFR 68.87(c). [40 CFR 68.87(b)(5)]

139 Develop and implement an emergency response program for the purpose of protecting public health and the environment. Include in the program the elements listed in 40 CFR 68.95(a)(1) through (4). [40 CFR 68.95(a)]

140 Coordinate the emergency response plan developed under 68.95(a)(1) with the community emergency response plan developed under 42 U.S.C. 11003. Upon request of the local emergency planning committee or emergency response officials, promptly provide information necessary for developing and implementing the community emergency response plan. [40 CFR 68.95(c)]

EQT774 222-Heat Transfer Furnace

141 Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. [LAC 33:III.1101.B]
Which Months: All Year Statistical Basis: None specified

142 UCC will demonstrate compliance through emission estimation calculations Total suspended particulate <= 0.6 lb/MMBTU of heat input. [LAC 33:III.1313.C]
Which Months: All Year Statistical Basis: None specified

143 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request. [LAC 33:III.1513]

144 This equipment (furnace) meets the definition of an affected unit under the boilers and process heaters NESHAP. The affected equipment listed in (b)(1) through (3) of 40 CFR 63.7506 are subject to only the initial notification requirements in 40 CFR 63.9(b) and are not subject to any other requirements of 40 CFR 63 Subpart A or Subpart DDDDD.
Subpart DDDDD
Initial notification was submitted on March 7, 2005. [40 CFR 63.7506(b)]

EQT775 223A-Surge Tank (MS-106)

145 Maintain working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere. [LAC 33:III.2103.A]

146 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

147 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

148 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Tank emits biphenyl a Class II TAP. Emissions routed to Tank EIQ 223 and then to a 99% efficient air cooled condenser. Determined as MACT. [LAC 33:III.5109.A]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
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EQT776 223B-Surge Tank (MS-306)

149 Maintain working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere. [LAC 33:III.2103.A]

150 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

151 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

152 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Tank emits biphenyl a Class II TAP. Emissions vented to Tank EQT817, and on to a 99% efficient air cooled condenser EQT777. Determined as MACT. [LAC 33:III.5109.A]

EQT777 223-Air Cooled Fin Condenser (Tanks 223, 223A, & 223B)

153 Permittee shall control biphenyl emissions from the condenser vent, Emission Point 223, by maintaining in operation an air cooled condenser. The outlet temperature of the condenser shall be continuously monitored and maintained at a daily average 90 degrees Fahrenheit or less. The daily temperature shall be less than 120 degree Fahrenheit during unit startup and shutdown. Records shall be maintained on site and available for inspection by the Office of Environmental Compliance, Surveillance Division.
STATE ONLY. [LAC 33:III.501.C.6]

154 Daily average Temperature <= 90 F. During unit startup and shutdown the daily temperature shall be less than 120 degree Fahrenheit.
STATE ONLY. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Daily average

155 Temperature monitored by technically sound method continuously.
STATE ONLY. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: None specified

156 Temperature recordkeeping by electronic or hard copy daily. Keep records of the daily average temperature monthly, as well as the daily average temperature for the last twelve months. Make records available for inspection by DEQ personnel.
STATE ONLY. [LAC 33:III.501.C.6, LAC 33:III.5109.A]

EQT778 228-Process Flare

157 Opacity <= 20 percent, except for a combined total of six hours in any 10 consecutive day period, for burning in connection with pressure valve releases for control over process upsets. [LAC 33:III.1105]
Which Months: All Year Statistical Basis: None specified

158 Submit notification: Due to the Office of Environmental Compliance, Emergency and Radiological Services Division, Single Point of Contact (SPOC), as soon as possible after the start of burning of pressure valve releases for control over process upsets. Notify in accordance with LAC 33:I.3923. Notification is required only if the upset cannot be controlled in six hours. [LAC 33:III.1105]

159 VOC, Total >= 90 % DRE. [LAC 33:III.2107.B]
Which Months: All Year Statistical Basis: None specified

160 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2107.D.3-4. [LAC 33:III.2107.D]

161 Determine compliance with LAC 33:III.2107.B using the methods in LAC 33:III.2107.E.1 through 5, as appropriate. [LAC 33:III.2107.E]

162 Nonhalogenated hydrocarbon burning: Temperature >= 1300 F (704 degrees C) for 0.3 second or greater in a direct-flame afterburner or an equally effective device which achieves a removal efficiency of 95 percent or greater, as determined in accordance with LAC 33:III.2115.J.1, or if emissions are reduced to 50 ppm by volume, whichever is less stringent. [LAC 33:III.2115.A]
Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

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EQT778 228-Process Flare

163 Determine compliance with LAC 33:III.2115.A through G by applying the test methods specified in LAC 33:III.2115.I.1 through 5, as appropriate. [LAC 33:III.2115.I]

164 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain the records specified in LAC 33:III.2115.K.1 through K.3. Maintain records on the premises for at least two years and make such information available to representatives of the Louisiana Department of Environmental Quality and the Environmental Protection Agency upon request. [LAC 33:III.2115.K]

165 Acetone <= 0.12 lb/hr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Hourly maximum

166 Acetone <= 0.01 lb/hr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Hourly average

167 Acetone <= 0.04 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

168 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
This flare is MACT for sources regulated by Chapter 51 and controlled by flare as shown in the Relationships section of the Inventories table. [LAC 33:III.5109.A]

169 Monitor flares to assure that they are operated and maintained in conformance with their designs. Subpart A. [40 CFR 63.11(b)(1)]

170 Operate at all times when emissions may be vented to the flare. Subpart A. [40 CFR 63.11(b)(3)]

171 Design and operate for no visible emissions, as determined using Test Method 22 in Appendix A of 40 CFR 60, except for periods not to exceed a total of 5 minutes during any two consecutive hours. Subpart A. [40 CFR 63.11(b)(4)]

172 Operate with a flame present at all times. Subpart A. [40 CFR 63.11(b)(5)]

173 Presence of a flame monitored by flame monitor continuously. Use a thermocouple or any other equivalent device to detect the presence of a flame. Subpart A. [40 CFR 63.11(b)(5)]
Which Months: All Year Statistical Basis: None specified

174 Heat content >= 300 BTU/scf (11.2 MJ/scm). Determine the net heating value of the gas being combusted using the equation specified in 40 CFR 63.11(b)(6)(ii). Subpart A. [40 CFR 63.11(b)(6)(ii)]
Which Months: All Year Statistical Basis: None specified

175 Exit Velocity < 60 ft/sec (18.3 m/sec), as determined using the method specified in 40 CFR 63.11(b)(7)(i). Subpart A. [40 CFR 63.11(b)(7)(i)]
Which Months: All Year Statistical Basis: None specified

176 Presence of a flame monitored by the regulation's specified method(s) continuously. Subpart G. [40 CFR 63.114(a)(2)]
Which Months: All Year Statistical Basis: None specified

177 Conduct a visible emission test using the techniques specified in 40 CFR 63.11(b)(4). Subpart G. [40 CFR 63.116(a)(1)]

178 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.117(a)(4) through (a)(8), as applicable. Subpart G. [40 CFR 63.117(a)]

179 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.118(a)(1) through (a)(4). Subpart G. [40 CFR 63.118(a)]

180 Reports of the times and durations of all periods recorded under paragraph (a)(2) of this section in which all pilot flames of a flare were absent.
. [40 CFR 63.118(f)(5)]

181 Vapor collection system: Design and operate to collect the organic hazardous air pollutant vapors displaced from tank trucks or railcars during loading, and route them to a process, or to a fuel gas system, or to a control device as provided in 40 CFR 63.126(b). Subpart G. [40 CFR 63.126(a)(1)]

182 Vapor collection system: Design and operate such that organic HAP vapors collected at one loading arm will not pass through another loading arm in the rack to the atmosphere. Subpart G. [40 CFR 63.126(a)(2)]

SPECIFIC REQUIREMENTS

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EQT778 228-Process Flare

183 Ensure that the process, fuel gas system, or control device used to comply with 40 CFR 63 Subpart G will be operating whenever organic HAP emissions are vented to the process, fuel gas system, or control device. Subpart G. [40 CFR 63.126(a)(3)]

184 Comply with the requirements of 40 CFR 63.11(b). Subpart G. [40 CFR 63.126(b)(2)]

185 Vent system: Secure each valve in the vent system that would divert the vent stream to the atmosphere in a non-diverting position using a car seal or a lock-and-key type configuration; or equip with a flow indicator. Subpart G. [40 CFR 63.126(i)]

186 Presence of a flame monitored by the regulation's specified method(s) continuously. Subpart G. [40 CFR 63.127(a)(2)]
Which Months: All Year Statistical Basis: None specified

187 Vent system: Seal or closure mechanism monitored by visual inspection/determination monthly to ensure that the valve is maintained in the closed position and the vent stream is not diverted through the by-pass line. Subpart G. [40 CFR 63.127(d)(2)(i)]
Which Months: All Year Statistical Basis: None specified

188 Vent system: If car-seal has been broken or valve position changed, record that the vent stream has been diverted. Return the car-seal or lock-and-key combination to the secured position as soon as practicable but not later than 15 calendar days after the change is position is detected. Subpart G. [40 CFR 63.127(d)(2)(ii)]

189 Vent system: Secure the by-pass line valve in the closed position with a car-seal or a lock-and-key type configuration. Subpart G. [40 CFR 63.127(d)(2)]

190 Determine compliance with 40 CFR 63.126 using the methods and procedures specified in 40 CFR 63.128(a) through (h). Subpart G. [40 CFR 63.128]

191 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in 40 CFR 63.129(a) through (f) as applicable. Subpart G. [40 CFR 63.129]

192 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in 40 CFR 63.130(a) through (d) as applicable. Subpart G. [40 CFR 63.130]

193 Vapor collection system or closed vent system (hard-piping): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially according to the procedures in 40 CFR 63.148(c). Subpart G. [40 CFR 63.148(b)(1)(i)]
Which Months: All Year Statistical Basis: None specified

194 Vapor collection system or closed vent system (hard-piping): Presence of a leak monitored by visual, audible, and/or olfactory annually. Subpart G. [40 CFR 63.148(b)(1)(ii)]
Which Months: All Year Statistical Basis: None specified

195 Vapor collection system or closed vent system (ductwork): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially according to the procedures in 40 CFR 63.148(c). Subpart G. [40 CFR 63.148(b)(2)(i)]
Which Months: All Year Statistical Basis: None specified

196 Vapor collection system or closed vent system (ductwork): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually according to the procedures in 40 CFR 63.148(c). Subpart G. [40 CFR 63.148(b)(2)(ii)]
Which Months: All Year Statistical Basis: None specified

197 Vapor collection system or closed vent system (ductwork): Presence of a leak monitored by visual, audible, and/or olfactory annually. Subpart G. [40 CFR 63.148(b)(2)(iii)]
Which Months: All Year Statistical Basis: None specified

198 Fixed roof, cover, or enclosure: Presence of a leak monitored by visual, audible, and/or olfactory once initially and once every six months as specified in 40 CFR 63.133 through 63.137. Subpart G. [40 CFR 63.148(b)(3)]
Which Months: All Year Statistical Basis: None specified

199 Repair leaks (as indicated by an instrument reading greater than 500 ppm above background or by visual inspections) as soon as practicable, except as provided in 40 CFR 63.148(e). Make a first attempt at repair no later than 5 calendar days after the leak is detected. Complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.148(d)(3). Subpart G. [40 CFR 63.148(d)]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
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EQT778 228-Process Flare

200 Vapor collection system or closed vent system (bypass lines): Flow monitored by flow indicator once every 15 minutes. Install the flow indicator at the entrance to any bypass line. Subpart G. [40 CFR 63.148(f)(1)]
Which Months: All Year Statistical Basis: None specified

201 Vapor collection system or closed vent system (bypass lines): Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. Subpart G. [40 CFR 63.148(f)(2)]

202 Vapor collection system or closed vent system (bypass lines): Seal or closure mechanism monitored by visual inspection/determination monthly to ensure the valve is maintained in the closed position and the vent stream is not diverted through the bypass line. Subpart G. [40 CFR 63.148(f)(2)]
Which Months: All Year Statistical Basis: None specified

203 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in 40 CFR 63.148(i)(1) through (i)(6). Subpart G. [40 CFR 63.148(i)]

204 Submit the information specified in 40 CFR 63.148(j)(1) through (j)(3) with the reports required by 40 CFR 63.182(b) of subpart H or 40 CFR 63.152(c). Subpart G. [40 CFR 63.148(j)]

EQT779 253-Thermal Oxidizer

205 Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. Unit uses fuel gas.

Unit will check for visible emission weekly. If visible emissions are detected, take corrective action. If visible emission persist, within 3 days conduct opacity reading using 40 CFR 60, Appendix A, Method 9. [LAC 33:III.1101.B]
Which Months: All Year Statistical Basis: None specified

206 Emissions of particulate matter which pass onto or across a public road and create a traffic hazard by impairment of visibility or intensify an existing traffic hazard condition are prohibited.
UCC shall meet concentration of Particulate matter (10 microns or less) <= 0.04 gr/dscf @ 7% O2 in the stack. [LAC 33:III.1303.B]

207 Total suspended particulate <= 0.6 lb/MMBTU of heat input.
UCC will demonstrate compliance through emission estimation calculations. [LAC 33:III.1313.C]
Which Months: All Year Statistical Basis: None specified

208 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request. [LAC 33:III.1513]

209 Flow (TOX CAP) - Submit report: Due annually, by the 31st of March. Report the total emissions and efficiency from the oxidizer based on the total flow to the oxidizer for the preceding calendar year to the Office of Environmental Compliance, Enforcement Division. [LAC 33:III.501.C.6]

210 (TOX CAP) - Flow monitored by technically sound method continuously. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: None specified

211 (TOX CAP) - Flow recordkeeping by electronic or hard copy monthly. Keep records of the total emissions and efficiency from the oxidizer, based on the total flow to the oxidizer each month, as well as the total emissions and efficiency from the oxidizer, based on the total flow to the oxidizer for the last twelve months. Make records available for inspection by DEQ personnel. [LAC 33:III.501.C.6]

212 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
This is a control device for other sources. Thermal Oxidizer is MACT for other sources. [LAC 33:III.5109.A]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
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Air - Title V Regular Permit Renewal

EQT779 253-Thermal Oxidizer

213 Comply with all applicable recordkeeping and recording requirements per 40 CFR 60.48c. [40 CFR 60.48c]

214 Organic HAP >= 98 % reduction by weight, or <= 20 ppmv, whichever is less stringent, as determined using the methods in 40 CFR 63.116(c). For combustion devices, calculate emission reduction or concentration on a dry basis, corrected to 3-percent oxygen. Subpart G. [40 CFR 63.113(a)(2)]
Which Months: All Year Statistical Basis: None specified

215 Temperature monitored by temperature monitoring device continuously. Equip the temperature monitoring device with a continuous recorder and install in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs. Subpart G. [40 CFR 63.114(a)(1)]
Which Months: All Year Statistical Basis: None specified

216 Establish a range that indicates proper operation of the control or recovery device for each parameter monitored under paragraphs (a), (b), and (c) of this section. Subpart G (Temperature in the firebox of the Thermal Oxidizer). [40 CFR 63.114(e)]

217 Conduct a performance test using the procedures in 40 CFR 63.116(c)(1) through (c)(4). Subpart G. [40 CFR 63.116(c)]

218 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.117(a)(4) through (a)(8), as applicable. Subpart G. [40 CFR 63.117(a)]

219 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.118(a)(1) through (a)(4). Subpart G. [40 CFR 63.118(a)]

220 Inlet emissions: Organic HAP >= 95 % reduction, except as provided in 40 CFR 63.119(e)(2). If a flare is used, it shall meet the specifications described in the general control device requirements of 40 CFR 63.11(b). Subpart G. [40 CFR 63.119(e)(1)]
Which Months: All Year Statistical Basis: None specified

221 Do not exceed 240 hours per year of periods of planned routine maintenance of the control device, during which the control device does not meet the specifications of 40 CFR 63.119(e)(1) or (e)(2). Subpart G. [40 CFR 63.119(e)(3)]

222 Prepare a design evaluation, which includes the information specified in 40 CFR 63.120(d)(1)(i), or submit the results of a performance test as described in 40 CFR 63.120(d)(1)(ii). Subpart G. [40 CFR 63.120(d)(1)]

223 Monitor the parameters specified in the Notification of Compliance Status required in 40 CFR 63.15(b) or in the operating permit and operate and maintain the control device such that the monitored parameters remain within the ranges specified in the Notification of Compliance Status. Subpart G. [40 CFR 63.120(d)(5)]

224 Submit, as part of the Notification of Compliance Status required by 40 CFR 63.151(b): A monitoring plan containing the information specified in 40 CFR 63.120(d)(2)(i) and in either (d)(2)(ii) or (d)(2)(iii); and the information specified in 40 CFR 63.120(d)(3)(i) and, if applicable, (d)(3)(ii). Subpart G. [40 CFR 63.120(d)]

225 Comply with all applicable reporting and recordkeeping under 40 CFR 63.122 and 40 CFR 63.123. Subpart G. [40 CFR 63.122, 40 CFR 63.123]

EQT780 2600-Thermal Oxidizer

226 Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. Unit uses fuel gas.

Unit will check for visible emission weekly. If visible emissions are detected, take corrective action. If visible emission persist, within 3 day conduct opacity reading using 40 CFR 60 Appendix A, Method 9. [LAC 33:III.1101.B]
Which Months: All Year Statistical Basis: None specified

227 Emissions of particulate matter which pass onto or across a public road and create a traffic hazard by impairment of visibility or intensify an existing traffic hazard condition are prohibited.
UCC shall meet concentration of Particulate matter (10 microns or less) <= 0.04 gr/dscf @ 7% O2 in the stack. [LAC 33:III.1303.B]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
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EQT780 2600-Thermal Oxidizer

228 Prevent particulate matter from becoming airborne by taking all reasonable precautions. These precautions shall include, but not be limited to, those specified in LAC 33:III.1305.A.1-7. [LAC 33:III.1305]

229 Total suspended particulate <= 0.6 lb/MMBTU of heat input.
UCC will demonstrate compliance through emission estimation calculations. [LAC 33:III.1313.C]
Which Months: All Year Statistical Basis: None specified

230 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request. [LAC 33:III.1513]

231 Flow (TOX CAP) - Submit report: Due annually, by the 31st of March. Report the total emissions and efficiency from the oxidizer based on the total flow to the oxidizer for the preceding calendar year to the Office of Environmental Compliance, Enforcement Division. [LAC 33:III.501.C.6]

232 (TOX CAP) - Flow monitored by technically sound method continuously. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: None specified

233 (TOX CAP) - Flow recordkeeping by electronic or hard copy monthly. Keep records of the total emissions and efficiency from the oxidizer, based on the total flow to the oxidizer each month, as well as the total emissions and efficiency from the oxidizer, based on the total flow to the oxidizer for the last twelve months. Make records available for inspection by DEQ personnel. [LAC 33:III.501.C.6]

234 Permittee shall operate the Thermal Oxidation Unit, Emission Point 2600 (EQT 780), as follows to achieve a minimum destruction and removal efficiency (DRE) of 99.97% (for all nonhalogenated hydrocarbon feed, including Acrolein and acrylic acid).
(a) Oxidation unit shall operate under the following conditions:
*(1) minimum of 1652 °F at the combustion chamber
(2) minimum of 0.5 second contact time
*(3) 5,774 lb moles/hr maximum flue gas flow rate from thermal oxidizer
*(4) 2% minimum O2
*(5) maximum 100 ppmv CO corrected to 7% O2 (dry). CO limits shall be based on a one hour rolling average of CO concentrations taken at one minute intervals.
Permittee shall take corrective action if any operating variable preceded by an * is out of the specified range for any continuous 15 minute averaging period, except that for stack CO and feed rate the averaging period shall be as specified in (3) and (5).

Alarms shall be set to sound when the thermal oxidizer temperature, oxygen concentration, stack CO concentration, and feed rate are out of the parameter values specified above. The permittee should have installed such alarms on or before June 30, 2000. Once installed, corrective action shall be taken any time an alarm is sounded. Monitoring records and records of alarm and corrective action shall be maintained on site and available for inspection by the Office of Environmental Compliance, Surveillance Division. Frequent or excessive instances of operating parameter excursions may be considered as indicative of failure to properly maintain or operate the equipment, and may be considered a violation of this permit.
. [LAC 33:III.501.C.6]

235 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
This is a control device for other sources. Thermal Oxidizer is MACT for other sources. [LAC 33:III.5109.A]

236 Comply with all applicable recordkeeping and recording requirements per 40 CFR 60.48c. [40 CFR 60.48c]

237 Organic HAP >= 98 % reduction by weight, or <= 20 ppmv, whichever is less stringent, as determined using the methods in 40 CFR 63.116(c). For combustion devices, calculate emission reduction or concentration on a dry basis, corrected to 3-percent oxygen. Subpart G. [40 CFR 63.113(a)(2)]
Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

EQT780 2600-Thermal Oxidizer

238 Temperature monitored by temperature monitoring device continuously. Equip the temperature monitoring device with a continuous recorder and install in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs. Subpart G. [40 CFR 63.114(a)(1)]
Which Months: All Year Statistical Basis: None specified

239 Establish a range that indicates proper operation of the control or recovery device for each parameter monitored under paragraphs (a), (b), and (c) of this section. Subpart G (Temperature in the firebox of the Thermal Oxidizer). [40 CFR 63.114(e)]

240 Conduct a performance test using the procedures in 40 CFR 63.116(c)(1) through (c)(4). Subpart G. [40 CFR 63.116(c)]

241 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.117(a)(4) through (a)(8), as applicable. Subpart G. [40 CFR 63.117(a)]

242 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.118(a)(1) through (a)(4). Subpart G. [40 CFR 63.118(a)]

243 Inlet emissions: Organic HAP >= 95 % reduction, except as provided in 40 CFR 63.119(e)(2). If a flare is used, it shall meet the specifications described in the general control device requirements of 40 CFR 63.11(b). Subpart G. [40 CFR 63.119(e)(1)]
Which Months: All Year Statistical Basis: None specified

244 Do not exceed 240 hours per year of periods of planned routine maintenance of the control device, during which the control device does not meet the specifications of 40 CFR 63.119(e)(1) or (e)(2). Subpart G. [40 CFR 63.119(e)(3)]

245 Prepare a design evaluation, which includes the information specified in 40 CFR 63.120(d)(1)(i), or submit the results of a performance test as described in 40 CFR 63.120(d)(1)(ii). Subpart G. [40 CFR 63.120(d)(1)]

246 Monitor the parameters specified in the Notification of Compliance Status required in 40 CFR 63.15(b) or in the operating permit and operate and maintain the control device such that the monitored parameters remain within the ranges specified in the Notification of Compliance Status. Subpart G. [40 CFR 63.120(d)(5)]

247 Submit, as part of the Notification of Compliance Status required by 40 CFR 63.151(b): .A monitoring plan containing the information specified in 40 CFR 63.120(d)(2)(i) and in either (d)(2)(ii) or (d)(2)(iii); and the information specified in 40 CFR 63.120(d)(3)(i) and, if applicable, (d)(3)(ii). Subpart G. [40 CFR 63.120(d)]

248 Comply with all applicable reporting and recordkeeping under 40 CFR 63.122 and 40 CFR 63.123. Subpart G. [40 CFR 63.122, 40 CFR 63.123]

EQT781 229-Tank 3544

249 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Tank emits Hydroquinone, a Class III TAP from supplemental list. MACT is not required. [LAC 33:III.5109.A]

EQT782 230-Tank 3545

250 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Tank emits Hydroquinone, a Class III TAP from supplemental list. MACT is not required. [LAC 33:III.5109.A]

EQT783 231-Tank 3564

251 Equip with a vapor loss control system, consisting of a gathering system capable of collecting volatile organic compound vapors and a vapor disposal system capable of processing such organic vapors. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
This tank vents to the Thermal Oxidizer, EQT780, Emission Point 2600. And, it uses Thermal Oxidizer, EQT779, Emission Point 253, as backup. [LAC 33:III.2103.A]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

EQT783 231-Tank 3564

252 VOC, Total >= 95 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year. [LAC 33:III.2103.E.1]
Which Months: All Year Statistical Basis: None specified

253 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

254 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

255 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
For compliance with LAC 33:2103.A, the tank is equipped with a vapor loss control system and vent stream routed to the thermal oxidizers EQT779 or EQT780 (EIQs 253 or 2600) with control efficiency greater than 95%. Determined as MACT. [LAC 33:III.5109.A]

EQT784 232-Tank 3542

256 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Tank stores Acrylic Acid, a Class III TAP. MACT is not required. [LAC 33:III.5109.A]

EQT785 233-Tank 3543

257 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Tank stores Acrylic Acid, a Class III TAP. MACT is not required. [LAC 33:III.5109.A]

EQT786 234-Tank 3550

258 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Tank stores only Class III and/or Class III Supplemental TAPs. MACT not required. [LAC 33:III.5109.A]

259 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart G. [40 CFR 63.123(a)]

EQT787 235-Tank 3551

260 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Tank stores only Class III and/or Class III Supplemental TAPs. MACT not required. [LAC 33:III.5109.A]

261 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart G. [40 CFR 63.123(a)]

EQT788 236-Tank 3553

262 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Tank stores only Class III and/or Class III Supplemental TAPs. MACT not required. [LAC 33:III.5109.A]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

EQT788 236-Tank 3553

263 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart G. [40 CFR 63.123(a)]

EQT789 237-Tank 3552

264 Equip with a submerged fill pipe. [LAC 33:III.2103.A]

265 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

266 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

267 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
For compliance with LAC 33:III.2103, the tank is equipped with submerged fill pipe.
Compliance with LAC 33:III.2103 and 40 CFR 63 Subpart G requirements determined as MACT. [LAC 33:III.5109.A]

268 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart G. [40 CFR 63.123(a)]

EQT790 238-Tank 3557

269 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Tank stores only Class III and/or Class III Supplemental TAPs. MACT not required. [LAC 33:III.5109.A]

270 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart G. [40 CFR 63.123(a)]

EQT792 241-Tank 3554

271 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Tank stores Acrylic Acid, a Class III TAP. MACT is not required. [LAC 33:III.5109.A]

EQT793 242-Tank 3555

272 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Tank stores Acrylic Acid, a Class III TAP. MACT is not required. [LAC 33:III.5109.A]

EQT794 243-Tank 3556

273 Throughput monitored by technically sound method continuously. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: None specified

274 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Tank stores Acrylic Acid, a Class III TAP. MACT is not required. [LAC 33:III.5109.A]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

EQT795 246-Tank 3570

275 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Tank stores only Class III and/or Class III Supplemental TAPs. MACT not required. [LAC 33:III.5109.A]

276 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart G. [40 CFR 63.123(a)]

EQT796 250-Tank 3562

277 Equip with a vapor loss control system, consisting of a gathering system capable of collecting volatile organic compound vapors and a vapor disposal system capable of processing such organic vapors. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
This tank vents to the Thermal Oxidizer, EQT780, Emission Point 2600. And, it uses Thermal Oxidizer, EQT779, Emission Point 253, as backup. [LAC 33:III.2103.A]

278 VOC, Total >= 95 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year. [LAC 33:III.2103.E.1]
Which Months: All Year Statistical Basis: None specified

279 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

280 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

281 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
For compliance with LAC 33:III.2103, Acetaldehyde emissions are normally routed to Thermal Oxidizer EQT780 (EIQ 2600) with control efficiency greater than 95%, or to Thermal Oxidizer EQT779 (EIQ 253) as back up. Determined as MACT. [LAC 33:III.5109.A]

282 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart G. [40 CFR 63.123(a)]

EQT797 259-Tank 2306

283 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Tank emits Class III TAP or TAP from supplemental list. No MACT required. [LAC 33:III.5109.A]

EQT798 260-Tank MS-756C

284 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Tank stores only Class III and/or Class III Supplemental TAPs. MACT not required. [LAC 33:III.5109.A]

285 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart G. [40 CFR 63.123(a)]

EQT799 260A-Tank 3571

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

EQT799 260A-Tank 3571

286 Equip with a vapor loss control system, consisting of a gathering system capable of collecting volatile organic compound vapors and a vapor disposal system capable of processing such organic vapors. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
This tank vents to the Thermal Oxidizer, EQT780, Emission Point 2600. And, it uses Thermal Oxidizer, EQT779, Emission Point 253, as backup. [LAC 33:III.2103.A]

287 VOC, Total >= 95 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year. [LAC 33:III.2103.E.1]
Which Months: All Year Statistical Basis: None specified

288 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

289 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

290 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
For compliance with NESHAP Subpart G Group 1 requirements, vent stream routed to Thermal Oxidizers EQT780 or EQT779 with control efficiency greater than 95%. Determined as MACT. [LAC 33:III.5109.A]

291 Reduce hazardous air pollutants emissions to the atmosphere either by operating and maintaining a fixed roof and internal floating roof, an external floating roof, an external floating roof converted to an internal floating roof, a closed-vent system and control device, routing the emissions to a process or a fuel gas system, or vapor balancing in accordance with the requirements in 40 CFR 63.119(b), (c), (d), (e), (f), or (g) or equivalent as provided in 40 CFR 63.121. Subpart G
This tank reduces emissions by 95% using a closed vent system control device as per 40 CFR 63.119(e)(1). [40 CFR 63.119(a)(1)]

292 Submit Periodic Reports as required by 40 CFR 63.152(d). Include the information specified in 40 CFR 63.122(d), (e), (f), and (g). Subpart G. [40 CFR 63.122(a)(4)]

293 Submit, as applicable, other reports as required by 40 CFR 63.152(d). Include the information specified in 40 CFR 63.122(h). Subpart G. [40 CFR 63.122(a)(5)]

294 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep readily accessible records of the information specified in 40 CFR 63.123(a) through (i), as applicable. Keep the records as long as the storage vessel retains Group 1 status and is in operation. Subpart G. [40 CFR 63.123]

EQT800 260B-Tank 3572

295 Equip with a vapor loss control system, consisting of a gathering system capable of collecting volatile organic compound vapors and a vapor disposal system capable of processing such organic vapors. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
This tank vents to the Thermal Oxidizer, EQT780, Emission Point 2600. And it uses Thermal Oxidizer, EQT779, Emission Point 253, as backup. [LAC 33:III.2103.A]

296 VOC, Total >= 95 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year. [LAC 33:III.2103.E.1]
Which Months: All Year Statistical Basis: None specified

297 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

298 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

299 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
For compliance with NESHAP Subpart G Group 1 requirements, vent stream routed to Thermal Oxidizers EQT780 or EQT779 with control efficiency greater than 95%. Determined as MACT. [LAC 33:III.5109.A]

300 Reduce hazardous air pollutants emissions to the atmosphere either by operating and maintaining a fixed roof and internal floating roof, an external floating roof, an external floating roof converted to an internal floating roof, a closed-vent system and control device, routing the emissions to a process or a fuel gas system, or vapor balancing in accordance with the requirements in 40 CFR 63.119(b), (c), (d), (e), (f), or (g) or equivalent as provided in 40 CFR 63.121. Subpart G
This tank reduces emissions by 95% using a closed vent system control device as per 40 CFR 63.119(e)(1). [40 CFR 63.119(a)(1)]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

EQT800 260B-Tank 3572

301 Submit Periodic Reports as required by 40 CFR 63.152(d). Include the information specified in 40 CFR 63.122(d), (e), (f), and (g). Subpart G. [40 CFR 63.122(a)(4)]

302 Submit, as applicable, other reports as required by 40 CFR 63.152(d). Include the information specified in 40 CFR 63.122(h). Subpart G. [40 CFR 63.122(a)(5)]

303 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep readily accessible records of the information specified in 40 CFR 63.123(a) through (i), as applicable. Keep the records as long as the storage vessel retains Group 1 status and is in operation. Subpart G. [40 CFR 63.123]

EQT801 260C-Tank 3573

304 Equip with a vapor loss control system, consisting of a gathering system capable of collecting volatile organic compound vapors and a vapor disposal system capable of processing such organic vapors. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
This tank vents to the Thermal Oxidizer, EQT780, Emission Point 2600. And it uses Thermal Oxidizer, EQT779, Emission Point 253, as backup. [LAC 33:III.2103.A]

305 VOC, Total >= 95 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year. [LAC 33:III.2103.E.1]
Which Months: All Year Statistical Basis: None specified

306 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

307 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

308 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
For compliance with NESHAP Subpart G Group 1 requirements, vent stream routed to Thermal Oxidizers EQT780 or EQT779 with control efficiency greater than 95%.
Determined as MACT. [LAC 33:III.5109.A]

309 Reduce hazardous air pollutants emissions to the atmosphere either by operating and maintaining a fixed roof and internal floating roof, an external floating roof, an external floating roof converted to an internal floating roof, a closed-vent system and control device, routing the emissions to a process or a fuel gas system, or vapor balancing in accordance with the requirements in 40 CFR 63.119(b), (c), (d), (e), (f), or (g) or equivalent as provided in 40 CFR 63.121. Subpart G
This tank reduces emissions by over 95% using a closed vent system control device as per 40 CFR 63.119(e)(1).

. [40 CFR 63.119(a)(1)]

310 Submit Periodic Reports as required by 40 CFR 63.152(d). Include the information specified in 40 CFR 63.122(d), (e), (f), and (g). Subpart G. [40 CFR 63.122(a)(4)]

311 Submit, as applicable, other reports as required by 40 CFR 63.152(d). Include the information specified in 40 CFR 63.122(h). Subpart G. [40 CFR 63.122(a)(5)]

312 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep readily accessible records of the information specified in 40 CFR 63.123(a) through (i), as applicable. Keep the records as long as the storage vessel retains Group 1 status and is in operation. Subpart G. [40 CFR 63.123]

EQT802 260D-Tank 3574

313 Equip with a vapor loss control system, consisting of a gathering system capable of collecting volatile organic compound vapors and a vapor disposal system capable of processing such organic vapors. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
This tank vents to the Thermal Oxidizer, EQT780, Emission Point 2600. And it uses Thermal Oxidizer, EQT779, Emission Point 253, as backup. [LAC 33:III.2103.A]

314 VOC, Total >= 95 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year. [LAC 33:III.2103.E.1]
Which Months: All Year Statistical Basis: None specified

315 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

EQT802 260D-Tank 3574

316 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

317 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
For compliance with LAC 33:2103.A, the tank is equipped with a vapor loss control system and vent stream routed to the thermal oxidizers EQT779 or EQT780 (EIQs 253 or 2600) with control efficiency greater than 95%. Determined as MACT. [LAC 33:III.5109.A]

EQT804 260E-Tank 3575

318 Equip with a vapor loss control system, consisting of a gathering system capable of collecting volatile organic compound vapors and a vapor disposal system capable of processing such organic vapors. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
This tank vents to the Thermal Oxidizer, EQT780, Emission Point 2600. And it uses Thermal Oxidizer, EQT779, Emission Point 253, as backup. [LAC 33:III.2103.A]

319 VOC, Total >= 95 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year. [LAC 33:III.2103.E.1]
Which Months: All Year Statistical Basis: None specified

320 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

321 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

322 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
For compliance with LAC 33:III.2103, emissions are normally routed to Thermal Oxidizers EQT779 (EIQ 253) or EQT780 (EIQ 2600) with control efficiency greater than 95%. Determined as MACT. [LAC 33:III.5109.A]

323 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart G. [40 CFR 63.123(a)]

EQT805 260F-Tank 3576

324 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Tank emits Hydroquinone, a Class III TAP from supplemental list. No MACT required. [LAC 33:III.5109.A]

EQT806 260H-Tank 3559

325 Equip with a vapor loss control system, consisting of a gathering system capable of collecting volatile organic compound vapors and a vapor disposal system capable of processing such organic vapors. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
This tank vents to the Thermal Oxidizer, EQT780, Emission Point 2600. And it uses Thermal Oxidizer, EQT779, Emission Point 253, as backup. [LAC 33:III.2103.A]

326 VOC, Total >= 95 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year. [LAC 33:III.2103.E.1]
Which Months: All Year Statistical Basis: None specified

327 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

328 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

EQT806 260H-Tank 3559

329 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
For compliance with LAC 33:III.2103, emissions are normally routed to Thermal Oxidizers EQT779 (EIQ 253) or EQT780 (EIQ 2600) with control efficiency greater than 95%. Determined as MACT. [LAC 33:III.5109.A]

330 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart G. [40 CFR 63.123(a)]

EQT816 Wastewater Streams (A1-05, A1-R, A1-01, A1-02, A1-03)

331 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Compliance with NESHAP Subparts F and G determined as MACT. [LAC 33:III.5109.A]

332 Determine whether each wastewater stream requires control for Table 9 compounds by complying with the requirements in 40 CFR 63.132(a)(1)(i) or (a)(1)(ii), and (a)(1)(iii). Subpart G. [40 CFR 63.132(a)(1)]

333 Determine total annual average concentration of Table 9 compounds according to the procedures in 40 CFR 63.144(b), and determine annual average flow rate according to the procedures in 40 CFR 63.144(c), to determine whether a wastewater stream is Group 1 or Group 2 for Table 9 compounds. Subpart G. [40 CFR 63.132(c)]

334 Determine annual average concentration for each Table 8 compound according to the procedures specified in 40 CFR 63.144(b), and determine annual average flow rate according to the procedures specified in 40 CFR 63.144(c), to determine whether a wastewater stream is Group 1 or Group 2 for Table 8 compounds. Subpart G. [40 CFR 63.132(d)]

335 Do not discard liquid or solid organic materials with a concentration of greater than 10,000 ppm of Table 9 compounds (as determined by analysis of the stream composition, engineering calculations, or process knowledge, according to the provisions of 40 CFR 63.144(b)) from a chemical manufacturing process unit to water or wastewater, unless the receiving stream is managed and treated as a Group 1 wastewater stream. Subpart G. [40 CFR 63.132(f)]

336 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records specified in 40 CFR 63.147(a) through (f), as applicable. Subpart G. [40 CFR 63.147]

EQT817 223-Heat Transfer Fluid Tank (ACE2-173) w/ condenser

337 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Tank emits biphenyl a Class II TAP. Emissions controlled by a 99% efficient air cooled condenser EQT777. Determined as MACT. [LAC 33:III.5109.A]

EQT826 Dowtherm Heat Exchange System

338 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Control biphenyl fugitive emissions from heat transfer fluid heat exchange system using the provisions for components in heavy liquid service in 40 CFR 63, Subpart H, regardless of applicability. Determined as MACT. [LAC 33:III.5109.A]

339 Comply with all the applicable requirements of 40 CFR 63 Subparts G and H. Subpart F. [40 CFR 63.102(a)]

340 Heat exchange systems (cooling water): HAP monitored by the regulation's specified method(s) monthly for the first 6 months and quarterly thereafter to detect leaks. Monitor for total hazardous air pollutants, total volatile organic compounds, total organic carbon, one or more speciated HAP compounds, or other representative substances that would indicate the presence of a leak in the heat exchange system. Subpart F. [40 CFR 63.104(b)]
Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
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EQT826 Dowtherm Heat Exchange System

341 Heat exchange systems: Maintain, at all times, the monitoring plan currently in use. Maintain on-site, or accessible from a central location by computer or other means that provide access within 2 hours after a request. If a monitoring plan is superseded, retain the most recent superseded plan at least until 5 years from the date of its creation. Retain the superseded plan on-site (or accessible from a central location by computer or other means that provides access within 2 hours after a request) for at least 6 months after its creation. Subpart F. [40 CFR 63.104(c)(3)]

342 Heat exchange systems: Prepare and implement a monitoring plan that documents the procedures that will be used to detect leaks of process fluids into cooling water. Require monitoring of one or more surrogate indicators or monitoring of one or more process parameters or other conditions that indicate a leak. Include the information specified in 40 CFR 63.104(c)(1)(i) and (ii). Monitor no less frequently than monthly for the first six months and quarterly thereafter to detect leaks. If a substantial leak is identified by methods other than those described in the monitoring plan and method(s) specified in the plan could not detect the leak, revise the plan and document the basis for the changes. Complete revisions to the plan no later than 180 days after discovery of the leak. Subpart F. [40 CFR 63.104(c)]

343 Heat exchange systems: Repair leaks as soon as practicable but not later than 45 calendar days after receiving results of monitoring tests indicating a leak, if a leak is detected according to the criteria of 40 CFR 63.104(b) or (c). Once the leak has been repaired, confirm that the heat exchange system has been repaired within 7 calendar days of the repair or startup, whichever is later. Subpart F. [40 CFR 63.104(d)]

344 Heat exchange systems: Equipment/operational data recordkeeping by electronic or hard copy continuously. Retain the records identified in 40 CFR 63.104(f)(1)(i) through (iv) as specified in 40 CFR 63.103(c)(1). Subpart F. [40 CFR 63.104(f)]

FUG016 196A-Equipment Fugitive Emissions

345 Equip all rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater at handling conditions with mechanical seals or other equivalent equipment. [LAC 33:III.2111]. [LAC 33:III.2111]

346 Repair according to LAC 33:III.2121.B.3 any regulated component observed leaking by sight, sound, or smell, regardless of the leak's concentration. [LAC 33:III.2121.B.1]

347 Do not locate any valve, except safety pressure relief valves, valves on sample lines, valves on drain lines and valves that can be removed and replaced without a shutdown, at the end of a pipe or line containing VOC unless the end of such line is sealed with a second valve, a blind flange, a plug, or a cap. Remove such sealing devices only when the line is in use, for example, when a sample is being taken. When the line has been used and is subsequently resealed, close the upstream valve first, followed by the sealing device. [LAC 33:III.2121.B.2]

348 Make every reasonable effort to repair a leaking component, as described in LAC 33:III.2121.B, within 15 days, except as provided. [LAC 33:III.2121.B.3]

349 Pump seals: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 annually (one time per year). If a reading of 10,000 ppmv or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in LAC 33:III.2121.B.3. [LAC 33:III.2121.C.1.a.i]
Which Months: All Year Statistical Basis: None specified

350 Valves in liquid service: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 annually (one time per year). If a reading of 10,000 ppmv or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in LAC 33:III.2121.B.3. [LAC 33:III.2121.C.1.a.ii]
Which Months: All Year Statistical Basis: None specified

351 Process drains: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 annually (one time per year). If a reading of 10,000 ppmv or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in LAC 33:III.2121.B.3. [LAC 33:III.2121.C.1.a.iii]
Which Months: All Year Statistical Basis: None specified

352 Valves in gas service: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 quarterly (four times per year). If a reading of 10,000 ppmv or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in LAC 33:III.2121.B.3. Permittee may elect to comply with the alternate standards for valves in LAC 33:III.2121.D (skip period provisions). [LAC 33:III.2121.C.1.b.ii]
Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
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FUG016 196A-Equipment Fugitive Emissions

353 Pressure relief valves in gas service: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 quarterly (four times per year). If a reading of 10,000 ppmv or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in LAC 33:III.2121.B.3. [LAC 33:III.2121.C.1.b.iii]
Which Months: All Year Statistical Basis: None specified

354 Valves in light liquid service: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 quarterly (four times per year). If a reading of 10,000 ppmv or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in LAC 33:III.2121.B.3. Permittee may elect to comply with the alternate standards for valves in LAC 33:III.2121.D (skip period provisions). [LAC 33:III.2121.C.1.b.iv]
Which Months: All Year Statistical Basis: None specified

355 Pumps in light liquid service: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 quarterly (four times per year). If a reading of 10,000 ppmv or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in LAC 33:III.2121.B.3. Permittee may elect to comply with the alternate standards for valves in LAC 33:III.2121.D (skip period provisions). [LAC 33:III.2121.C.1.b.v]
Which Months: All Year Statistical Basis: None specified

356 Pumps: Seal or closure mechanism monitored by visual inspection/determination weekly (52 times per year). [LAC 33:III.2121.C.1.c]
Which Months: All Year Statistical Basis: None specified

357 Pressure relief valves: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 within 24 hours after venting to the atmosphere. If a reading of 10,000 ppmv or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in LAC 33:III.2121.B.3. [LAC 33:III.2121.C.3.a]
Which Months: All Year Statistical Basis: None specified

358 All components: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 upon each occurrence of a leak detected by sight, smell, or sound, unless electing to implement actions as specified in LAC 33:III.2121.B.3. [LAC 33:III.2121.C.3.b]
Which Months: All Year Statistical Basis: None specified

359 Inaccessible valves: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 annually (at a minimum). [LAC 33:III.2121.C.4.c]
Which Months: All Year Statistical Basis: None specified

360 Unsafe-to-monitor valves: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 upon each occurrence of conditions allowing these valves to be monitored safely. [LAC 33:III.2121.C.4.c]
Which Months: All Year Statistical Basis: None specified

361 When a leak that cannot be repaired on-line and in-place is located, affix to the leaking component a weatherproof and readily visible tag bearing an identification number and the date the leak is located. Date and remove the tag after the leak is repaired. [LAC 33:III.2121.E.1]

362 Equipment/operational data recordkeeping by survey log upon each occurrence of a leak. Include the leaking component information specified in LAC 33:III.2121.E.2. Retain the survey log for two years after the latter date specified in LAC 33:III.2121.E.2 and make said log available to DEQ upon request. [LAC 33:III.2121.E]

363 Submit report: Due semiannually, by the 31st of January and July, to the Office of Environmental Assessment, Air Quality Assessment Division. Include the information specified in LAC 33:III.2121.F.1 through 4 for each calendar quarter during the reporting period. [LAC 33:III.2121.F]

364 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
UCC will comply with 40 CFR 63 Subpart H for all affected (>5% HAP) components streams. UCC will also comply with LAC 33:III.2121 as applicable. Determined as MACT. [LAC 33:III.5109.A]

365 Identify each piece of equipment in a process unit such that it can be distinguished readily from equipment that is not subject to 40 CFR 63 Subpart H. Subpart H. [40 CFR 63.162(c)]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
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FUG016 196A-Equipment Fugitive Emissions

366 Clearly identify leaking equipment, for leaking equipment detected as specified in 40 CFR 63.163, 40 CFR 63.164, 40 CFR 63.168, 40 CFR 63.169, and 40 CFR 63.172 through 63.174. The identification may be removed after the equipment is repaired, except for valves or for connectors subject to 40 CFR 63.174(c)(1)(i). The identification on a valve may be removed after it has been monitored as specified in 40 CFR 63.168(f)(3) and 63.175(e)(i)(D), and no leak has been detected during the follow-up monitoring. If electing to comply using the provisions of 40 CFR 63.174(c)(1)(i), the identification on a connector may be removed after it is monitored as specified in 40 CFR 63.174(c)(1)(i) and no leak is detected during that monitoring. Subpart H. [40 CFR 63.162(f)]

367 Pumps in light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks, except as provided in 40 CFR 63.162(b) and 63.163(e) through (j). If a reading of 10,000 ppm (phase I); 5,000 ppm (phase II); or 5,000 ppm (phase III, pumps handling polymerizing monomers), 2,000 ppm (phase III, pumps in food/medical service), or 1,000 ppm (phase III, all other pumps) or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.163(c). Subpart H. [40 CFR 63.163(b)(1)]
Which Months: All Year Statistical Basis: None specified

368 Pumps in light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected. If a leak is detected, initiate the repair provisions specified in 40 CFR 63.163(c). Subpart H. [40 CFR 63.163(b)(3)]
Which Months: All Year Statistical Basis: None specified

369 Pumps in light liquid service: Make a first attempt at repair no later than 5 calendar days after a leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.163(c)(3) and 40 CFR 63.171. Subpart H. [40 CFR 63.163(c)]

370 Pumps in light liquid service: Implement a quality improvement program for pumps that complies with the requirements of 40 CFR 63.176, if, in Phase III, calculated on a 6-month rolling average, the greater of either 10 percent of the pumps in a process unit or three pumps in a process unit leak. Subpart H. [40 CFR 63.163(d)(2)]

371 Pumps in light liquid service: Determine percent leaking pumps using the equation in 40 CFR 63.163(d)(4). Subpart H. [40 CFR 63.163(d)(4)]

372 Pumps in light liquid service (dual mechanical seal system): Operate with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or equip with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or equip with a closed-loop system that purges the barrier fluid into a process stream. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(1)]

373 Pumps in light liquid service (dual mechanical seal system): Ensure that the barrier fluid is not in light liquid service. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(2)]

374 Pumps in light liquid service (dual mechanical seal system): Equip barrier fluid system with a sensor that will detect failure of the seal system, barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(3)]

375 Pumps in light liquid service (dual mechanical seal system): Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the pump seal. If there are indications of liquid dripping from the pump seal at the time of the weekly inspection, monitor the pump as specified in 40 CFR 63.180(b) to determine if there is a leak of organic HAP in the barrier fluid. If an instrument reading of 1,000 ppm or greater is measured, a leak is detected. If a leak is detected, initiate the repair provisions in 40 CFR 63.163(e)(6). Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(4)]
Which Months: All Year Statistical Basis: None specified

376 Pumps in light liquid service (dual mechanical seal system): Determine, based on design considerations and operating experience, criteria that indicates failure of the seal system, the barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(6)(i)]

377 Pumps in light liquid service (dual mechanical seal system): Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(6)]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
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Permit Number: 513-V2
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FUG016 196A-Equipment Fugitive Emissions

378 *Pumps in light liquid service (dual mechanical seal system - sensor): Equipment/operational data monitored by visual inspection/determination daily, or equip with an audible* alarm unless the pump is located within the boundary of an unmanned plant site. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criteria established in 40 CFR 63.163(e)(6), a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.163(e)(6). Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)]
Which Months: All Year Statistical Basis: None specified

379 Pumps in light liquid service (unmanned plant site): Presence of a leak monitored by visual inspection/determination at the regulation's specified frequency. Monitor each pump as often as practicable and at least monthly. Comply with this requirement instead of the weekly visual inspection requirement of 40 CFR 63.163(b)(3) and (e)(4), and the daily requirements of 40 CFR 63.163(e)(5). Subpart H. [40 CFR 63.163(h)]
Which Months: All Year Statistical Basis: None specified

380 Pumps in light liquid service (unsafe-to-monitor): Determine that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.163(b) through (d). Comply with this requirement instead of the requirements in 40 CFR 63.163(b) through (e). Subpart H. [40 CFR 63.163(j)(1)]

381 Pumps in light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.163(b) through (e). Subpart H. [40 CFR 63.163(j)(2)]
Which Months: All Year Statistical Basis: None specified

382 Pressure relief device in gas/vapor service: Organic HAP < 500 ppm above background except during pressure releases, as determined by the method specified in 63.180(c). Subpart H. [40 CFR 63.165(a)]
Which Months: All Year Statistical Basis: None specified

383 Pressure relief devices in gas/vapor service: After each pressure release, return to a condition indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.165(b)(1)]

384 Pressure relief devices in gas/vapor service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 5 days (calendar) after the pressure release and being returned to organic HAP service, to confirm the condition indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 63.180(c). Subpart H. [40 CFR 63.165(b)(2)]
Which Months: All Year Statistical Basis: None specified

385 Pressure relief devices in gas/vapor service (rupture disk): After each pressure release, install a new rupture disk upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171. Comply with this requirement instead of the requirements in 40 CFR 63.165(a) and (b). Subpart H. [40 CFR 63.165(d)(2)]

386 Sampling connection systems: Equip with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 63.162(b). Operate the system as specified in 40 CFR 63.166(b). Subpart H. [40 CFR 63.166]

387 Open-ended valves or lines: Equip with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 63.162(b) and 40 CFR 63.167(d) and (e). Ensure that the cap, blind flange, plug or second valve seals the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance or repair. Operate each open-ended valve or line equipped with a second valve in a manner such that the valve on the process fluid end is closed before the second valve is closed. Subpart H. [40 CFR 63.167]

388 Valves in gas/vapor service or light liquid service (Phase I): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly, as specified in 40 CFR 63.180(b). If an instrument reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). Subpart H. [40 CFR 63.168(c)]
Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
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389 Valves in gas/vapor service or light liquid service (Phase II): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly, as specified in 40 CFR 63.180(b). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). Subpart H. [40 CFR 63.168(c)]
Which Months: All Year Statistical Basis: None specified

390 Valves in gas/vapor service or light liquid service (Phase III, 2 percent or greater leaking valves): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly, as specified in 40 CFR 63.180(b); or implement a quality improvement program for valves that complies with the requirements of 40 CFR 63.175 and monitor quarterly. If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). If electing to implement a quality improvement program, follow the procedures in 40 CFR 63.175. Subpart H. [40 CFR 63.168(d)(1)]
Which Months: All Year Statistical Basis: None specified

391 Valves in gas/vapor service or light liquid service (Phase III, less than 2 percent leaking valves): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly, as specified in 40 CFR 63.180(b). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). Permittee may elect to comply with the alternate standards in 40 CFR 63.168(d)(3) and (d)(4). Subpart H. [40 CFR 63.168(d)(2)]
Which Months: All Year Statistical Basis: None specified

392 Valves in gas/vapor service or light liquid service: Determine percent leaking valves using the equation in 40 CFR 63.168(e)(1). Subpart H. [40 CFR 63.168(e)(1)]

393 Valves in gas/vapor service or light liquid service (after leak repair): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once within three months (at least) after repair to determine whether the valve has resumed leaking. Subpart H. [40 CFR 63.168(f)(3)]
Which Months: All Year Statistical Basis: None specified

394 Valves in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after a leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.168(f)]

395 Valves in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.168(b) through (d). Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (f). Subpart H. [40 CFR 63.168(h)(1)]

396 Valves in gas/vapor service or light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of the valves as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (f). Subpart H. [40 CFR 63.168(h)(2)]
Which Months: All Year Statistical Basis: None specified

397 Valves in gas/vapor service or light liquid service (difficult-to-monitor): Demonstrate that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface or it is not accessible at anytime in a safe manner. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (d). Subpart H. [40 CFR 63.168(i)(1)]

398 Valves in gas/vapor service or light liquid service (difficult-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Maintain a written plan that requires monitoring of the valves at least once per calendar year. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (d). Subpart H. [40 CFR 63.168(i)(3)]
Which Months: All Year Statistical Basis: None specified

399 Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 5 days (calendar) if evidence of a potential leak to the atmosphere is found by visible, audible, olfactory, or any other detection method. If a reading of 10,000 ppm for agitators, 5,000 ppm for pumps handling polymerizing monomers, 2,000 ppm for all other pumps (including pumps in food/medical service), or 500 ppm for valves, connectors, instrumentation systems, and pressure relief devices, or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.169(c). Subpart H. [40 CFR 63.169(a)]
Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
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FUG016 196A-Equipment Fugitive Emissions

400 Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.169(c)]

401 Surge control vessels and bottoms receivers: Equip with a closed-vent system that routes the organic vapors vented from the surge control vessel or bottoms receiver back to the process or to a control device that complies with the requirements of 40 CFR 63.172, except as provided in 40 CFR 63.162(b), or comply with the requirements of 40 CFR 63.119(b) or (c), if surge control vessel or bottoms receiver is not routed back to the process and meets the conditions specified in 40 CFR 63 Subpart H Table 2 or Table 3. Subpart H. [40 CFR 63.170]

402 Closed-vent system (hard-piping): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially according to the procedures in 40 CFR 63.180(b). If an instrument reading greater than 500 ppm above background is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(f)(1)(i)]
Which Months: All Year Statistical Basis: None specified

403 Closed-vent system (hard-piping): Presence of a leak monitored by visual, audible, and/or olfactory annually. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(f)(1)(ii)]
Which Months: All Year Statistical Basis: None specified

404 Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.172(i). Subpart H. [40 CFR 63.172(h)]

405 Closed-vent system (bypass lines): Flow monitored by flow indicator once every 15 minutes. Install flow indicator at the entrance to any bypass line. Subpart H. [40 CFR 63.172(j)(1)]
Which Months: All Year Statistical Basis: None specified

406 Closed-vent system (bypass lines): Flow recordkeeping by electronic or hard copy once every 15 minutes. Generate records as specified in 40 CFR 63.118(a)(3). Subpart H. [40 CFR 63.172(j)(1)]

407 Closed-vent system (bypass lines): Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. Subpart H. [40 CFR 63.172(j)(2)]

408 Closed-vent system (bypass lines): Seal or closure mechanism monitored by visual inspection/determination monthly to ensure the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line. Subpart H. [40 CFR 63.172(j)(2)]
Which Months: All Year Statistical Basis: None specified

409 Closed-vent system (unsafe-to-inspect): Demonstrate that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential dangers as a consequence of complying with 40 CFR 63.172(f)(1) or (f)(2). Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(k)(1)]

410 Closed-vent system (unsafe-to-inspect): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times, but not more frequently than annually. Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(k)(2)]
Which Months: All Year Statistical Basis: None specified

411 Closed-vent system (difficult-to-inspect): Demonstrate that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface. Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(l)(1)]

412 Closed-vent system (difficult-to-inspect): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once every five years. Maintain a written plan that requires inspection of the equipment at least once every five years. Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(l)(2)]
Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

FUG016 196A-Equipment Fugitive Emissions

413 Ensure that the closed-vent system or control device is operating whenever organic HAP emissions are vented to the closed-vent system or control device. Subpart H. [40 CFR 63.172(m)]

414 Agitators in gas/vapor service or light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks, as specified in 40 CFR 63.180(b). If an instrument reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.173(c). Subpart H. [40 CFR 63.173(a)]
Which Months: All Year Statistical Basis: None specified

415 Agitators in gas/vapor service or light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar) for indications of liquids dripping from the agitator. If there are indications of liquids dripping from the agitator, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.173(c). Subpart H. [40 CFR 63.173(b)]
Which Months: All Year Statistical Basis: None specified

416 Agitators in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.173(c)]

417 Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Operate with the barrier fluid at a pressure that is at all times greater than the agitator stuffing box pressure; or equip with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or equip with a closed-loop system that purges the barrier fluid into a process stream. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(1)]

418 Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Ensure that the barrier fluid is not in light liquid organic HAP service. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(2)]

419 Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Equip barrier fluid system with a sensor that will detect failure of the seal system, barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(3)]

420 Agitators in gas/vapor service or light liquid service (dual mechanical seal system): Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the agitator seal. If there are indications of liquid dripping from the agitator seal at the time of the weekly inspection, monitor the agitator as specified in 40 CFR 63.180(b) to determine the presence of organic HAP in the barrier fluid. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. If a leak is detected, initiate the repair provisions in 40 CFR 63.173(d)(6). Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(4)]
Which Months: All Year Statistical Basis: None specified

421 Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Determine, based on design considerations and operating experience, criteria that indicates failure of the seal system, the barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(6)(i)]

422 Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(6)]

423 Agitators in gas/vapor service or light liquid service (dual mechanical seal system - sensor): Equipment/operational data monitored by visual inspection/determination daily, or equip with an audible alarm unless the agitator is located within the boundary of an unmanned plant site. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criteria established in 40 CFR 63.173(d)(6), a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.173(d)(6). Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)]
Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
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Air - Title V Regular Permit Renewal

FUG016 196A-Equipment Fugitive Emissions

424 Agitators in gas/vapor service or light liquid service (unmanned plant site): Presence of a leak monitored by visual inspection/determination at the regulation's specified frequency. Monitor each agitator as often as practicable and at least monthly. Comply with this requirement instead of the weekly visual inspection requirement of 40 CFR 63.173(b)(1) and (d)(4), and the daily requirements of 40 CFR 63.173(d)(5). Subpart H. [40 CFR 63.173(g)]
Which Months: All Year Statistical Basis: None specified

425 Agitators in gas/vapor service or light liquid service (difficult to monitor): Demonstrate that the agitator cannot be monitored without elevating the monitoring personnel more than two meters above a support surface or it is not accessible at anytime in a safe manner. Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(h)(1)]

426 Agitators in gas/vapor service or light liquid service (difficult-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Maintain a written plan that requires monitoring of the agitator at least once per calendar year. Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(h)(3)]
Which Months: All Year Statistical Basis: None specified

427 Agitators in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the agitator is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.173(a) through (d). Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(j)(1)]

428 Agitators in gas/vapor service or light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of the agitator as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(j)(2)]
Which Months: All Year Statistical Basis: None specified

429 Connectors in gas/vapor service or light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once within 12 months after the compliance date, except as provided in 40 CFR 63.174(f) through (h). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.174(d). Subpart H. [40 CFR 63.174(b)(1)]
Which Months: All Year Statistical Basis: None specified

430 Connectors in gas/vapor service or light liquid service (0.5% or greater leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Subpart H. [40 CFR 63.174(b)(3)(i)]
Which Months: All Year Statistical Basis: None specified

431 Connectors in gas/vapor service or light liquid service (less than 0.5% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once every two years. Subpart H. [40 CFR 63.174(b)(3)(ii)]
Which Months: All Year Statistical Basis: None specified

432 Connectors in gas/vapor service or light liquid service (opened or otherwise had the seal broken): Presence of a leak monitored by 40 CFR 60, Appendix A, Method 21 within three months after being returned to organic HAP service or when it is reconnected. If monitoring detects a leak, repair according to the provisions of 40 CFR 63.174(d), as specified, except as provided in 40 CFR 63.174(c)(1)(ii). Subpart H. [40 CFR 63.174(c)(1)(i)]
Which Months: All Year Statistical Basis: None specified

433 Connectors in gas/vapor service or light liquid service (2 inches or less in nominal diameter): Comply with the requirements of 40 CFR 63.169. Subpart H. [40 CFR 63.174(c)(2)(i)]

434 Connectors in gas/vapor service or light liquid service (2 inches or less in nominal diameter): Organic HAP monitored by technically sound method within three months after being returned to organic HAP service after having been opened or otherwise had the seal broken. If monitoring detects a leak, implement repair provisions in 40 CFR 63.174(d). Subpart H. [40 CFR 63.174(c)(2)(ii)]
Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

FUG016 196A-Equipment Fugitive Emissions

435 Connectors in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171 and 63.174(g). Subpart H. [40 CFR 63.174(d)]

436 Connectors in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the connector is unsafe to monitor because personnel would be exposed to an immediate danger as a result of complying with 40 CFR 63.174(a) through (c). Comply with this requirement instead of the requirements in 40 CFR 63.174(a). Subpart H. [40 CFR 63.174(f)(1)]

437 Connectors in gas/vapor service or light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of connectors as frequently as practicable during safe to monitor times, but not more frequently than the periodic schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.174(a). Subpart H. [40 CFR 63.174(f)(2)]
Which Months: All Year Statistical Basis: None specified

438 Connectors in gas/vapor service or light liquid service (unsafe-to-repair): Demonstrate that repair personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.174(d). Comply with this requirement instead of the requirements in 40 CFR 63.174(a), (d), and (e). Subpart H. [40 CFR 63.174(g)]

439 Connectors in gas/vapor service or light liquid service (inaccessible, ceramic, or ceramic-lined): Make a first attempt at repair within 5 days after leak is detected by visual, audible, olfactory or other means, and complete repairs no later than 15 calendar days after leak is detected, except as provided in 40 CFR 63.171 and 63.174(g). Comply with this requirement instead of the monitoring requirements of 40 CFR 63.174(a) and (c) and from the recordkeeping and reporting requirements of 40 CFR 63.181 and 63.182. Subpart H. [40 CFR 63.174(h)(2)]

440 Connectors in gas/vapor service or light liquid service: Calculate percent leaking connectors as specified in 40 CFR 63.174(i)(1) and (i)(2). Subpart H. [40 CFR 63.174(i)]

441 Comply with the test methods and procedures requirements provided in 40 CFR 63.180. Subpart H. [40 CFR 63.180]

442 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain records as specified in 40 CFR 63.181(a) through (k). Subpart H. [40 CFR 63.181]

443 Submit Initial Notification: Due within 120 days after the date of promulgation of the subpart that references 40 CFR 63 Subpart H. Include the information specified in 40 CFR 63.182(b)(1). Subpart H. [40 CFR 63.182(b)]

444 Submit Notification of Compliance Status: Due within 90 days of the compliance dates specified in the 40 CFR 63 subpart that references 40 CFR 63 Subpart H. Include the information specified in 40 CFR 63.182(c)(1) through (c)(3). Subpart H. [40 CFR 63.182(c)]

445 Submit Periodic Reports: Due semiannually starting 6 months after the Notification of Compliance Status, as required in 40 CFR 63.182(c). Include the information specified in 40 CFR 63.182(d)(2) through (d)(4). Subpart H. [40 CFR 63.182(d)]

GRP140 ACRYLICS 1 UNIT

446 Emissions of smoke which pass onto or across a public road and create a traffic hazard by impairment of visibility as defined in LAC 33:III.111 or intensify an existing traffic hazard condition are prohibited. [LAC 33:III.1103]

447 Outdoor burning of waste material or other combustible material is prohibited. [LAC 33:III.1109.B]

448 Emissions of particulate matter which pass onto or across a public road and create a traffic hazard by impairment of visibility or intensify an existing traffic hazard condition are prohibited. [LAC 33:III.1303.B]

449 Prevent particulate matter from becoming airborne by taking all reasonable precautions. These precautions shall include, but not be limited to, those specified in LAC 33:III.1305.A.1-7. [LAC 33:III.1305]

450 Maintain best practical housekeeping and maintenance practices at the highest possible standards to reduce the quantity of organic compounds emissions. Good housekeeping shall include, but not be limited to, the practices listed in LAC 33:III.2113.A.1-5. [LAC 33:III.2113.A]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
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GRP140 ACRYLICS 1 UNIT

451 Failure to pay the prescribed application fee or annual fee as provided herein, within 90 days after the due date, will constitute a violation of these regulations and shall subject the person to applicable enforcement actions under the Louisiana Environmental Quality Act including, but not limited to, revocation or suspension of the applicable permit, license, registration, or variance. [LAC 33:III.219]

452 Discharges of odorous substances at or beyond property lines which cause a perceived odor intensity of six or greater on the specified eight point butanol scale as determined by Method 41 of LAC 33:III.2901.G are prohibited. [LAC 33:III.2901.D]

453 If requested to monitor for odor intensity, take and transport samples in a manner which minimizes alteration of the samples either by contamination or loss of material. Evaluate all samples as soon after collection as possible in accordance with the procedures set forth in LAC 33:III.2901.G. [LAC 33:III.2901.F]

454 Carbon monoxide <= 108.30 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

455 Nitrogen oxides <= 199.20 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

456 Particulate matter (10 microns or less) <= 7.01 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

457 Sulfur dioxide <= 0.55 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

458 VOC, Total <= 49.58 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

459 Acetaldehyde <= 2.22 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

460 Acetophenone < 0.01 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

461 Acrolein <= 3.90 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

462 Acrylic acid <= 5.22 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

463 Benzene < 0.01 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

464 n-butyl alcohol <= 0.01 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

465 Ethyl Acrylate <= 0.2 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

466 Biphenyl <= 2.31 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

467 Ethylene glycol <= 0.44 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

468 Formaldehyde <= 1.30 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

469 Hydroquinone <= 0.01 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
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GRP140 ACRYLICS 1 UNIT

470 Methanol < 0.01 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

471 Naphthalene < 0.01 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

472 Propionaldehyde < 0.01 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Hourly maximum

473 Phenol < 0.01 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

474 Phthalic Anhydride < 0.01 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

475 o-Phenylenediamine <= 0.07 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

476 Sulfuric acid < 0.01 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

477 Propionaldehyde < 0.01 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

478 All affected facilities shall comply with all applicable provisions in 40 CFR 60 Subpart A, as applicable. [40 CFR 60]

479 Comply with the requirements of 40 CFR 63 Subparts G and H. Subpart F as applicable. [40 CFR 63.102(a)]

480 Conduct performance tests and compliance determinations according to the schedule and procedures in 40 CFR 63.7(a) and the applicable sections of 40 CFR 63 Subparts G and H. Subpart F. [40 CFR 63.103(b)(1)]

481 Submit Notification: Due at least 30 calendar days before a performance test is scheduled. Notify DEQ of the intention to conduct a performance test to allow DEQ the opportunity to have an observer present during the test. Subpart F. [40 CFR 63.103(b)(2)]

482 Conduct performance tests according to the provisions in 40 CFR 63.7(e) of subpart A, except conduct performance tests at maximum representative operating conditions for the process. Subpart F. [40 CFR 63.103(b)(3)]

483 Maintain all applicable records in such a manner that they can be readily accessed. Retain the most recent 6 months of records on site or make accessible by computer or other means that provides access within 2 hours after a request. Subpart F. [40 CFR 63.103(c)(1)]

484 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records specified in 40 CFR 63.103(c)(2)(i) through (iii), as well as records specified in 40 CFR 63 Subparts G and H. Subpart F. [40 CFR 63.103(c)(2)]

485 Keep copies of all applicable reports and records required by 40 CFR 63 Subparts F, G, and H for at least 5 years. If 40 CFR 63 Subparts G or H require records to be maintained for a time period different than 5 years, maintain those records for the time specified in 40 CFR 63 Subparts G or H. Subpart F. [40 CFR 63.103(c)]

486 Maintenance wastewater: Implement the procedures described in 40 CFR 63.105(b) and (c) as part of the start-up, shutdown and malfunction plan required under 40 CFR 63.6(e)(3). Subpart F. [40 CFR 63.105(d)]

487 Maintenance wastewater: Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain a record of the information required by 40 CFR 63.105(b) and (c) as part of the start-up, shut-down, and malfunction plan required under 40 CFR 63.6(e)(3). Subpart F. [40 CFR 63.105(e)]

488 Maintenance wastewater: Prepare a description of maintenance procedures for the management of wastewaters generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair and during periods which are not shutdowns as specified in 40 CFR 63.105(b)(1) through (b)(3). Modify and update the information required by 40 CFR 63.105(b) as needed following each maintenance procedure based on the actions taken and the wastewaters generated in the preceding maintenance procedure. Subpart F. [40 CFR 63.105]

489 Control emissions of organic HAP's to the level represented by the equation listed in 40 CFR 63.112(a). Subpart G. [40 CFR 63.112(a)]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
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GRP140 ACRYLICS 1 UNIT

490 Demonstrate compliance with the emission standard in 40 CFR 63.112(a) by following the procedures specified in 40 CFR 63.112(e) for all emission points, or by following the emissions averaging compliance approach specified in 40 CFR 63.112(f) for some emission points and the procedures specified in 40 CFR 63.112(e) for all other emission points within the source. Subpart G. [40 CFR 63.112(c)]

491 Submit Periodic Reports: Due semiannually no later than 60 calendar days after the end of each 6-month period, except as specified in 40 CFR 63.152(c)(5) and (c)(6). Submit the first report no later than 8 months after the date the Notification of Compliance Status is due. Include the information specified in 40 CFR 63.152(c)(2) through (c)(4). Subpart G. [40 CFR 63.152(c)]

492 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records as specified in 40 CFR 63.152(f)(1) through (f)(7). Subpart G. [40 CFR 63.152(f)]

493 All affected facilities shall comply with all applicable provisions in 40 CFR 63 Subpart A. [40 CFR 63]

494 Submit Title V permit application for renewal: Due 180 calendar days before permit expiration date. [40 CFR 70.5(a)(1)(iii)]

495 Submit Title V monitoring results report: Due semiannually, by March 31st and September 30th for the preceding periods encompassing July through December and January through June, respectively. Submit reports to the Office of Environmental Compliance, Surveillance Division. Certify reports by a responsible company official. Clearly identify all instances of deviations from permitted monitoring requirements. For previously reported deviations, in lieu of attaching the individual deviation reports, clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. [40 CFR 70.6(a)(3)(iii)(A)]

496 Submit Title V excess emissions report: Due quarterly, by June 30, September 30, December 31, March 31. Submit reports of all permit deviations to the Office of Environmental Compliance, Surveillance Division. Certify all reports by a responsible official in accordance with 40 CFR 70.5(d). The reports submitted on March 31 and September 30 may be consolidated with the semi-annual reports required by 40 CFR 70.6(a)(3)(iii)(A) as long as the report clearly indicates this and all required information is included and clearly delineated in the consolidated report. [40 CFR 70.6(a)(3)(iii)(B)]

497 Submit Title V compliance certification: Due annually, by the 31st of March. Submit to the Office of Environmental Compliance, Surveillance Division. [40 CFR 70.6(c)(5)(iv)]

498 Comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B. [40 CFR 82.Subpart F]

GRP141 2601-CAP EQT779 & EQT780 (TOXs 253, 2600)

499 Flow - Submit report: Due annually, by the 31st of March. Report the overall total emissions and efficiency from the oxidizers based on the overall total flow to the oxidizers for the preceding calendar year to the Office of Environmental Compliance, Enforcement Division. [LAC 33:III.501.C.6]

500 Flow recordkeeping by electronic or hard copy monthly. Keep records of the overall total emissions and efficiencies from the oxidizers based on total flow to the oxidizers each month, as well as the overall total emissions and efficiencies from the oxidizers, based on total flow to the oxidizers for the last twelve months. Make records available for inspection by DEQ personnel. [LAC 33:III.501.C.6]

RLP055 Column D (Vacuum Pump Case)

501 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Column D emits Acrolein, a Class II TAP, vacuum pump's emissions routed to the thermal oxidizers EQT779 or EQT780 (EIQs 253 or 2600), with control efficiency greater than 98%). Determined as MACT
. [LAC 33:III.5109.A]

502 TRE index value > 4.0 (no units). Subpart G. [40 CFR 63.113(e)]
Which Months: All Year Statistical Basis: None specified

503 Recalculate the TRE index value, flow, or organic hazardous air pollutants concentration for each process vent, as necessary to determine whether the vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the vent to a Group 1 vent. Subpart G. [40 CFR 63.115(e)]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
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RLP055 Column D (Vacuum Pump Case)

504 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records of measurements, engineering assessments, and calculations performed to determine the TRE index value of the vent stream. Include all data, assumptions and procedures used for the engineering assessments, as specified in 40 CFR 63.115(d)(1). Subpart G. [40 CFR 63.117(b)]

505 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of any process changes as defined in 40 CFR 63.115(e), and any recalculation of the TRE index value pursuant to 40 CFR 63.115(e). Subpart G. [40 CFR 63.118(c)]

506 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent to become a Group 1 process vent. Include the information specified in 40 CFR 63.118(g)(1) through (g)(3). Subpart G. [40 CFR 63.118(g)]

507 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with a TRE greater than 4.0 to become a Group 2 process vent with a TRE less than 4.0. Include the information specified in 40 CFR 63.118(h)(1) through (h)(3). Subpart G. [40 CFR 63.118(h)]

RLP056 Column E (Vacuum Pump Case)

508 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Column E (Vacuum Case) emits only Acrylic Acid, a Class III TAP. MACT is not required.
Emissions routed to a thermal oxidizers, EQT779 or EQT780 (EIQs 253 or 2600), though. [LAC 33:III.5109.A]

509 TRE index value > 4.0 (no units). Subpart G. [40 CFR 63.113(e)]
Which Months: All Year Statistical Basis: None specified

510 Recalculate the TRE index value, flow, or organic hazardous air pollutants concentration for each process vent, as necessary to determine whether the vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the vent to a Group 1 vent. Subpart G. [40 CFR 63.115(e)]

511 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records of measurements, engineering assessments, and calculations performed to determine the TRE index value of the vent stream. Include all data, assumptions and procedures used for the engineering assessments, as specified in 40 CFR 63.115(d)(1). Subpart G. [40 CFR 63.117(b)]

512 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of any process changes as defined in 40 CFR 63.115(e), and any recalculation of the TRE index value pursuant to 40 CFR 63.115(e). Subpart G. [40 CFR 63.118(c)]

513 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent to become a Group 1 process vent. Include the information specified in 40 CFR 63.118(g)(1) through (g)(3). Subpart G. [40 CFR 63.118(g)]

514 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with a TRE greater than 4.0 to become a Group 2 process vent with a TRE less than 4.0. Include the information specified in 40 CFR 63.118(h)(1) through (h)(3). Subpart G. [40 CFR 63.118(h)]

RLP057 Column D (Jet Case)

515 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Column D (Jet Case) emits Acrolein a Class II TAP. Compliance with HON Subparts F and G determined as MACT. [LAC 33:III.5109.A]

516 TRE index value > 4.0 (no units). Subpart G. [40 CFR 63.113(e)]
Which Months: All Year Statistical Basis: None specified

517 Recalculate the TRE index value, flow, or organic hazardous air pollutants concentration for each process vent, as necessary to determine whether the vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the vent to a Group 1 vent. Subpart G. [40 CFR 63.115(e)]

518 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records of measurements, engineering assessments, and calculations performed to determine the TRE index value of the vent stream. Include all data, assumptions and procedures used for the engineering assessments, as specified in 40 CFR 63.115(d)(1). Subpart G. [40 CFR 63.117(b)]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

RLP057 Column D (Jet Case)

519 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of any process changes as defined in 40 CFR 63.115(e), and any recalculation of the TRE index value pursuant to 40 CFR 63.115(e). Subpart G. [40 CFR 63.118(c)]

520 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent to become a Group 1 process vent. Include the information specified in 40 CFR 63.118(g)(1) through (g)(3). Subpart G. [40 CFR 63.118(g)]

521 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with a TRE greater than 4.0 to become a Group 2 process vent with a TRE less than 4.0. Include the information specified in 40 CFR 63.118(h)(1) through (h)(3). Subpart G. [40 CFR 63.118(h)]

RLP058 Column E (Jet Case)

522 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Column E (Jet Case) emits only Acrylic Acid, a Class III TAP. MACT is not required. [LAC 33:III.5109.A]

523 TRE index value > 4.0 (no units). Subpart G. [40 CFR 63.113(e)]
Which Months: All Year Statistical Basis: None specified

524 Recalculate the TRE index value, flow, or organic hazardous air pollutants concentration for each process vent, as necessary to determine whether the vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the vent to a Group 1 vent. Subpart G. [40 CFR 63.115(e)]

525 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records of measurements, engineering assessments, and calculations performed to determine the TRE index value of the vent stream. Include all data, assumptions and procedures used for the engineering assessments, as specified in 40 CFR 63.115(d)(1). Subpart G. [40 CFR 63.117(b)]

526 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of any process changes as defined in 40 CFR 63.115(e), and any recalculation of the TRE index value pursuant to 40 CFR 63.115(e). Subpart G. [40 CFR 63.118(c)]

527 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent to become a Group 1 process vent. Include the information specified in 40 CFR 63.118(g)(1) through (g)(3). Subpart G. [40 CFR 63.118(g)]

528 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with a TRE greater than 4.0 to become a Group 2 process vent with a TRE less than 4.0. Include the information specified in 40 CFR 63.118(h)(1) through (h)(3). Subpart G. [40 CFR 63.118(h)]

RLP059 254-Column H (Jet Case)

529 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Column H (jet case) emits only Acrylic Acid, a Class III TAP. MACT is not required. [LAC 33:III.5109.A]

530 TRE index value > 4.0 (no units). Subpart G. [40 CFR 63.113(e)]
Which Months: All Year Statistical Basis: None specified

531 Recalculate the TRE index value, flow, or organic hazardous air pollutants concentration for each process vent, as necessary to determine whether the vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the vent to a Group 1 vent. Subpart G. [40 CFR 63.115(e)]

532 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records of measurements, engineering assessments, and calculations performed to determine the TRE index value of the vent stream. Include all data, assumptions and procedures used for the engineering assessments, as specified in 40 CFR 63.115(d)(1). Subpart G. [40 CFR 63.117(b)]

533 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of any process changes as defined in 40 CFR 63.115(e), and any recalculation of the TRE index value pursuant to 40 CFR 63.115(e). Subpart G. [40 CFR 63.118(c)]

534 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent to become a Group 1 process vent. Include the information specified in 40 CFR 63.118(g)(1) through (g)(3). Subpart G. [40 CFR 63.118(g)]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

RLP059 254-Column H (Jet Case)

535 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with a TRE greater than 4.0 to become a Group 2 process vent with a TRE less than 4.0. Include the information specified in 40 CFR 63.118(h)(1) through (h)(3). Subpart G. [40 CFR 63.118(h)]

RLP060 Column H (Vacuum Case)

536 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Column H (Vacuum Jet) emits only Acrylic Acid, a Class III TAP. MACT is not required. [LAC 33:III.5109.A]

537 Organic HAP >= 98 % reduction by weight, or <= 20 ppmv, whichever is less stringent, as determined using the methods in 40 CFR 63.116(c). Subpart G. [40 CFR 63.113(a)(2)]
Which Months: All Year Statistical Basis: None specified

538 Bypass lines: Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. Subpart G. [40 CFR 63.114(d)(2)]

539 Bypass lines: Seal or closure mechanism monitored by visual inspection/determination monthly to ensure that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line. Subpart G. [40 CFR 63.114(d)(2)]
Which Months: All Year Statistical Basis: None specified

540 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.117(a)(4) through (a)(8), as applicable. Subpart G. [40 CFR 63.117(a)]

RLP061 Column B

541 Nonhalogenated hydrocarbon burning: Temperature >= 1300 F (704 degrees C) for 0.3 second or greater in a direct-flame afterburner or an equally effective device which achieves a removal efficiency of 95 percent or greater, as determined in accordance with LAC 33:III.2115.J.1, or if emissions are reduced to 50 ppm by volume, whichever is less stringent.
Emissions routed to Flare, Emission Point 228, with emissions control efficiency > 95%. [LAC 33:III.2115.A]
Which Months: All Year Statistical Basis: None specified

542 Determine compliance with LAC 33:III.2115.A through G by applying the test methods specified in LAC 33:III.2115.I.1 through 5, as appropriate. [LAC 33:III.2115.I]

543 Demonstrate compliance with LAC 33:III.2115 as requested by DEQ. [LAC 33:III.2115.J.1]

544 Install and maintain monitors to accurately measure and record operational parameters of all required control devices as necessary to ensure the proper functioning of those devices in accordance with design specifications. Monitor and record at a minimum the parameters listed in LAC 33:III.2115.J.2.a through e. [LAC 33:III.2115.J.2]

545 Comply with LAC 33:III.2115 as soon as practicable but in no event later than August 20, 2003. Comply with the requirements of LAC 33:III.2115 as soon as practicable, but in no event later than one year from the promulgation of the regulation revision, if subject to LAC 33:III.2115 as a result of a revision of LAC 33:III.2115. [LAC 33:III.2115.J]

546 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain the records specified in LAC 33:III.2115.K.1 through K.3. Maintain records on the premises for at least two years and make such information available to representatives of the Louisiana Department of Environmental Quality and the Environmental Protection Agency upon request. [LAC 33:III.2115.K]

547 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Column emits Class I and II TAPs. Emissions routed to Flare, EQT778, with emissions control efficiency > 95%. Determined as MACT. [LAC 33:III.5109.A]

548 TRE index value > 4.0 (no units). Subpart G. [40 CFR 63.113(e)]
Which Months: All Year Statistical Basis: None specified

549 Recalculate the TRE index value, flow, or organic hazardous air pollutants concentration for each process vent, as necessary to determine whether the vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the vent to a Group 1 vent. Subpart G. [40 CFR 63.115(e)]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

RLP061 Column B

550 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records of measurements, engineering assessments, and calculations performed to determine the TRE index value of the vent stream. Include all data, assumptions and procedures used for the engineering assessments, as specified in 40 CFR 63.115(d)(1). Subpart G. [40 CFR 63.117(b)]

551 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of any process changes as defined in 40 CFR 63.115(e), and any recalculation of the TRE index value pursuant to 40 CFR 63.115(e). Subpart G. [40 CFR 63.118(c)]

552 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent to become a Group 1 process vent. Include the information specified in 40 CFR 63.118(g)(1) through (g)(3). Subpart G. [40 CFR 63.118(g)]

553 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with a TRE greater than 4.0 to become a Group 2 process vent with a TRE less than 4.0. Include the information specified in 40 CFR 63.118(h)(1) through (h)(3). Subpart G. [40 CFR 63.118(h)]

RLP062 Column C

554 Nonhalogenated hydrocarbon burning: Temperature >= 1300 F (704 degrees C) for 0.3 second or greater in a direct-flame afterburner or an equally effective device which achieves a removal efficiency of 95 percent or greater, as determined in accordance with LAC 33:III.2115.J.1, or if emissions are reduced to 50 ppm by volume, whichever is less stringent.
Emissions routed to Flare, Emission Point 228, with emissions control efficiency > 95%. [LAC 33:III.2115.A]
Which Months: All Year Statistical Basis: None specified

555 Determine compliance with LAC 33:III.2115.A through G by applying the test methods specified in LAC 33:III.2115.I.1 through 5, as appropriate. [LAC 33:III.2115.I]

556 Demonstrate compliance with LAC 33:III.2115 as requested by DEQ. [LAC 33:III.2115.J.1]

557 Install and maintain monitors to accurately measure and record operational parameters of all required control devices as necessary to ensure the proper functioning of those devices in accordance with design specifications. Monitor and record at a minimum the parameters listed in LAC 33:III.2115.J.2.a through e. [LAC 33:III.2115.J.2]

558 Comply with LAC 33:III.2115 as soon as practicable but in no event later than August 20, 2003. Comply with the requirements of LAC 33:III.2115 as soon as practicable, but in no event later than one year from the promulgation of the regulation revision, if subject to LAC 33:III.2115 as a result of a revision of LAC 33:III.2115. [LAC 33:III.2115.J]

559 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain the records specified in LAC 33:III.2115.K.1 through K.3. Maintain records on the premises for at least two years and make such information available to representatives of the Louisiana Department of Environmental Quality and the Environmental Protection Agency upon request. [LAC 33:III.2115.K]

560 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Compliance with HON Subparts F and G determined as MACT. [LAC 33:III.5109.A]

561 TRE index value > 4.0 (no units). Subpart G. [40 CFR 63.113(e)]
Which Months: All Year Statistical Basis: None specified

562 Recalculate the TRE index value, flow, or organic hazardous air pollutants concentration for each process vent, as necessary to determine whether the vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the vent to a Group 1 vent. Subpart G. [40 CFR 63.115(e)]

563 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records of measurements, engineering assessments, and calculations performed to determine the TRE index value of the vent stream. Include all data, assumptions and procedures used for the engineering assessments, as specified in 40 CFR 63.115(d)(1). Subpart G. [40 CFR 63.117(b)]

564 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of any process changes as defined in 40 CFR 63.115(e), and any recalculation of the TRE index value pursuant to 40 CFR 63.115(e). Subpart G. [40 CFR 63.118(c)]

565 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent to become a Group 1 process vent. Include the information specified in 40 CFR 63.118(g)(1) through (g)(3). Subpart G. [40 CFR 63.118(g)]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

RLP062 Column C

566 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with a TRE greater than 4.0 to become a Group 2 process vent with a TRE less than 4.0. Include the information specified in 40 CFR 63.118(h)(1) through (h)(3). Subpart G. [40 CFR 63.118(h)]

RLP063 Column I

567 Nonhalogenated hydrocarbon burning: Temperature >= 1300 F (704 degrees C) for 0.3 second or greater in a direct-flame afterburner or an equally effective device which achieves a removal efficiency of 95 percent or greater, as determined in accordance with LAC 33:III.2115.J.1, or if emissions are reduced to 50 ppm by volume, whichever is less stringent.
Vent stream routed to Thermal Oxidizers, EQT779 or EQT780, Emission Points 253 or 2600, with an emissions control efficiency > 95%. [LAC 33:III.2115.A]
Which Months: All Year Statistical Basis: None specified

568 Determine compliance with LAC 33:III.2115.A through G by applying the test methods specified in LAC 33:III.2115.I.1 through 5, as appropriate. [LAC 33:III.2115.I]

569 Demonstrate compliance with LAC 33:III.2115 as requested by DEQ. [LAC 33:III.2115.J.1]

570 Install and maintain monitors to accurately measure and record operational parameters of all required control devices as necessary to ensure the proper functioning of those devices in accordance with design specifications. Monitor and record at a minimum the parameters listed in LAC 33:III.2115.J.2.a through e. [LAC 33:III.2115.J.2]

571 Comply with LAC 33:III.2115 as soon as practicable but in no event later than August 20, 2003. Comply with the requirements of LAC 33:III.2115 as soon as practicable, but in no event later than one year from the promulgation of the regulation revision, if subject to LAC 33:III.2115 as a result of a revision of LAC 33:III.2115. [LAC 33:III.2115.J]

572 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain the records specified in LAC 33:III.2115.K.1 through K.3. Maintain records on the premises for at least two years and make such information available to representatives of the Louisiana Department of Environmental Quality and the Environmental Protection Agency upon request. [LAC 33:III.2115.K]

573 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Vent stream contains Class I and II TAPs. Stream routed to Thermal Oxidizers, EQT779 or EQT780 (EIQs 253 or 2600), with an emissions control efficiency > 98%. Determined as MACT. [LAC 33:III.5109.A]

574 Organic HAP >= 98 % reduction by weight, or <= 20 ppmv, whichever is less stringent, as determined using the methods in 40 CFR 63.116(c). Subpart G. [40 CFR 63.113(a)(2)]
Which Months: All Year Statistical Basis: None specified

575 Bypass lines: Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. Subpart G. [40 CFR 63.114(d)(2)]

576 Bypass lines: Seal or closure mechanism monitored by visual inspection/determination monthly to ensure that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line. Subpart G. [40 CFR 63.114(d)(2)]
Which Months: All Year Statistical Basis: None specified

577 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.117(a)(4) through (a)(8), as applicable. Subpart G. [40 CFR 63.117(a)]

RLP064 Column J

578 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Vent stream contains Class I and II TAPs. For compliance with HON Subparts F and G Group 1 requirements, emissions routed to Thermal Oxidizers EQT780 or EQT779, Emission Points 2600 or 253. Determined as MACT. [LAC 33:III.5109.A]

579 Organic HAP >= 98 % reduction by weight, or <= 20 ppmv, whichever is less stringent, as determined using the methods in 40 CFR 63.116(c). Subpart G. [40 CFR 63.113(a)(2)]
Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

RLP064 Column J

580 Bypass lines: Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. Subpart G. [40 CFR 63.114(d)(2)]

581 Bypass lines: Seal or closure mechanism monitored by visual inspection/determination monthly to ensure that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line. Subpart G. [40 CFR 63.114(d)(2)]
Which Months: All Year Statistical Basis: None specified

582 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.117(a)(4) through (a)(8), as applicable. Subpart G. [40 CFR 63.117(a)]

RLP065 Column K

583 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Vent stream contains Class I and II TAPs. For compliance with HON Subparts F and G Group 1 requirements, emissions routed to Thermal Oxidizers EQT780 or EQT779, Emission Points 2600 or 253. Determined as MACT. [LAC 33:III.5109.A]

584 Organic HAP >= 98 % reduction by weight, or <= 20 ppmv, whichever is less stringent, as determined using the methods in 40 CFR 63.116(c). Subpart G. [40 CFR 63.113(a)(2)]
Which Months: All Year Statistical Basis: None specified

585 Bypass lines: Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. Subpart G. [40 CFR 63.114(d)(2)]

586 Bypass lines: Seal or closure mechanism monitored by visual inspection/determination monthly to ensure that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line. Subpart G. [40 CFR 63.114(d)(2)]
Which Months: All Year Statistical Basis: None specified

587 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.117(a)(4) through (a)(8), as applicable. Subpart G. [40 CFR 63.117(a)]

RLP066 Column L

588 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Vent stream contains Class I and II TAPs. For compliance with HON Subparts F and G Group 1 requirements, emissions routed to Thermal Oxidizers EQT780 or EQT779, Emission Points 2600 or 253. Determined as MACT. [LAC 33:III.5109.A]

589 Organic HAP >= 98 % reduction by weight, or <= 20 ppmv, whichever is less stringent, as determined using the methods in 40 CFR 63.116(c). Subpart G. [40 CFR 63.113(a)(2)]
Which Months: All Year Statistical Basis: None specified

590 Bypass lines: Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. Subpart G. [40 CFR 63.114(d)(2)]

591 Bypass lines: Seal or closure mechanism monitored by visual inspection/determination monthly to ensure that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line. Subpart G. [40 CFR 63.114(d)(2)]
Which Months: All Year Statistical Basis: None specified

592 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.117(a)(4) through (a)(8), as applicable. Subpart G. [40 CFR 63.117(a)]

RLP067 Column M

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

RLP067 Column M

593 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Vent stream contains Class I and II TAPs. For compliance with HON Subparts F and G Group 1 requirements, emissions routed to Thermal Oxidizers EQT780 or EQT779, Emission Points 2600 or 253. Determined as MACT. [LAC 33:III.5109.A]

594 Organic HAP >= 98 % reduction by weight, or <= 20 ppmv, whichever is less stringent, as determined using the methods in 40 CFR 63.116(c). Subpart G. [40 CFR 63.113(a)(2)]
Which Months: All Year Statistical Basis: None specified

595 Bypass lines: Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. Subpart G. [40 CFR 63.114(d)(2)]

596 Bypass lines: Seal or closure mechanism monitored by visual inspection/determination monthly to ensure that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line. Subpart G. [40 CFR 63.114(d)(2)]
Which Months: All Year Statistical Basis: None specified

597 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.117(a)(4) through (a)(8), as applicable. Subpart G. [40 CFR 63.117(a)]

RLP068 Column N

598 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Vent stream contains Class I and II TAPs. For compliance with HON Subparts F and G Group 1 requirements, emissions routed to Thermal Oxidizers EQT780 or EQT779, Emission Points 2600 or 253. Determined as MACT. [LAC 33:III.5109.A]

599 Organic HAP >= 98 % reduction by weight, or <= 20 ppmv, whichever is less stringent, as determined using the methods in 40 CFR 63.116(c). Subpart G. [40 CFR 63.113(a)(2)]
Which Months: All Year Statistical Basis: None specified

600 Bypass lines: Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. Subpart G. [40 CFR 63.114(d)(2)]

601 Bypass lines: Seal or closure mechanism monitored by visual inspection/determination monthly to ensure that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line. Subpart G. [40 CFR 63.114(d)(2)]
Which Months: All Year Statistical Basis: None specified

602 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.117(a)(4) through (a)(8), as applicable. Subpart G. [40 CFR 63.117(a)]

RLP081 226-Column F (Jet Case stack)

603 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Column F (jet case) emits only Acrylic Acid, a Class III TAP. MACT is not required. [LAC 33:III.5109.A]

604 TRE index value > 4.0 (no units). Subpart G. [40 CFR 63.113(e)]
Which Months: All Year Statistical Basis: None specified

605 Recalculate the TRE index value, flow, or organic hazardous air pollutants concentration for each process vent, as necessary to determine whether the vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the vent to a Group 1 vent. Subpart G. [40 CFR 63.115(e)]

606 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records of measurements, engineering assessments, and calculations performed to determine the TRE index value of the vent stream. Include all data, assumptions and procedures used for the engineering assessments, as specified in 40 CFR 63.115(d)(1). Subpart G. [40 CFR 63.117(b)]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

RLP081 226-Column F (Jet Case stack)

607 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of any process changes as defined in 40 CFR 63.115(e), and any recalculation of the TRE index value pursuant to 40 CFR 63.115(e). Subpart G. [40 CFR 63.118(c)]

608 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent to become a Group 1 process vent. Include the information specified in 40 CFR 63.118(g)(1) through (g)(3). Subpart G. [40 CFR 63.118(g)]

609 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with a TRE greater than 4.0 to become a Group 2 process vent with a TRE less than 4.0. Include the information specified in 40 CFR 63.118(h)(1) through (h)(3). Subpart G. [40 CFR 63.118(h)]

RLP082 Column F (Vacuum Case)

610 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Column F (Vacuum Case) emits only Acrylic Acid, a Class III TAP. MACT is not required. [LAC 33:III.5109.A]

611 Organic HAP >= 98 % reduction by weight, or <= 20 ppmv, whichever is less stringent, as determined using the methods in 40 CFR 63.116(c). For combustion devices, calculate emission reduction or concentration on a dry basis, corrected to 3-percent oxygen. Subpart G. [40 CFR 63.113(a)(2)]
Which Months: All Year Statistical Basis: None specified

612 Bypass lines: Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. Subpart G. [40 CFR 63.114(d)(2)]

613 Bypass lines: Seal or closure mechanism monitored by visual inspection/determination monthly to ensure that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line. Subpart G. [40 CFR 63.114(d)(2)]
Which Months: All Year Statistical Basis: None specified

614 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.117(a)(4) through (a)(8), as applicable. Subpart G. [40 CFR 63.117(a)]

RLP083 227-Column G (Jet Case)

615 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Column G (jet case) emits only Acrylic Acid, a Class III TAP. MACT is not required. [LAC 33:III.5109.A]

616 TRE index value > 4.0 (no units). Subpart G. [40 CFR 63.113(e)]
Which Months: All Year Statistical Basis: None specified

617 Recalculate the TRE index value, flow, or organic hazardous air pollutants concentration for each process vent, as necessary to determine whether the vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the vent to a Group 1 vent. Subpart G. [40 CFR 63.115(e)]

618 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records of measurements, engineering assessments, and calculations performed to determine the TRE index value of the vent stream. Include all data, assumptions and procedures used for the engineering assessments, as specified in 40 CFR 63.115(d)(1). Subpart G. [40 CFR 63.117(b)]

619 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of any process changes as defined in 40 CFR 63.115(e), and any recalculation of the TRE index value pursuant to 40 CFR 63.115(e). Subpart G. [40 CFR 63.118(c)]

620 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent to become a Group 1 process vent. Include the information specified in 40 CFR 63.118(g)(1) through (g)(3). Subpart G. [40 CFR 63.118(g)]

621 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with a TRE greater than 4.0 to become a Group 2 process vent with a TRE less than 4.0. Include the information specified in 40 CFR 63.118(h)(1) through (h)(3). Subpart G. [40 CFR 63.118(h)]

RLP084 Column G (Vacuum Case)

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

RLP084 Column G (Vacuum Case)

622 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Column G (vacuum jet) emits only Acrylic Acid, a Class III TAP. MACT is not required.
Emissions from vacuum case are routed to the thermal oxidizer, though. [LAC 33:III.5109.A]

623 TRE index value > 4.0 (no units). Subpart G. [40 CFR 63.113(e)]
Which Months: All Year Statistical Basis: None specified

624 Recalculate the TRE index value, flow, or organic hazardous air pollutants concentration for each process vent, as necessary to determine whether the vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the vent to a Group 1 vent. Subpart G. [40 CFR 63.115(e)]

625 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records of measurements, engineering assessments, and calculations performed to determine the TRE index value of the vent stream. Include all data, assumptions and procedures used for the engineering assessments, as specified in 40 CFR 63.115(d)(1). Subpart G. [40 CFR 63.117(b)]

626 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of any process changes as defined in 40 CFR 63.115(e), and any recalculation of the TRE index value pursuant to 40 CFR 63.115(e). Subpart G. [40 CFR 63.118(c)]

627 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent to become a Group 1 process vent. Include the information specified in 40 CFR 63.118(g)(1) through (g)(3). Subpart G. [40 CFR 63.118(g)]

628 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with a TRE greater than 4.0 to become a Group 2 process vent with a TRE less than 4.0. Include the information specified in 40 CFR 63.118(h)(1) through (h)(3). Subpart G. [40 CFR 63.118(h)]

RLP085 Acid Scrubber (process vessel)

629 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Vent stream contains Class I and II TAPs. For compliance with HON Subparts F and G Group 1 requirements, emissions routed to Thermal Oxidizers EQT780 or EQT779, Emission Points 2600 or 253. Determined as MACT. [LAC 33:III.5109.A]

630 Organic HAP >= 98 % reduction by weight, or <= 20 ppmv, whichever is less stringent, as determined using the methods in 40 CFR 63.116(c). Subpart G. [40 CFR 63.113(a)(2)]
Which Months: All Year Statistical Basis: None specified

631 Bypass lines: Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. Subpart G. [40 CFR 63.114(d)(2)]

632 Bypass lines: Seal or closure mechanism monitored by visual inspection/determination monthly to ensure that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line. Subpart G. [40 CFR 63.114(d)(2)]
Which Months: All Year Statistical Basis: None specified

633 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.117(a)(4) through (a)(8), as applicable. Subpart G. [40 CFR 63.117(a)]

RLP089 MS-323 Process Vessel

634 Nonhalogenated hydrocarbon burning: Temperature >= 1600 F (870 degrees C) for 0.5 seconds or greater in a direct-flame afterburner or thermal incinerator. Other devices will be accepted provided 98 percent or greater VOC destruction or removal efficiency can be demonstrated, as determined in accordance with LAC 33:III.2115.J.1, or if emissions are reduced to 20 ppm by volume, whichever is less stringent. [LAC 33:III.2115.B]
Which Months: All Year Statistical Basis: None specified

635 Determine compliance with LAC 33:III.2115.A through G by applying the test methods specified in LAC 33:III.2115.I.1 through 5, as appropriate. [LAC 33:III.2115.I]

636 Demonstrate compliance with LAC 33:III.2115 as requested by DEQ. [LAC 33:III.2115.J.1]

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SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
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RLP089 MS-323 Process Vessel

637 Install and maintain monitors to accurately measure and record operational parameters of all required control devices as necessary to ensure the proper functioning of those devices in accordance with design specifications. Monitor and record at a minimum the parameters listed in LAC 33:III.2115.J.2.a through e. [LAC 33:III.2115.J.2]

638 Comply with LAC 33:III.2115 as soon as practicable but in no event later than August 20, 2003. Comply with the requirements of LAC 33:III.2115 as soon as practicable, but in no event later than one year from the promulgation of the regulation revision, if subject to LAC 33:III.2115 as a result of a revision of LAC 33:III.2115. [LAC 33:III.2115.J]

639 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain the records specified in LAC 33:III.2115.K.1 through K.3. Maintain records on the premises for at least two years and make such information available to representatives of the Louisiana Department of Environmental Quality and the Environmental Protection Agency upon request. [LAC 33:III.2115.K]

640 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Compliance with LAC 33:III.2115 determined as MACT. [LAC 33:III.5109.A]

INVENTORIES

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

Subject Item Inventory:

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
EQT774	222-Heat Transfer Furnace		20 MM BTU/hr	20 MM BTU/hr		8760 hr/yr (All Year)
EQT775	223A-Surge Tank (MS-106)	23990 gallons	6000 gallons/hr	143940 gallons/yr	Dowtherm-Diphenyl Ether/Biphenyl Blend (27%)	8760 hr/yr (All Year)
EQT776	223B-Surge Tank (MS-306)	23990 gallons	6000 gallons/hr	143940 gallons/yr	Dowtherm-Diphenyl Ether/Biphenyl Blend (27%)	8760 hr/yr (All Year)
EQT777	223-Air Cooled Fin Condenser (Tanks 223, 223A, & 223B)					8760 hr/yr (All Year)
EQT778	228-Process Flare		382 MM BTU/hr	382 MM BTU/hr		8760 hr/yr (All Year)
EQT779	253-Thermal Oxidizer		100 MM BTU/hr	100 MM BTU/hr		8760 hr/yr (All Year)
EQT780	2600-Thermal Oxidizer		90 MM BTU/hr	90 MM BTU/hr		8760 hr/yr (All Year)
EQT781	229-Tank 3544	3996 gallons	3996 gallons/hr	1.26 MM gallons/yr	Inhibitor Feed	8760 hr/yr (All Year)
EQT782	230-Tank 3545	3996 gallons	3996 gallons/hr	1.26 MM gallons/yr	Inhibitor Feed	8760 hr/yr (All Year)
EQT783	231-Tank 3564	10257 gallons	10257 gallons/hr	346752 gallons/yr	Inhibitor / Acrolein Mix	8760 hr/yr (All Year)
EQT784	232-Tank 3542	5952 gallons	5952 gallons/hr	6.21 MM gallons/yr	Acrylic Acid	8760 hr/yr (All Year)
EQT785	233-Tank 3543	5952 gallons	5952 gallons/hr	6.21 MM gallons/yr	Acrylic Acid	8760 hr/yr (All Year)
EQT786	234-Tank 3550	21394 gallons	6900 gallons/hr	40000 gallons/yr	Acrylic Acid / IPE	8760 hr/yr (All Year)
EQT787	235-Tank 3551	21394 gallons	6900 gallons/hr	40000 gallons/yr	Acrylic Acid / IPE	8760 hr/yr (All Year)
EQT788	236-Tank 3553	21394 gallons	21394 gallons/hr	2.69 MM gallons/yr	Acrylic Acid	8760 hr/yr (All Year)
EQT789	237-Tank 3552	20035 gallons	20035 gallons/hr	317864 gallons/yr	Solvent 1 Mix	8760 hr/yr (All Year)
EQT790	238-Tank 3557	10940 gallons	24000 gallons/hr	1.31 MM gallons/yr	Acrylic Acid	8760 hr/yr (All Year)
EQT791	239-Tank 3558	5061 gallons	5061 gallons/hr	47378 gallons/yr	PDA	8760 hr/yr (All Year)
EQT792	241-Tank 3554	5700 gallons	5700 gallons/hr	2.69 MM gallons/yr	Acrylic Acid	8760 hr/yr (All Year)
EQT793	242-Tank 3555	5700 gallons	5700 gallons/hr	2.69 MM gallons/yr	Acrylic Acid	8760 hr/yr (All Year)
EQT794	243-Tank 3556	5700 gallons	5700 gallons/hr	2.69 MM gallons/yr	Acrylic Acid	8760 hr/yr (All Year)
EQT795	246-Tank 3570	87204 gallons	87204 gallons/hr	2.69 MM gallons/yr	Acrylic Acid	8760 hr/yr (All Year)
EQT796	250-Tank 3562	12381 gallons	12381 gallons/hr	579012 gallons/yr	Acetaldehyde	8760 hr/yr (All Year)
EQT797	259-Tank 2306	3721 gallons	3721 gallons/hr	1.41 MM gallons/yr	Acrylic Acid	8760 hr/yr (All Year)
EQT798	260-Tank MS-756C	12879 gallons	12879 gallons/hr	1.26 MM gallons/yr	Inhibitor Mix	8760 hr/yr (All Year)
EQT799	260A-Tank 3571	32771 gallons	32771 gallons/hr	28.35 MM gallons/yr	Refined Acrolein	8760 hr/yr (All Year)
EQT800	260B-Tank 3572	32771 gallons	32771 gallons/hr	28.35 MM gallons/yr	Refined Acrolein	8760 hr/yr (All Year)
EQT801	260C-Tank 3573	32771 gallons	32771 gallons/hr	28.35 MM gallons/yr	Refined Acrolein	8760 hr/yr (All Year)
EQT802	260D-Tank 3574	8201 gallons	8201 gallons/hr	32.8 gallons/yr	Crude Acrolein	8760 hr/yr (All Year)
EQT804	260E-Tank 3575	14389 gallons	14389 gallons/hr	346752 gallons/yr	Inhibitor/ Acrolein Feed	8760 hr/yr (All Year)
EQT805	260F-Tank 3576	3834 gallons	3834 gallons/hr	4284 gallons/yr	Buffer Tank	8760 hr/yr (All Year)
EQT806	260H-Tank 3559	18478 gallons	18478 gallons/hr	492000 gallons/yr	Acetaldehyde	8760 hr/yr (All Year)
EQT807	2602-Tank MS-789	12278 gallons	12278 gallons/hr	53.31 MM gallons/yr	Process Inhibitor 1 Mix	8760 hr/yr (All Year)
EQT808	Reactor A					8760 hr/yr (All Year)
EQT809	Reactor B					8760 hr/yr (All Year)

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INVENTORIES

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

Subject Item Inventory:

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
EQT810	Reactor C					8760 hr/yr (All Year)
EQT811	Reactor D					8760 hr/yr (All Year)
EQT812	Reactor E					8760 hr/yr (All Year)
EQT813	Reactor F					8760 hr/yr (All Year)
EQT816	Wastewater Streams (A1-05, A1-R, A1-01, A1-02, A1-03)					8760 hr/yr (All Year)
EQT817	223-Heat Transfer Fluid Tank (ACE2-173) w/ condenser	6541 gallons	3000 gallons/hr	18867 gallons/yr	Diphenyl Ether/Biphenyl Blend (27%)	8760 hr/yr (All Year)
EQT826	Dowtherm Heat Exchange System					8760 hr/yr (All Year)
FUG016	196A-Equipment Fugitive Emissions					8760 hr/yr (All Year)
RLP055	Column D (Vacuum Pump Case)		19 ft^3/min	19 ft^3/min		8760 hr/yr (All Year)
RLP056	Column E (Vacuum Pump Case)		19 ft^3/min	19 ft^3/min		8760 hr/yr (All Year)
RLP057	Column D (Jet Case)		19 ft^3/min	19 ft^3/min		8760 hr/yr (All Year)
RLP058	Column E (Jet Case)		19 ft^3/min	19 ft^3/min		8760 hr/yr (All Year)
RLP059	254-Column H (Jet Case)		.5 ft^3/min	.5 ft^3/min		8760 hr/yr (All Year)
RLP060	Column H (Vacuum Case)		.5 ft^3/min	.5 ft^3/min		8760 hr/yr (All Year)
RLP061	Column B					8760 hr/yr (All Year)
RLP062	Column C					8760 hr/yr (All Year)
RLP063	Column I					8760 hr/yr (All Year)
RLP064	Column J					8760 hr/yr (All Year)
RLP065	Column K					8760 hr/yr (All Year)
RLP066	Column L					8760 hr/yr (All Year)
RLP067	Column M					8760 hr/yr (All Year)
RLP068	Column N					8760 hr/yr (All Year)
RLP081	226-Column F (Jet Case stack)		3.3 ft^3/min	3.3 ft^3/min		8760 hr/yr (All Year)
RLP082	Column F (Vacuum Case)		3.3 ft^3/min	3.3 ft^3/min		8760 hr/yr (All Year)
RLP083	227-Column G (Jet Case)		5.8 ft^3/min	5.8 ft^3/min		8760 hr/yr (All Year)
RLP084	Column G (Vacuum Case)		3.3 ft^3/min	3.3 ft^3/min		8760 hr/yr (All Year)
RLP085	Acid Scrubber (process vessel)				process vessel removing acrylic acid from reaction outlet stream.	8760 hr/yr (All Year)
RLP089	MS-323 Process Vessel		58600 lb/hr	40000 lb/hr		8760 hr/yr (All Year)

Subject Item Groups:

ID	Description	Included Components (from Above)
GRP140	ACRYLICS 1 UNIT	EQT774 222-Heat Transfer Furnace
GRP140	ACRYLICS 1 UNIT	EQT775 223A-Surge Tank (MS-106)
GRP140	ACRYLICS 1 UNIT	EQT776 223B-Surge Tank (MS-306)
GRP140	ACRYLICS 1 UNIT	EQT777 223-Air Cooled Fin Condenser (Tanks 223, 223A, & 223B)

INVENTORIES

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

Subject Item Groups:

ID	Description	Included Components (from Above)
GRP140	ACRYLICS 1 UNIT	EQT778 228-Process Flare
GRP140	ACRYLICS 1 UNIT	EQT779 253-Thermal Oxidizer
GRP140	ACRYLICS 1 UNIT	EQT780 2600-Thermal Oxidizer
GRP140	ACRYLICS 1 UNIT	EQT781 229-Tank 3544
GRP140	ACRYLICS 1 UNIT	EQT782 230-Tank 3545
GRP140	ACRYLICS 1 UNIT	EQT783 231-Tank 3564
GRP140	ACRYLICS 1 UNIT	EQT784 232-Tank 3542
GRP140	ACRYLICS 1 UNIT	EQT785 233-Tank 3543
GRP140	ACRYLICS 1 UNIT	EQT786 234-Tank 3550
GRP140	ACRYLICS 1 UNIT	EQT787 235-Tank 3551
GRP140	ACRYLICS 1 UNIT	EQT788 236-Tank 3553
GRP140	ACRYLICS 1 UNIT	EQT789 237-Tank 3552
GRP140	ACRYLICS 1 UNIT	EQT790 238-Tank 3557
GRP140	ACRYLICS 1 UNIT	EQT791 239-Tank 3558
GRP140	ACRYLICS 1 UNIT	EQT792 241-Tank 3554
GRP140	ACRYLICS 1 UNIT	EQT793 242-Tank 3555
GRP140	ACRYLICS 1 UNIT	EQT794 243-Tank 3556
GRP140	ACRYLICS 1 UNIT	EQT795 246-Tank 3570
GRP140	ACRYLICS 1 UNIT	EQT796 250-Tank 3562
GRP140	ACRYLICS 1 UNIT	EQT797 259-Tank 2306
GRP140	ACRYLICS 1 UNIT	EQT798 260-Tank MS-756C
GRP140	ACRYLICS 1 UNIT	EQT799 260A-Tank 3571
GRP140	ACRYLICS 1 UNIT	EQT800 260B-Tank 3572
GRP140	ACRYLICS 1 UNIT	EQT801 260C-Tank 3573
GRP140	ACRYLICS 1 UNIT	EQT802 260D-Tank 3574
GRP140	ACRYLICS 1 UNIT	EQT804 260E-Tank 3575
GRP140	ACRYLICS 1 UNIT	EQT805 260F-Tank 3576
GRP140	ACRYLICS 1 UNIT	EQT806 260H-Tank 3559
GRP140	ACRYLICS 1 UNIT	EQT807 2602-Tank MS-789
GRP140	ACRYLICS 1 UNIT	EQT808 Reactor A
GRP140	ACRYLICS 1 UNIT	EQT809 Reactor B
GRP140	ACRYLICS 1 UNIT	EQT810 Reactor C
GRP140	ACRYLICS 1 UNIT	EQT811 Reactor D
GRP140	ACRYLICS 1 UNIT	EQT812 Reactor E
GRP140	ACRYLICS 1 UNIT	EQT813 Reactor F
GRP140	ACRYLICS 1 UNIT	EQT816 Wastewater Streams (A1-05, A1-R, A1-01, A1-02, A1-03)
GRP140	ACRYLICS 1 UNIT	EQT817 223-Heat Transfer Fluid Tank (ACE2-173) w/ condenser

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INVENTORIES

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

Subject Item Groups:

ID	Description	Included Components (from Above)
GRP140	ACRYLICS 1 UNIT	EQT826 Dowtherm Heat Exchange System
GRP140	ACRYLICS 1 UNIT	FUG16 196A-Equipment Fugitive Emissions
GRP140	ACRYLICS 1 UNIT	GRP141 2601-CAP EQT779 & EQT780 (TOXs 253, 2600)
GRP140	ACRYLICS 1 UNIT	GRP145 224 - IPE Distillation Unit Common Vent (Columns D & E Jet Cases)
GRP140	ACRYLICS 1 UNIT	RLP55 Column D (Vacuum Pump Case)
GRP140	ACRYLICS 1 UNIT	RLP56 Column E (Vacuum Pump Case)
GRP140	ACRYLICS 1 UNIT	RLP57 Column D (Jet Case)
GRP140	ACRYLICS 1 UNIT	RLP58 Column E (Jet Case)
GRP140	ACRYLICS 1 UNIT	RLP59 254-Column H (Jet Case)
GRP140	ACRYLICS 1 UNIT	RLP60 Column H (Vacuum Case)
GRP140	ACRYLICS 1 UNIT	RLP61 Column B
GRP140	ACRYLICS 1 UNIT	RLP62 Column C
GRP140	ACRYLICS 1 UNIT	RLP63 Column I
GRP140	ACRYLICS 1 UNIT	RLP64 Column J
GRP140	ACRYLICS 1 UNIT	RLP65 Column K
GRP140	ACRYLICS 1 UNIT	RLP66 Column L
GRP140	ACRYLICS 1 UNIT	RLP67 Column M
GRP140	ACRYLICS 1 UNIT	RLP68 Column N
GRP140	ACRYLICS 1 UNIT	RLP81 226-Column F (Jet Case stack)
GRP140	ACRYLICS 1 UNIT	RLP82 Column F (Vacuum Case)
GRP140	ACRYLICS 1 UNIT	RLP83 227-Column G (Jet Case)
GRP140	ACRYLICS 1 UNIT	RLP84 Column G (Vacuum Case)
GRP140	ACRYLICS 1 UNIT	RLP85 Acid Scrubber (process vessel)
GRP141	2601-CAP EQT779 & EQT780 (TOXs 253, 2600)	EQT779 253-Thermal Oxidizer
GRP141	2601-CAP EQT779 & EQT780 (TOXs 253, 2600)	EQT780 2600-Thermal Oxidizer
GRP145	224 - IPE Distillation Unit Common Vent (Columns D & E Jet Cases)	RLP57 Column D (Jet Case)
GRP145	224 - IPE Distillation Unit Common Vent (Columns D & E Jet Cases)	RLP58 Column E (Jet Case)

Relationships:

Subject Item	Relationship	Subject Item
EQT775 223A-Surge Tank (MS-106)	Vents to	EQT817 223-Heat Transfer Fluid Tank (ACE2-173) w/ condenser
EQT776 223B-Surge Tank (MS-306)	Vents to	EQT817 223-Heat Transfer Fluid Tank (ACE2-173) w/ condenser
EQT778 228-Process Flare	Controls emissions from	GRP151 Site Logistics Unit (GRP084 - Crude Acetaldehyde Loading)
EQT783 231-Tank 3564	Controlled by	EQT780 2600-Thermal Oxidizer
EQT783 231-Tank 3564	Controlled by, (back up)	EQT779 253-Thermal Oxidizer
EQT796 250-Tank 3562	Controlled by	EQT780 2600-Thermal Oxidizer
EQT796 250-Tank 3562	Controlled by, (back up)	EQT779 253-Thermal Oxidizer

INVENTORIES

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

Relationships:

Subject Item	Relationship	Subject Item
EQT799 260A-Tank 3571	Controlled by	EQT780 2600-Thermal Oxidizer
EQT799 260A-Tank 3571	Controlled by, (back up)	EQT779 253-Thermal Oxidizer
EQT800 260B-Tank 3572	Controlled by	EQT780 2600-Thermal Oxidizer
EQT800 260B-Tank 3572	Controlled by, (back up)	EQT779 253-Thermal Oxidizer
EQT801 260C-Tank 3573	Controlled by	EQT780 2600-Thermal Oxidizer
EQT801 260C-Tank 3573	Controlled by, (back up)	EQT779 253-Thermal Oxidizer
EQT802 260D-Tank 3574	Controlled by	EQT780 2600-Thermal Oxidizer
EQT802 260D-Tank 3574	Controlled by, (back up)	EQT779 253-Thermal Oxidizer
EQT804 260E-Tank 3575	Controlled by	EQT780 2600-Thermal Oxidizer
EQT804 260E-Tank 3575	Controlled by, (back up)	EQT779 253-Thermal Oxidizer
EQT806 260H-Tank 3559	Controlled by	EQT780 2600-Thermal Oxidizer
EQT806 260H-Tank 3559	Controlled by, (back up)	EQT779 253-Thermal Oxidizer
EQT808 Reactor A	Vents to	EQT809 Reactor B
EQT809 Reactor B	Vents to	RLP85 Acid Scrubber (process vessel)
EQT810 Reactor C	Vents to	EQT811 Reactor D
EQT811 Reactor D	Vents to	RLP85 Acid Scrubber (process vessel)
EQT812 Reactor E	Vents to	RLP63 Column I
EQT813 Reactor F	Vents to	RLP63 Column I
EQT817 223-Heat Transfer Fluid Tank (ACE2-173) w/ condenser	Controlled by	EQT777 223-Air Cooled Fin Condenser (Tanks 223, 223A, & 223B)
RLP55 Column D (Vacuum Pump Case)	Controlled by	EQT779 253-Thermal Oxidizer
RLP55 Column D (Vacuum Pump Case)	Controlled by, back up	EQT780 2600-Thermal Oxidizer
RLP56 Column E (Vacuum Pump Case)	Controlled by	EQT779 253-Thermal Oxidizer
RLP56 Column E (Vacuum Pump Case)	Controlled by, (back up)	EQT780 2600-Thermal Oxidizer
RLP60 Column H (Vacuum Case)	Controlled by, back up	EQT780 2600-Thermal Oxidizer
RLP60 Column H (Vacuum Case)	Controlled by	EQT779 253-Thermal Oxidizer
RLP61 Column B	Controlled by	EQT778 228-Process Flare
RLP62 Column C	Controlled by	EQT778 228-Process Flare
RLP63 Column I	Vents to	RLP64 Column J
RLP64 Column J	Controlled by	EQT780 2600-Thermal Oxidizer
RLP64 Column J	Controlled by, (back up)	EQT779 253-Thermal Oxidizer
RLP65 Column K	Controlled by	EQT780 2600-Thermal Oxidizer
RLP65 Column K	Controlled by, (back up)	EQT779 253-Thermal Oxidizer
RLP66 Column L	Controlled by	EQT780 2600-Thermal Oxidizer
RLP66 Column L	Controlled by, (back up)	EQT779 253-Thermal Oxidizer
RLP67 Column M	Controlled by	EQT780 2600-Thermal Oxidizer
RLP67 Column M	Controlled by, (back up)	EQT779 253-Thermal Oxidizer
RLP68 Column N	Controlled by	EQT780 2600-Thermal Oxidizer

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INVENTORIES

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

Relationships:

Subject Item	Relationship	Subject Item
RLP68 Column N	Controlled by, (back up)	EQT779 253-Thermal Oxidizer
RLP82 Column F (Vacuum Case)	Controlled by	EQT779 253-Thermal Oxidizer
RLP82 Column F (Vacuum Case)	Controlled by, (back up)	EQT780 2600-Thermal Oxidizer
RLP84 Column G (Vacuum Case)	Controlled by, (back up)	EQT780 2600-Thermal Oxidizer
RLP84 Column G (Vacuum Case)	Controlled by	EQT779 253-Thermal Oxidizer
RLP85 Acid Scrubber (process vessel)	Controlled by	EQT779 253-Thermal Oxidizer
RLP85 Acid Scrubber (process vessel)	Controlled by, (back-up)	EQT780 2600-Thermal Oxidizer
RLP89 MS-323 Process Vessel	Controlled by	EQT779 253-Thermal Oxidizer
RLP89 MS-323 Process Vessel	Controlled by, back-up	EQT780 2600-Thermal Oxidizer

Stack Information:

ID		Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Temperature (oF)
EQT774	222-Heat Transfer Furnace	15.08	8706	3.5		80	700
EQT775	223A-Surge Tank (MS-106)			.2		20	194
EQT776	223B-Surge Tank (MS-306)			.2		20	600
EQT777	223-Air Cooled Fin Condenser (Tanks 223, 223A, & 223B)			.2		20	194
EQT778	228-Process Flare	10.92	3215	2.5		200	1200
EQT779	253-Thermal Oxidizer	121.5	173256	5.5		85	572
EQT780	2600-Thermal Oxidizer	168.6	173256	4.67		78	330
EQT781	229-Tank 3544			.17		16	68
EQT782	230-Tank 3545			.17		16	68
EQT783	231-Tank 3564				14		68
EQT784	232-Tank 3542			.25		20	89.6
EQT785	233-Tank 3543			.25		20	89.6
EQT786	234-Tank 3550			.33		15	68
EQT787	235-Tank 3551			.33		15	68
EQT788	236-Tank 3553			.33		15	86
EQT789	237-Tank 3552			.33		15	72.5
EQT790	238-Tank 3557			.33		28	95
EQT791	239-Tank 3558			.33		20	68.2
EQT792	241-Tank 3554			.33		10	86
EQT793	242-Tank 3555			.33		20	86
EQT794	243-Tank 3556			.33		30	86
EQT795	246-Tank 3570			.5		35	68
EQT796	250-Tank 3562					28	68
EQT797	259-Tank 2306			.25		15	113
EQT798	260-Tank MS-756C			.5		23	130
EQT799	260A-Tank 3571					12.33	68
EQT800	260B-Tank 3572					12.33	68
EQT801	260C-Tank 3573					12.33	68

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INVENTORIES

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

Stack Information:

ID		Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Temperature (oF)
EQT802	260D-Tank 3574					9	68
EQT804	260E-Tank 3575					12.33	68
EQT805	260F-Tank 3576					9.1	68
EQT806	260H-Tank 3559					12.33	68
EQT807	2602-Tank MS-789			.17		14.2	73
EQT817	223-Heat Transfer Fluid Tank (ACE2-173) w/ condenser			.2		20	194
RLP055	Column D (Vacuum Pump Case)						
RLP056	Column E (Vacuum Pump Case)						
RLP057	Column D (Jet Case)	23.86	19	.13		50	100
RLP058	Column E (Jet Case)	23.86	19	.13		50	100
RLP059	254-Column H (Jet Case)	.37	.5	.17		50	90
RLP060	Column H (Vacuum Case)	.37	.5	.17		50	90
RLP081	226-Column F (Jet Case stack)	2.4	3.3	.17		50	100
RLP082	Column F (Vacuum Case)	2.4	3.3	.17		50	100
RLP083	227-Column G (Jet Case)	4.26	5.8	.17		50	100
RLP084	Column G (Vacuum Case)	4.26	5.8	.17		50	100

Fee Information:

Subj Item Id	Multiplier	Units Of Measure	Fee Desc
GRP140	460	MM Lb/Yr	0690 - Chemical and Chemical Prep. N.E.C. (Rated Capacity)

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EMISSION RATES FOR CRITERIA POLLUTANTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

All phases

	PM_{10}			SO_2			NOx			CO			VOC		
Subject Item	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 774 222	0.15	0.15	0.65	0.01	0.01	0.05	1.96	1.96	8.59	1.65	1.65	7.21	0.11	0.11	0.47
EQT 777 223-Condenser Vent													0.06	21.51	0.26
EQT 778 228 flare	0.04	0.63	0.16	0.003	0.01	0.01	1.36	25.99	5.97	7.42	141.40	32.49	0.91	21.91	3.98
EQT 779 253 TOX		1.70			0.13			50.59			18.78			8.93	
EQT 780 2600 TOX		1.70			0.13			50.59			18.78			8.93	
EQT 781 229													< 0.001	< 0.001	< 0.01
EQT 782 230													< 0.001	< 0.001	< 0.01
EQT 784 232													0.03	2.01	0.14
EQT 785 233													0.03	2.01	0.14
EQT 786 234													0.07	26.24	0.29
EQT 787 235													0.06	26.24	0.27
EQT 788 236													0.03	7.22	0.12
EQT 789 237													0.59	243.04	2.60
EQT 790 238													0.002	0.75	0.01
EQT 791 239													< 0.001	0.005	< 0.01
EQT 792 241													0.01	1.92	0.06
EQT 793 242													0.01	1.92	0.06
EQT 794 243													0.01	1.92	0.06

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EMISSION RATES FOR CRITERIA POLLUTANTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

All phases

	PM_{10}			SO_2			NOx			CO			VOC		
Subject Item	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 795 246													0.05	29.44	0.23
EQT 797 259													0.02	1.77	0.09
EQT 798 260													< 0.001	< 0.001	< 0.01
EQT 805 260F													< 0.001	2.34	< 0.01
EQT 807 2602													< 0.001	< 0.001	< 0.01
FUG 016 196A										0.006	0.006	0.03	3.27	3.27	14.33
GRP 141 2601-CAP	1.42		6.20	0.11		0.49	42.16		184.64	15.65		68.53	3.19		13.96
GRP 145 224 Common Vent										0.01	0.03	0.04	2.76	59.98	12.10
RLP 059 254 column H jet													0.08	0.08	0.35
RLP 081 226 (column F jet)													< 0.001	< 0.001	< 0.01
RLP 083 227 (column G jet)													0.01	0.01	0.06

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals

Permit Phase Totals:

PM10: 7.01 tons/yr

SO2: 0.55 tons/yr

NOx: 199.20 tons/yr

CO: 108.30 tons/yr

VOC: 49.58 tons/yr

Emission rates Notes:

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EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

All phases

	Acetaldehyde			Acetophenone			Acrolein			Acrylic acid			Benzene		
Subject Item	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 777 223-Condenser Vent															
EQT 778 228 flare	0.08	1.40	0.34				0.07	1.39	0.3	0.06	6.57	0.25			
EQT 779 253 TOX		0.75			< 0.001			1.00			3.83				
EQT 780 2600 TOX		0.75			< 0.001			1.00			3.83				
EQT 781 229															
EQT 782 230															
EQT 784 232										0.03	2.01	0.14			
EQT 785 233										0.03	2.01	0.14			
EQT 786 234										0.004	2.25	0.02			
EQT 787 235										0.004	2.25	0.02			
EQT 788 236										0.03	7.22	0.12			
EQT 789 237							< 0.001	< 0.001	< 0.01	< 0.001	0.05	< 0.01	< 0.001	< 0.001	< 0.01
EQT 790 238										0.002	0.65	0.01			
EQT 792 241										0.01	1.92	0.06			
EQT 793 242										0.01	1.92	0.06			
EQT 794 243										0.01	1.92	0.06			
EQT 795 246										0.05	29.44	0.23			
EQT 797 259										0.02	1.77	0.09			

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EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

All phases

	Biphenyl			Ethyl Acrylate			Ethylene glycol			Formaldehyde			Hydroquinone		
Subject Item	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 777 223-Condenser Vent	0.02	5.70	0.07												
EQT 778 228 flare				0.01	0.08	0.03				0.04	0.89	0.16	< 0.001	0.01	< 0.01
EQT 779 253 TOX					0.09						0.52			0.005	
EQT 780 2600 TOX					0.09						0.52			0.005	
EQT 781 229													< 0.001	< 0.001	< 0.01
EQT 782 230													< 0.001	< 0.001	< 0.01
EQT 784 232															
EQT 785 233															
EQT 786 234															
EQT 787 235															
EQT 788 236															
EQT 789 237															
EQT 790 238															
EQT 792 241															
EQT 793 242															
EQT 794 243															
EQT 795 246															
EQT 797 259													< 0.001	< 0.001	< 0.01

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EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

All phases

	Methanol			Naphthalene			Phenol			Phthalic Anhydride			Propionaldehyde		
Subject Item	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 777 223-Condenser Vent															
EQT 778 228 flare													< 0.001	< 0.001	< 0.01
EQT 779 253 TOX		< 0.001			< 0.001			< 0.001			< 0.001			< 0.001	
EQT 780 2600 TOX		< 0.001			< 0.001			< 0.001			< 0.001			< 0.001	
EQT 781 229															
EQT 782 230															
EQT 784 232															
EQT 785 233															
EQT 786 234															
EQT 787 235															
EQT 788 236															
EQT 789 237															
EQT 790 238															
EQT 792 241															
EQT 793 242															
EQT 794 243															
EQT 795 246															
EQT 797 259										< 0.001	< 0.001	< 0.01			

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EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

All phases

	Sulfuric acid			n-butyl alcohol			o-Phenylenediamine		
Subject Item	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 777 223-Condenser Vent									
EQT 778 228 flare				< 0.001	0.005	< 0.01			
EQT 779 253 TOX		< 0.001			0.01				
EQT 780 2600 TOX		< 0.001			0.01				
EQT 781 229									
EQT 782 230									
EQT 784 232									
EQT 785 233									
EQT 786 234									
EQT 787 235									
EQT 788 236									
EQT 789 237									
EQT 790 238									
EQT 792 241									
EQT 793 242									
EQT 794 243									
EQT 795 246									
EQT 797 259									

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EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

All phases

	Acetaldehyde			Acetophenone			Acrolein			Acrylic acid			Benzene		
Subject Item	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 798 260															
EQT 805 260F															
FUG 016 196A	0.03	0.03	0.14				0.51	0.51	2.25	0.43	0.43	1.87	< 0.001	< 0.001	< 0.01
GRP 141 2601-CAP	0.40		1.74	< 0.001		< 0.01	0.31		1.35	0.40		1.74			
GRP 145 224 Common Vent							0.001	0.02	< 0.01	0.001	0.001	< 0.01			
RLP 059 254 column H jet										0.08	0.08	0.35			
RLP 081 226 (column F jet)										< 0.001	< 0.001	< 0.01			
RLP 083 227 (column G jet)										0.01	0.01	0.06			

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EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

All phases

	Biphenyl			Ethyl Acrylate			Ethylene glycol			Formaldehyde			Hydroquinone		
Subject Item	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 798 260													< 0.001	< 0.001	< 0.01
EQT 805 260F													< 0.001	< 0.001	< 0.01
FUG 016 196A	0.51	0.51	2.24				0.10	0.10	0.44	0.003	0.003	0.01	0.003	0.003	0.01
GRP 141 2601-CAP				0.04		0.17				0.26		1.13	< 0.001		< 0.01
GRP 145 224 Common Vent															
RLP 059 254 column H jet															
RLP 081 226 (column F jet)															
RLP 083 227 (column G jet)															

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EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

All phases

	Methanol			Naphthalene			Phenol			Phthalic Anhydride			Propionaldehyde		
Subject Item	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 798 260															
EQT 805 260F															
FUG 016 196A							< 0.001	< 0.001	< 0.01				< 0.001	< 0.001	< 0.01
GRP 141 2601-CAP	< 0.001		< 0.01	< 0.001		< 0.01	< 0.001		< 0.01	< 0.001		< 0.01	< 0.001		< 0.01
GRP 145 224 Common Vent															
RLP 059 254 column H jet															
RLP 081 226 (column F jet)															
RLP 083 227 (column G jet)															

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EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

All phases

	Sulfuric acid			n-butyl alcohol			o-Phenylenediamine		
Subject Item	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 798 260									
EQT 805 260F									
FUG 016 196A							0.02	0.02	0.07
GRP 141 2601-CAP	< 0.001		< 0.01	0.002		0.01			
GRP 145 224 Common Vent									
RLP 059 254 column H jet									
RLP 081 226 (column F jet)									
RLP 083 227 (column G jet)									

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals

Permit Parameter Totals:

Acetaldehyde: 2.22 tons/yr
Acetophenone: <0.01 tons/yr
Acrolein: 3.90 tons/yr
Acrylic acid: 5.22 tons/yr
Benzene: <0.01 tons/yr
Biphenyl: 2.31 tons/yr
Ethyl Acrylate: 0.2 tons/yr
Ethylene glycol: 0.44 tons/yr
Formaldehyde: 1.30 tons/yr
Hydroquinone: 0.01 tons/yr
Methanol: <0.01 tons/yr
n-butyl alcohol: 0.01 tons/yr
Naphthalene: <0.01 tons/yr
o-Phenylenediamine: 0.07 tons/yr

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER20040020
Permit Number: 513-V2
Air - Title V Regular Permit Renewal

All phases

Phenol: <0.01 tons/yr
Phthalic Anhydride: <0.01 tons/yr
Propionaldehyde: <0.01 tons/yr
Sulfuric acid: <0.01 tons/yr

Emission Rates Notes: