For Minor Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Action Number: MM01  
Name of Permittee: Specialty Products US, LLC  
Facility Name/Location: Institute Facility  
County: Kanawha  
Permittee Mailing Address: P.O. Box 1006, Institute, WV 25112

Description of Permit Revision: Transfer ownership of previous Union Carbide Corporation, Institute Facility R30-03900005-2017 (Group 4 of 8) to Specialty Products US, LLC Institute Facility R30-03900682-2017 (Group 1 of 2). Added R13-3412 requirements to the Permit which separate the previous Rule 21 Consent Order of UCC. Removal of Emission Point ID’s 170A and 170B from the Emission Point ID list.

Title V Permit Information:  
Permit Number: R30-03900682-2017 (Group 1 of 2)  
Issued Date: May 16, 2017  
Effective Date: May 30, 2017  
Expiration Date: May 16, 2022

Directions To Facility: From I-64, take the Institute exit, turn right onto State route 25. Plant entrance is located about 1/4 mile west on Route 25.

THIS PERMIT REVISION IS ISSUED IN ACCORDANCE WITH THE WEST VIRGINIA AIR POLLUTION CONTROL ACT (W.VA. CODE §§ 22-5-1 ET SEQ.) AND 45CSR30 - "REQUIREMENTS FOR OPERATING PERMITS." THE PERMITTEE IDENTIFIED AT THE FACILITY ABOVE IS AUTHORIZED TO OPERATE THE STATIONARY SOURCES OF AIR POLLUTANTS IDENTIFIED HEREIN IN ACCORDANCE WITH ALL TERMS AND CONDITIONS OF THIS PERMIT.

Laura M. Crowder  
Director, Division of Air Quality

October 22, 2019  
Date Issued
West Virginia Department of Environmental Protection
Division of Air Quality

Jim Justice
Governor

Austin Caperton
Cabinet Secretary

Permit to Operate

Pursuant to
Title V
of the Clean Air Act

Issued to:
Union Carbide Corporation
Specialty Products US, LLC
Institute Facility
Glutaraldehyde Plant (Group 4 of 8 1 of 2)
R30-03900005682-2017

William F. Durham
Director

Issued: May 16, 2017 • Effective: May 30, 2017
Expiration: May 16, 2022 • Renewal Application Due: November 16, 2021
Permit Number: **R30-03900005682-2017**
Permittee: **Union Carbide Corporation
Specialty Products US, LLC**
Facility Name: **Institute Facility**
Business Unit: **Glutaraldehyde Plant (Group 4 of 8)**
Permittee Mailing Address: **P. O. Box 8361 1006, South Charleston Institute, WV 25303 25112**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-3-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location: Institute, Kanawha County, West Virginia
Telephone Number: (304) 747-7000-7902
Type of Business Entity: Corporation
Facility Description: Production of Glutaraldehyde
SIC Codes: 2869
UTM Coordinates: 432.189 km Easting • 4,248.754 km Northing • Zone 17

Permit Writer: Rex Compston, P.E.

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility’s operation and compliance have been incorporated into the Title V Operating Permit.

West Virginia Department of Environmental Protection • Division of Air Quality
Approved: May 16, 2017 • Modified: N/A October 22, 2019
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APPENDIX A Consent Order CO-R21-97-41 ATTACHMENTS A and B Rule 21: Equipment with Maximum Theoretical VOC Emissions ≥ 6 lbs/hr
<table>
<thead>
<tr>
<th>Emission Unit ID</th>
<th>Emission ID</th>
<th>Emission Unit Description</th>
<th>Year Installed</th>
<th>Control Device</th>
</tr>
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<tbody>
<tr>
<td>T4210</td>
<td>175I</td>
<td>Tank 4210</td>
<td>1970</td>
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<tr>
<td>T4212</td>
<td>175J</td>
<td>Tank 4212</td>
<td>1970</td>
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<td>T4222</td>
<td>177CCC</td>
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<td>T4223</td>
<td>175BBB</td>
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<td>1959</td>
<td>None</td>
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<tr>
<td>T4225</td>
<td>175FF</td>
<td>Tank 4225</td>
<td>1952</td>
<td>None</td>
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<td>T4237</td>
<td>175K</td>
<td>Tank 4237</td>
<td>1964</td>
<td>None</td>
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<td>T4238</td>
<td>175L</td>
<td>Tank 4238</td>
<td>1964</td>
<td>None</td>
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<td>T4241</td>
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<td>1964</td>
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<td>175M</td>
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<td>175N</td>
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<td>B170</td>
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<td>Vessel B170</td>
<td>1988</td>
<td>None or Flare A163</td>
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<tr>
<td>C170</td>
<td>163A</td>
<td>Vessel C170</td>
<td>2013</td>
<td>Flare A163</td>
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<td>V29</td>
<td>170A or 163A</td>
<td>Vessel 29</td>
<td>1952/Modified 2008</td>
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<tr>
<td>L2D</td>
<td>L2D</td>
<td>Bldg. 131 Containers</td>
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<td>None</td>
</tr>
<tr>
<td>L2D</td>
<td>L2D</td>
<td>Bldg. 260 Containers</td>
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<td>None</td>
</tr>
<tr>
<td>L6TT (aka TTWR)</td>
<td>L6TT (aka TTWR)</td>
<td>West Tank Truck Rack (aka Tank Truck Wagon)</td>
<td>1950s</td>
<td>None</td>
</tr>
<tr>
<td>L5RC (aka L5TC)</td>
<td>L5RC (aka L5TC) or 163A</td>
<td>West Rail Car Rack</td>
<td>1950s</td>
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<td>TTWR</td>
<td>TTWR</td>
<td>Tank Truck-Wagon</td>
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<td>None</td>
</tr>
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<td>170A or 163A</td>
<td>Vessel A170</td>
<td>1957</td>
<td>None or Flare A163</td>
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<tr>
<td>KOP</td>
<td>163A</td>
<td>Flare Knockout Pot</td>
<td>1992</td>
<td>Flare A163</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>Refrigeration System</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
1.2. **Active R13, R14, and R19 Permits**

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Date of Issuance</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>N/A</td>
</tr>
<tr>
<td>R13-3412</td>
<td>October 29, 2018</td>
</tr>
</tbody>
</table>
d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language.

2. The result of the test for each permit or rule condition.

3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. Monitoring information. The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.; 45CSR13, R13-3412, 4.4.1]

3.4.2. Retention of records. The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

3.4.3. Odors. For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§30-5.1.c. State-Enforceable only.]
3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[45CSR§§30-4.4. and 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

[45CSR§30-5.1.c.3.E.]

3.5.3. Except for the electronic submittal of the annual compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5 and 3.5.6 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by e-mail as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

**DAQ:**

Director

WVDEP

Division of Air Quality

601 57th Street SE

Charleston, WV 25304

**US EPA:**

Associate Director *Section Chief*

Office of Air Enforcement and Compliance Assistance (3AP20)

U. S. Environmental Protection Agency, Region III

Enforcement and Compliance Assurance Division Air Section (3ED21)

1650 Arch Street

Philadelphia, PA 19103-2029

**DAQ Compliance and Enforcement**: 5

[DEPAirQualityReports@wv.gov](mailto:DEPAirQualityReports@wv.gov)

1For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status reports, Initial Notifications, etc.

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.

[45CSR§30-8.]

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify
b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary. [45CSR§30-5.1.c.3.B.]

3.5.9. New applicable requirements. If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement. [45CSR§30-4.3.h.1.B.]

3.5.10. Reports of excess emissions. Except as provided in 3.5.11, the owner or operator of any facility containing sources subject to 45CSR§21-5. shall, for each occurrence of excess emissions expected to last more than 7 days, within 1 business day of becoming aware of such occurrence, supply the Director by letter with the following information:

a. The name and location of the facility;

b. The subject sources that caused the excess emissions;

c. The time and date of first observation of the excess emissions; and

d. The cause and expected duration of the excess emissions.

e. For sources subject to numerical emission limitations, the estimated rate of emissions (expressed in the units of the applicable emission limitation) and the operating data and calculations used in determining the magnitude of the excess emissions; and

g. The proposed corrective actions and schedule to correct the conditions causing the excess emissions.

[45CSR§21-5.2; CO-R21-97-41, HL.3 (State-Enforceable only) 45CSR13, R13-3412, 4.1.6 and 4.5.1]

3.5.11. Variance. If the provisions of 45CSR21 cannot be satisfied due to repairs made as the result of routine maintenance or in response to the unavoidable malfunction of equipment, the Director may permit the owner or operator of a source subject to 45CSR21 to continue to operate said source for periods not to exceed 10 days upon specific application to the Director. Such application shall be made prior to the making of repairs and, in the case of equipment malfunction, within 24 hours of the equipment malfunction. Where repairs will take in excess of 10 days to complete, additional time periods may be granted by the Director. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director. During such time periods, the owner or operator shall take all reasonable and practicable steps to minimize VOC emissions. [45CSR§21-9.3; CO-R21-97-41, HL.3 (State-Enforceable only) 45CSR13, R13-3412, 4.1.7]

3.6. Compliance Plan

3.6.1. None

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
elected to apply 40 C.F.R. 63, Subpart H to all such equipment in the process unit. All VOC in such equipment shall be considered, for purposes of applicability and compliance with 40 C.F.R. 63, Subpart H as if it were organic hazardous air pollutant (HAP). Compliance with the provisions of 40 C.F.R. 63, Subpart H shall be deemed to constitute compliance with 40 C.F.R. 60, Subpart VV. [45CSR34; 40 C.F.R. 63, Subpart H; 40 C.F.R. §§63.160(c)(1), 63.162, 63.163, 63.168, 63.169, and 63.171].

4.1.7. The permittee shall comply with the following applicable requirements from CO-R21-97-41 for the Glutaraldehyde Plant:

4.1.7.1. On or after the effective date of Consent Order CO-R21-97-41 (October 20, 1997), the COMPANY shall, reduce VOC emissions in accordance with the alternate emissions reduction plan (AERP). The permittee shall reduce emissions as set forth in Attachment A of CO-R21-97-41; and shall continue to comply with such emissions reduction requirements and the emission limits set forth in Attachment A as Consent Order CO-R21-97-41 expressly provides. Compliance with the emission limits set forth in Attachment A of Consent Order CO-R21-97-41 shall be demonstrated by test or monitoring data, approved emission factors, material balances, and/or representative calculations in accordance with 45CSR21. The Attachment A limits from Consent Order CO-R21-97-41 for the Glutaraldehyde Plant are provided in APPENDIX A of this permit. [45CSR§21.40 (State-Enforceable only); CO-R21-97-41, III.1 and Attachment A (State-Enforceable only); June 14, 2006 letter from J. L. Blatt] The permittee shall continue to use the alternative emission reduction plan (AERP) to reduce volatile organic (VOC) emissions from all point sources that have maximum theoretical emissions greater than or equal to 6 lb/hr. The emission sources and their corresponding limits are set forth in Appendix A of this permit. [45CSR§21-40.3.b. (State-Enforceable only); 45CSR13, R13-3412, 4.1.2]

4.1.7.2. At all times, including periods of start-up, shutdown, and malfunction, the COMPANY shall maintain and operate the VOC emitting sources and associated air pollution control devices subject to the provisions of Consent Order CO-R21-97-41 in a manner consistent with good air pollution control practices for minimizing emissions. Compliance with the emission limits set forth in Attachment A of Consent Order CO-R21-97-41 shall be demonstrated at all times unless exception periods are provided for in accordance with this paragraph. The COMPANY shall comply with 3.5.10 and 3.5.11 (45CSR§§21-5.2 and 9.3) with respect to all periods of non-compliance with the emission limitations and emission reduction requests set forth in Attachment A of Consent Order CO-R21-97-41 resulting from unavoidable malfunctions of equipment. In the event that the emission limitation and/or emission reduction requirements for a source listed in Attachment A of CO-R21-97-41 cannot be met during routine start-ups, shutdowns, or routine maintenance activities, the COMPANY shall, within 180 days of the effective date of Consent Order CO-R21-97-41 (October 20, 1997), submit an operation and VOC emissions mitigation plan for such periods. If such plan is submitted, it shall contain the information outlined in Attachment B of CO-R21-97-41 and provided in APPENDIX A of this permit, and shall become an Appendix to Consent Order CO-R21-97-41. The Director may require reasonable revisions to the COMPANY’s plan if he or she finds the routine start-up, shutdown, or maintenance resulting in excess VOC emissions not addressed by the plan occur or that the plan fails to provide for operation in a manner consistent with good air pollution control practices for minimizing emissions. VOC emissions and associated control procedures conforming to the COMPANY’s plan submitted under this provision shall not be subject to the variance approval process of 3.5.11 (45CSR§21-9.3) provided that the COMPANY maintains test, monitoring, operating, and maintenance records containing sufficient information and detail to enable the COMPANY and the Director to verify compliance with the plan and associated VOC emissions control requirements. These records shall be maintained on-site for not
less than three (3) years and be made available to the Director or his or her authorized representative upon request. The Director also may request submission of copies of such records. [45CSR§21-40 (State-Enforceable only); CO-R21-97-41, III.3 and Attachment B (State-Enforceable only)]

**Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary. [45CSR§13-5.10.; 45CSR13, R13-3412, 4.1.8]

4.1.7.3. Unless granted a variance pursuant to 3.5.11, the COMPANY shall operate all emission control equipment for those emission sources listed in Attachment A of Consent Order CO-R21-97-41, at all times when the production unit is in operation or when any VOC emitting activity is occurring. In the event that the control equipment is inoperable, the production unit shall be shut down or the activity shall be discontinued as expeditiously as possible. [45CSR§21-40 (State-Enforceable only); CO-R21-97-41, IV.7 (State-Enforceable only)]

4.1.8. **45CSR§21-37 Requirements for Equipment Leaks.** The permittee shall continue to comply with all applicable requirements the emission control plan for equipment leaks (fugitive emissions) using the methods and criteria of 45CSR§21-37 – “Leaks from Synthetic Organic Chemical, Polymer, and Resin Manufacturing Equipment,” or alternative methods and standards approved by the Director. The pertinent equipment leak standards include Sections 45CSR§21-37.3 through 37.8. To the extent that implementation of the requirements of 40 C.F.R. 60, 40 C.F.R. 61, or 40 C.F.R. 63 results in monitoring and repair, consistent with 45CSR§21-37, of all components in VOC service in any synthetic organic chemical, polymer, or resin manufacturing process unit, compliance with these federally enforceable standards will satisfy the requirements of 45CSR§21-37. [45CSR§21-37.3 through 37.8 and 37.1.c and 40.3.a.2 (State-Enforceable only); CO-R21-97-41, III.3 45CSR13, R13-3412, 4.1.3 (State-Enforceable only)]

4.1.9. No person shall cause, suffer, allow or permit particulate matter to be discharged from any incinerator into the open air in excess of the quantity determined by use of the following formula:

\[
\text{Emissions (lb/hr)} = F \times \text{Incinerator Capacity (tons/hr)}
\]

Where, the factor, F, is as indicated in Table I below:

**Table I:** Factor F, for Determining Maximum Allowable Particulate Emissions

<table>
<thead>
<tr>
<th>Incinerator Capacity</th>
<th>Factor F</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Less than 15,000 lbs/hr</td>
<td>5.43</td>
</tr>
<tr>
<td>B. 15,000 lbs/hr or greater</td>
<td>2.72</td>
</tr>
</tbody>
</table>

For flare A163, the 45CSR§6-4.1 hourly particulate emission limit is 0.13 lb/hr.

(A163) [45CSR§6-4.1]

4.1.10. No person shall cause, suffer, allow or permit emission of smoke into the atmosphere from any incinerator which is twenty (20%) percent opacity or greater. (A163) [45CSR§6-4.3]
performed within seven (7) days of return to operation. These checks shall be performed during periods of normal operation of emission sources that vent from the referenced emission points for a sufficient time interval to determine if there is a visible emission. If visible emissions are identified during the visible emission check, or at any other time regardless of operations, the permittee shall conduct a visual emission evaluation per 40 C.F.R. 60, Appendix A, Method 9 within three (3) days of the first identification of visible emissions. A 40 C.F.R. 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected within seventy-two (72) hours after the visible emission and the sources are operating at normal conditions. (A163) [45CSR§30-5.1.c]

4.3. Testing Requirements


4.3.2. 45CSR§21-41 Test Methods and Compliance Procedures. The permittee shall comply with all applicable provisions of 45CSR§21-41 regarding test methods and compliance procedures to demonstrate compliance with 4.1.7, except as otherwise approved by the Director. If requested by the Director, testing shall be in accordance with applicable test methods specified in Rule 21 Section 41 through 46 or by other means approved by the Director. Compliance with the emission limits set forth in Appendix A of this permit shall be demonstrated by test or monitoring data, approved emission factors, material balances, and/or representative calculations in accordance with 45CSR21. [45CSR§§21-40.5 (State Enforceable only) and 41; CO-R21-97-41, III.5 (State Enforceable only)45CSR13, R13-3412, 4.1.5 and 4.3.1]

4.3.3. 45CSR§21-37 Testing Requirements for Equipment Leaks. The permittee shall comply with all applicable test methods and procedures of 45CSR§21-37 — “Leaks from Synthetic Organic Chemical, Polymer, and Resin Manufacturing Equipment” as specified in 45CSR§21-37.9. To the extent that implementation of the requirements of 40 C.F.R. 60, 40 C.F.R. 61, or 40 C.F.R. 63 results in monitoring and repair, consistent with 45CSR§21-37, of all components in VOC service in any synthetic organic chemical, polymer, or resin manufacturing process unit, compliance with these federally enforceable standards may satisfy the requirements of 45CSR§21-37. [45CSR§§21-37.1.e and 37.9 (State-Enforceable only); CO-R21-97-41, III.2 (State-Enforceable only)] Reserved

4.3.4. At such reasonable times as the Director may designate, the operator of any incinerator shall be required to conduct or have conducted stack tests to determine the particulate matter loading, by using 40 C.F.R. 60, Appendix A, Method 5 or other equivalent EPA approved method approved by the Director, in exhaust gases. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or the Director’s authorized representative, may at the Director’s option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling ports to be located in such manner as the Director may require, power for test equipment and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices. (A163) [45CSR§6-7.1]

4.4. Recordkeeping Requirements

4.4.1. Group 1 Process Vents. To demonstrate compliance with 4.1.1 for Group 1 process vents using a flare, the permittee shall keep the following records up-to-date and readily accessible: [45CSR34; 40 C.F.R. §63.118(a)]
4.4.10.1. An analysis demonstrating the design and actual annual throughput of the transfer rack; [45CSR34; 40 C.F.R. §63.130(f)(1)]

4.4.10.2. An analysis documenting the weight-percent organic HAP’s in the liquid loaded. Examples of acceptable documentation include but are not limited to analyses of the material and engineering calculations. [45CSR34; 40 C.F.R. §63.130(f)(2)]

4.4.10.3. An analysis documenting the annual rack weighted average HAP partial pressure of the transfer rack. [45CSR34; 40 C.F.R. §63.130(f)(3)]
   a. For Group 2 transfer racks that are limited to transfer of organic HAP’s with partial pressures less than 10.3 kilopascals, documentation is required of the organic HAP’s (by compound) that are transferred. The rack weighted average partial pressure does not need to be calculated. [45CSR34; 40 C.F.R. §63.130(f)(3)(i)]
   b. For racks transferring one or more organic HAP’s with partial pressures greater than 10.3 kilopascals, as well as one or more organic HAP’s with partial pressures less than 10.3 kilopascals, a rack weighted partial pressure shall be documented. The rack weighted average HAP partial pressure shall be weighted by the annual throughput of each chemical transferred. [45CSR34; 40 C.F.R. §63.130(f)(3)(ii)]

(L5TC – Spot #5)

4.4.11. Maintenance Wastewater. The owner or operator shall maintain a record of the information required by 4.1.5.1 and 4.1.5.2 as part of the start-up, shutdown, and malfunction plan required under 40 C.F.R. §63.6(e)(3). [45CSR34; 40 C.F.R. §63.105(e)]


4.4.13. 45CSR§21-37 Recordkeeping Requirements for Equipment Leaks. The permittee shall comply with all applicable recordkeeping requirements of 45CSR§21-37 – “Leaks from Synthetic Organic Chemical, Polymer, and Resin Manufacturing Equipment” as specified in 45CSR§21-37.10, with the exception that all records shall be maintained for a period of five (5) years instead of three (3) years. To the extent that implementation of the requirements of 40 C.F.R. 60, 40 C.F.R. 61, or 40 C.F.R. 63 results in monitoring and repair, consistent with 45CSR§21-37. All components in VOC service in any synthetic organic chemical, polymer, or resin manufacturing process unit, compliance with these federal enforceable standards will satisfy the requirements of 45CSR§21-37. [45CSR§21-37.1.c and 37.10 (State-Enforceable only); 45CSR§30-5.1.c; CO-R21-97-41, HL2 45CSR13, R13-3412, 4.4.4 (State-Enforceable only)]

4.4.14. The permittee shall maintain records of all monitoring data required by Section 4.2.3 of this permit, documenting the date and time of each visible emission check, the emission point or equipment identification number, the name or means of identification of the responsible observer, the results of the check, and, if necessary, all corrective actions taken. Should a visible emission observation be required to be performed per the requirements specified in 40 C.F.R. 60, Appendix A, Method 9, the data records of each observation shall be maintained per the requirements of 40 C.F.R. 60, Appendix A, Method 9. For an emission unit out of service during the normal monthly evaluation, the record of observation may note “out of service” (OOS) or equivalent. These records shall be made available to the Director or his authorized representative upon request. (A163) [45CSR§30-5.1.c]
4.4.15. Record of Maintenance of Air Pollution Control Equipment. For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspections and/or preventative maintenance procedures. [45CSR13, R13-3412, 4.4.2]

4.4.16. Record of Malfunctions of Air Pollution Control Equipment. For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction. [45CSR13, R13-3412, 4.4.3]

4.5. Reporting Requirements

4.5.1. The permittee shall submit Periodic Reports as described in 40 C.F.R. §63.152(c), except that semi-annual periodic monitoring reports are due within 60 calendar days following June 30 and December 31, for each calendar year. The reports cover the periods January 1 through June 30 and July 1 through December 31. [45CSR34; 40 C.F.R. §§63.152(a)(4) and 63.152(c)]

4.5.2. The permittee shall submit reports of start-up, shutdown, and malfunction required by 40 C.F.R. §63.10(d)(5). The start-up, shutdown and malfunction reports may be submitted on the same schedule as the Periodic Reports required under 4.5.1. [45CSR34; 40 C.F.R. §§63.152(a)(5) and 63.152(d)(1)]

4.5.3. Group 1 Process Vents. If any subsequent TRE determinations or performance tests are conducted after submittal of the Notification of Compliance Status on September 19, 1997, or any amendments thereto, the data in 4.4.2.1.a through 4.4.2.1.e shall be submitted in the next Periodic Report as specified in 40 C.F.R. §63.152(c). (V29 and C170) [45CSR34; 40 C.F.R. §63.117(a)(3)]

4.5.4. Group 1 Process Vents. The permittee shall submit to the Secretary, Periodic Reports of the following recorded information according to the schedule in 40 C.F.R. §63.152(c). [45CSR34; 40 C.F.R. §§63.118(f), 63.152(a), 63.152(a)(4), and 63.152(c)]

4.5.4.1. For Group 1 points, reports of the duration of periods when monitoring data is not collected for each excursion caused by insufficient monitoring data as defined in 40 C.F.R. §63.152(c)(2)(ii)(A). [45CSR34; 40 C.F.R. §63.118(f)(2)]
4.5.7.4. The TRE index value is recalculated according to 40 C.F.R. §63.115(e) and the recalculated value is greater than 4.0. [45CSR34; 40 C.F.R. §63.118(k)(4)]

(B170)

4.5.8. **Group 1 Transfer Operations.** If any subsequent TRE determinations or performance tests are conducted after submittal of the Notification of Compliance Status on September 19, 1997, or any amendments thereto, the data in 4.4.6.1.a through 4.4.6.1.c shall be submitted in the next Periodic Report as specified in 40 C.F.R. §63.152(c). *(L5TC – Spot #5)* [45CSR34; 40 C.F.R. §63.129(a)(3)]

4.5.9. **Group 1 Transfer Operations.** The permittee shall submit to the Secretary, Periodic Reports of the following recorded information according to the schedule in 40 C.F.R. §63.152(c). [45CSR34; 40 C.F.R. §§63.130(d), 63.152(a), 63.152(a)(4), and 63.152(c)]

4.5.9.1. Reports of the duration of periods when monitoring data is not collected for each excursion caused by insufficient monitoring data as defined in 40 C.F.R. §63.152(c)(2)(ii)(A). [45CSR34; 40 C.F.R. §63.130(d)(2)]

4.5.9.2. Reports of the times and durations of all periods recorded under 4.4.8.2 in which all pilot flames of a flare were absent. [45CSR34; 40 C.F.R. §63.130(d)(5)]

(L5TC – Spot #5)

4.5.10. **Equipment Leaks.** The permittee shall comply with all applicable reporting requirements of 40 C.F.R. 63, Subpart H – “National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks” as specified in 40 C.F.R. §63.182. [45CSR34; 40 C.F.R. 63, Subpart H; 40 C.F.R. §63.182]

4.5.11. **45CSR§21-37 Reporting Requirements for Equipment Leaks.** The permittee shall comply with all applicable reporting requirements of 45CSR§21-37 – “Leaks from Synthetic Organic Chemical, Polymer, and Resin Manufacturing Equipment” as specified in 45CSR§21-37.11 and 5.2. To the extent that implementation of the requirements of 40 C.F.R. 60, 40 C.F.R. 61, or 40 C.F.R. 63 results in monitoring and repair, consistent with 45CSR§21-37, of all components in VOC service in any synthetic organic chemical, polymer, or resin manufacturing process unit, compliance with these federally enforceable standards will satisfy the requirements of 45CSR§21-37. [45CSR§21-37.1.e, 37.11, and 5.2 (State-Enforceable only); CO-R21-97-41, III.2 [45CSR13, R13-3412, 4.52] (State-Enforceable only)]

4.6. **Compliance Plan**

4.6.1. None
APPENDIX A – Consent Order CO-R21-97-41
ATTACHMENTS A AND B  Rule 21: Equipment with Maximum Theoretical VOC Emissions ≥ 6 lbs/hr
### ATTACHMENT  APPENDIX A

<table>
<thead>
<tr>
<th>Process Area Description and Identification Number</th>
<th>Name of Process Equipment Vented to Control Device and Equipment Identification Number</th>
<th>Maximum Theoretical Emissions (MTE) of the Source (lbs/hr)</th>
<th>Emission Point Identification Number</th>
<th>Control Device Identification Number</th>
<th>Control Device Description</th>
<th>Efficiency of Control Device</th>
<th>Maximum Allowable Hours of Operation (hrs/yr)</th>
<th>Maximum Allowable VOC Emissions</th>
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</thead>
<tbody>
<tr>
<td>Glutaraldehyde 170</td>
<td>Flare Header₄</td>
<td>14₄</td>
<td>163A</td>
<td>A163³</td>
<td>FL, Flare</td>
<td>98₄</td>
<td>8760₄</td>
<td>0.27₄</td>
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<td>19.10₄</td>
<td>208B₄</td>
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<td>None¹</td>
<td>0₄</td>
<td>8760₄</td>
<td>19.10₄</td>
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<td>Glutaraldehyde 170</td>
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<td>19.10₄</td>
<td>198B₄</td>
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<td>None¹</td>
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<td>8760₄</td>
<td>19.10₄</td>
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<tr>
<td>Glutaraldehyde 170</td>
<td>Tank 3144 (T3144)₄</td>
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<td>None¹</td>
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<td>8760₄</td>
<td>19.10₄</td>
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</table>

*FL = Flare

¹ Revised based on June 14, 2006 letter from J. L. Blatt.
ATTACHMENT B

ROUTINE/NORMAL OPERATING & MAINTENANCE SCENARIOS RESULTING IN EXCESS EMISSIONS*

<table>
<thead>
<tr>
<th>Process Area Description and Identification Number</th>
<th>Emission Point Identification Number</th>
<th>Description of Excess Emission Scenario</th>
<th>Description of Controls and Measures used to Minimize VOC Emissions (During each Scenario)</th>
<th>Duration of Excess Emission Scenario (Hours)</th>
<th>Typical/Maximum Number of Events per Year</th>
<th>Average/Peak VOC Emissions per Event (Pounds per Hour)</th>
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<tbody>
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*Do not include malfunction scenarios