

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
Institute Facility
Logistics (Group 3A of 8)
R30-03900005-2017

William F. Durham
Director

Issued: August 1, 2017 • Effective: August 15, 2017
Expiration: August 1, 2022 • Renewal Application Due: February 1, 2022

Permit Number: **R30-03900005-2017**
Permittee: **Union Carbide Corporation**
Facility Name: **Institute Facility**
Business Unit: **Logistics (Group 3A of 8)**
Permittee Mailing Address: **P. O. Box 8361, South Charleston, WV 25303**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 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
Type of Business Entity:	Corporation
Facility Description:	Supply and services group includes <u>the</u> EO distribution process, air separation process, barge operations process, tank truck and rail car operations process, and the plant lab.
SIC Codes:	2869
UTM Coordinates:	432.189 km Easting • 4,248.754 km Northing • Zone 17

Permit Writer: Mike Egnor

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.

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1.0 Emission Units and Active R13, R14, and R19 Permits

1.1 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Control Device
C9704	410-B or 410A	Tank 9704	1969	Primary Flare B410 or Secondary Flare A410
C9705	410B or 410A	Tank 9705	1969	Primary Flare B410 or Secondary Flare A410
C9745	410A	Flare Knock-out Pot C9745	1989	Secondary Flare A410
C9746	410B	Flare Seal Pot C9746	1991	Primary Flare B410
C9747	410B	Flare Knock-out Pot C9747	1990	Primary Flare B410
PMP	410B or 410A	Priming Pot	1990	Primary Flare B410 or Secondary Flare A410
EOTC	410B or 410A	EO Tank Car Rack	1988	Primary Flare B410 or Secondary Flare A410
L1B	B1L	Barge Loading	1940s	None
L1B1	2B1L	Barge Unloading includes West Suction Pot	1981	None
L1B2	2B1L	Barge Unloading includes West Knockout Pot	1981	None
TTL4 ¹	L4TF ¹	East Rack Tank Truck Loading	1940s	None
RCL4 (aka TCL4) ¹	L4RC (aka L4TC) or 040F ¹	East Rack Rail Car Loading	1940s	None or Scrubber F040 ³
L6TF	L6TF	West Tank Truck Rack	1950s	None
L5RC (aka L5TC) ²	L5RC (aka L5TC) or 163A ²	West Rail Car Rack	1950s	None or Flare A163 ⁴

¹ Requirements for Emission Units TTL4 and RCL4 (aka TCL4) are addressed in R30-03900005-2017 (Group 2 of 8).

² Requirements for Emission Unit L5RC (aka L5TC) are addressed in R30-03900005-2017 (Group 4 of 8).

³ A CAM applicability discussion for Scrubber F040 is provided in the Fact Sheet for R30-03900005-2012 (Group 2 of 5).

⁴ A CAM applicability discussion for Flare A163 is provided in the Fact Sheet for R30-03900005-2012 (Group 4 of 5).

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.

Permit Number	Date of Issuance
R13-2646A	August 8, 2006

- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

- 3.1.8. **Risk Management Plan.** ~~This stationary source, as defined in 40 C.F.R. § 68.3, is subject to Part 68. This stationary source shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. Part 68.10. This stationary source shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.~~ **Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.**

[40 C.F.R. 68]

3.2. Monitoring Requirements

- 3.2.1. None

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary 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. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:
 - a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
 - b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
 - c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

- 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~~
- ~~f. The proposed corrective actions and schedule to correct the conditions causing the excess emissions.~~

[45CSR§21-5.2; CO-R21-97-41, III.3 (State-Enforceable only)]

- ~~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, III.3 (State-Enforceable only)]

4.0 EO Distribution Reserved

4.1. ~~Limitations and Standards~~

4.1.1. ~~Group 1 Storage Vessels.~~ For each storage vessel located at a 40 C.F.R. 63, Subpart PPP affected source, the owner or operator shall comply with the HON storage vessel requirements of 40 C.F.R. §§63.119 through 63.123 and the HON leak inspection provisions in 40 C.F.R. §63.148, with the differences noted in 40 C.F.R. §§63.1432 (b) through (p). The applicable provisions for a Group I storage vessel with a closed vent system and flare are as follows: ~~{45CSR34; 40 C.F.R. §63.1432(a)}~~

4.1.1.1. ~~The owner or operator shall reduce hazardous air pollutants emissions to the atmosphere by operating and maintaining a closed vent system and control device in accordance with 4.1.1.1.a through 4.1.1.1.d. {45CSR34; 40 C.F.R. §§63.119(a)(2) and 63.119(e)}~~

a. ~~The Primary Flare (B410) shall be designed and operated to reduce inlet emissions of total organic HAP by 95 percent or greater and shall meet the specifications described in the general control device requirements of 40 C.F.R. §63.11(b). {45CSR34; 40 C.F.R. §§63.119(e)(1)}~~

b. ~~Periods of planned routine maintenance of the control device, during which the control device does not meet the specifications of 4.1.1.1.a shall not exceed 240 hours per year. {45CSR34; 40 C.F.R. §63.119(e)(3)}~~

c. ~~The specifications and requirements in 4.1.1.1.a for control devices do not apply during periods of planned routine maintenance. {45CSR34; 40 C.F.R. §63.119(e)(4)}~~

d. ~~The specifications and requirements in 4.1.1.1.a for control devices do not apply during a control system malfunction. {45CSR34; 40 C.F.R. §63.119(e)(5)}~~

~~(Tank 9704 and Tank 9705)~~

4.1.2. ~~Maintenance Wastewater.~~ The owner or operator of each 40 C.F.R. 63, Subpart PPP affected source, shall comply with the HON maintenance wastewater requirements of 40 C.F.R. §63.105, with the exceptions noted in 40 C.F.R. §§63.1433 (b)(1) through (3). The applicable provisions for maintenance wastewater are as follows: ~~{45CSR34; 40 C.F.R. §63.1433(b)}~~

4.1.2.1. ~~Each owner or operator of a source subject to 40 C.F.R. §63.105, Subpart F shall comply with the requirements of 4.1.2.1.a through 4.1.2.1.c for maintenance wastewaters containing those organic HAP's listed in table 9 of 40 C.F.R. 63, Subpart G and meet the definition of organic HAP in 40 C.F.R. §63.1423. {45CSR34; 40 C.F.R. §63.105(a); 40 C.F.R. §63.1433(b)(1)}~~

a. ~~The owner or operator shall prepare a description of maintenance procedures for management of wastewaters generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair (i.e., a maintenance turn-around) and during periods which are not shutdowns (i.e., routine maintenance). The descriptions shall: {45CSR34; 40 C.F.R. §63.105(b)}~~

i. ~~Specify the process equipment or maintenance tasks that are anticipated to create wastewater during maintenance activities. {45CSR34; 40 C.F.R. §63.105(b)(1)}~~

- ~~ii. Specify the procedures that will be followed to properly manage the wastewater and control organic HAP emissions to the atmosphere; and [45CSR34; 40 C.F.R. §63.105(b)(2)]~~
 - ~~iii. Specify the procedures to be followed when clearing materials from process equipment. [45CSR34; 40 C.F.R. §63.105(b)(3)]~~
 - ~~b. The owner or operator shall modify and update the information required by 4.1.2.1.a as needed following each maintenance procedure based on the actions taken and the wastewaters generated in the preceding maintenance procedure. [45CSR34; 40 C.F.R. §63.105(e)]~~
 - ~~e. The owner or operator shall implement the procedures described in 4.1.2.1.a and 4.1.2.1.b 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(d)]~~
- ~~4.1.3. **Equipment Leaks.** The permittee shall comply with all applicable standards of 40 C.F.R. 63, Subpart H—“National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks”, except as specified in 40 C.F.R. §§63.1434(b) through (g). The pertinent equipment leak standards include: 40 C.F.R. §§63.162 (Standards: General), 63.163 (Standards: Pumps in light liquid service), 63.165 (Standards: Pressure relief devices in gas/vapor service), 63.166 (Standards: Sampling connection systems), 63.167 (Standards: Open-ended valves or lines), 63.168 (Standards: Valves in gas/vapor service and in light liquid service), 63.171 (Standards: Delay of repair), 63.172 (Standards: Closed-vent systems and control devices), 63.173 (Standards: Agitators in gas/vapor service and in light liquid service), and 63.174 (Standards: Connectors in gas/vapor service and in light liquid service). [45CSR34; 40 C.F.R. §63.1434(a); 40 C.F.R. 63, Subpart H; 40 C.F.R. §§63.162, 63.163, 63.165, 63.166, 63.167, 63.168, 63.171, 63.172, 63.173, and 63.174; 45CSR§27-4.1 (State Enforceable only); CO R27-99-14-A(92), III.3 (State Enforceable only)].~~
- ~~4.1.4. The permittee shall comply with the following applicable requirements from CO R21-97-41 for EO Distribution:~~
- ~~4.1.4.1. 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 VOC 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 EO Distribution 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]~~
 - ~~4.1.4.2. 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)]~~

~~4.1.4.3. 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)]~~

~~4.1.5. **45CSR§21-37 Requirements for Equipment Leaks.** The permittee shall comply with all applicable requirements of 45CSR§21-37 "Leaks from Synthetic Organic Chemical, Polymer, and Resin Manufacturing Equipment." 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 (State Enforceable only); CO-R21-97-41, III.2 (State Enforceable only)]~~

4.1.6. Emissions to the air of ethylene oxide from EO Distribution shall not exceed the following:

Emission Source	Emission Point	Ethylene Oxide Emission Limit after BAT	
		lb/hr	lb/yr
Institute Header Double Vent & Valve EO Sample Analyzer Lines 9704 Surge Tank 9705 Surge Tank Unloading Pump Seal Pot Vents G-9702, G-9703 512 Distribution Pump Seal Pot Vents G-9706, G-9707 514 Distribution Pump Seal Pot Vents G-9708, G-9709 Priming Pot Vent Institute Header Thermal Relief Tank Car Blowdown from EO Tank Car Unloading Rack (6 spots) Safety Valve to the Institute Header Thermal Relief So. Charleston Cross-Country Header G-9708 Seal Pot, East 514	410B/410A	0.29	2,539

~~[45CSR§27-3.1 (State-Enforceable only); CO-R27-99-14 A(92), III.2 and Attachment B (State-Enforceable only)]~~

4.1.7. 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

Incinerator Capacity	Factor F
A. Less than 15,000 lbs/hr	5.43
B. 15,000 lbs/hr or greater	2.72

For flares B410 and A410, the 45CSR§6-4.1 hourly particulate emission limit is 1.19 lbs/hr.

~~(B410 and A410) [45CSR§6-4.1]~~

4.1.8. 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. ~~(B410 and A410) [45CSR§6-4.3]~~

4.1.9. The provisions of 4.1.8 shall not apply to smoke which is less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per start up. ~~(B410 and A410) [45CSR§6-4.4]~~

4.2. Monitoring Requirements

4.2.1. **Group 1 Storage Vessels.** For each storage vessel located at a 40 C.F.R. 63, Subpart PPP affected source, the owner or operator shall comply with the HON storage vessel requirements of 40 C.F.R. §§63.119 through 63.123 and the HON leak inspection provisions in 40 C.F.R. §63.148, with the differences noted in 40 C.F.R.

~~§§63.1432 (b) through (p). The monitoring requirements for a Group I storage vessel with a closed vent system and flare are as follows: [45CSR34; 40 C.F.R. §63.1432(a)]~~

~~4.2.1.1. To demonstrate compliance with 4.1.1 (storage vessel equipped with a closed vent system and control device) using a flare, the owner or operator shall comply with the requirements in 4.2.1.1.a through 4.2.1.1.d [45CSR34; 40 C.F.R. §63.120(e)]~~

~~a. The owner or operator shall demonstrate compliance with the requirements of 4.1.1.1.c (planned routine maintenance of a flare, during which the flare does not meet the specifications of 4.1.1.1.a, shall not exceed 240 hours per year) by including in each Periodic Report required by 40 C.F.R. §63.1439(e)(6) the information specified in 4.5.3.1.a. [45CSR34; 40 C.F.R. §63.120(e)(3); 40 C.F.R. §63.1432(f)]~~

~~b. The owner or operator shall continue to meet the general control device requirements specified in 40 C.F.R. §63.11(b). [45CSR34; 40 C.F.R. §63.120(e)(4)]~~

~~c. Except as provided in 4.2.1.1.d, each closed vent system shall be inspected as specified in 40 C.F.R. §63.148. The inspections required to be performed in accordance with 40 C.F.R. §63.148(e) shall be done during filling of the storage vessel. [45CSR34; 40 C.F.R. §63.120(e)(5)]~~

~~d. For any fixed roof tank and closed vent system that is operated and maintained under negative pressure, the owner or operator is not required to comply with the requirements specified in 40 C.F.R. §63.148. [45CSR34; 40 C.F.R. §63.120(e)(6)]~~

~~(Tank 9704 and Tank 9705)~~

~~4.2.2. For the purpose of determining compliance with the opacity limits set forth in Sections 4.1.8 and 4.1.9 for flares B410 and A410, the permittee shall conduct visual emissions monitoring at a frequency of at least once per month with a maximum of forty five (45) days between consecutive readings, unless there is a plant shutdown. Following a shutdown that prevents observations within forty (45) days, visual monitoring must be performed within seven (7) days of return to operation. These checks shall be performed during periods of operation of emission sources that vent from the referenced emission points for a sufficient time interval, but not less than one (1) minute 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. (B410 and A410) [45CSR§30-5.1.e]~~

4.3. Testing Requirements

~~4.3.1. Equipment Leaks. The permittee shall comply with all applicable test methods and procedures 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. §63.180, except as specified in 40 C.F.R. §§63.1434(b) through (g). [45CSR34; 40 C.F.R. §63.1434(a); 40 C.F.R. 63, Subpart H; 40 C.F.R. §63.180]~~

~~4.3.2. The permittee shall comply with all applicable provisions of 45CSR§21-41 regarding test methods and compliance procedures to demonstrate compliance with 4.1.4, except as otherwise approved by the Director. [45CSR§21-41; CO-R21-97-41, III.5 (State-Enforceable only)]~~

~~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 will 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)]~~

~~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. (B410 and A410) [45CSR§6-7.1]~~

4.4. Recordkeeping Requirements

~~4.4.1. For each storage vessel located at a 40 C.F.R. 63, Subpart PPP affected source, the owner or operator shall comply with the HON storage vessel requirements of 40 C.F.R. §§63.119 through 63.123 and the HON leak inspection provisions in 40 C.F.R. §63.148, with the differences noted in 40 C.F.R. §§63.1432 (b) through (p). The recordkeeping requirements for a Group 1 storage vessel with a closed vent system and flare are as follows: [45CSR34; 40 C.F.R. §63.1432(a)]~~

~~4.4.1.1. Each owner or operator of a Group 1 or Group 2 storage vessel shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 or Group 2 status and is in operation. [45CSR34; 40 C.F.R. §63.123(a)]~~

~~4.4.1.2. The permittee shall keep in a readily accessible location a record of the planned routine maintenance performed on the control device including the duration of each time the control device does not meet the specifications of 4.1.1.1.a due to the planned routine maintenance. Such record shall include the information specified in 4.4.1.2.a and 4.4.1.2.b. [45CSR34; 40 C.F.R. §§63.123(f) and 63.123(f)(2)]~~

~~a. The first time of day and date the requirements of 4.1.1.1.a were not met at the beginning of the planned routine maintenance, and [45CSR34; 40 C.F.R. §63.123(f)(2)(i)]~~

~~b. The first time of day and date the requirements of 4.1.1.1.a were met at the conclusion of the planned routine maintenance. [45CSR34; 40 C.F.R. §63.123(f)(2)(ii)]~~

~~4.4.1.3. To demonstrate compliance with 4.1.1.1.a and 4.2.1.1.b for Group 1 storage vessels with a closed vent system and flare meeting the requirements of 40 C.F.R. §63.11(b), the permittee shall keep readily accessible records of the following: [45CSR§30-12.7]~~

~~a. Hourly records of whether the monitor was continuously operating and whether a flame was continuously present at the pilot light during each hour. [45CSR§30-12.7]~~

~~b. Records of the times and duration of all periods during which all pilot flames are absent. [45CSR§30-12.7]~~

~~(Tank 9704 and Tank 9705)~~

~~4.4.2. Maintenance Wastewater. The owner or operator of each 40 C.F.R. 63, Subpart PPP affected source, shall comply with the HON maintenance wastewater requirements of 40 C.F.R. §63.105, with the exceptions noted in 40 C.F.R. §§63.1433 (b)(1) through (3). The HON provisions for recordkeeping requirements for maintenance wastewater are as follows: [45CSR34; 40 C.F.R. §63.1433(b)]~~

~~4.4.2.1. Maintenance Wastewater. The owner or operator shall maintain a record of the information required by 4.1.2.1.a and 4.1.2.1.b 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)]~~

~~4.4.3. Equipment Leaks. The permittee shall comply with all applicable recordkeeping 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. §63.181, except as specified in 40 C.F.R. §§63.1434(b) through (g). [45CSR34; 40 C.F.R. §63.1434(a); 40 C.F.R. 63, Subpart H; 40 C.F.R. §63.181]~~

~~4.4.4. 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, 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 and 37.10 (State Enforceable only); 45CSR§30-5.1.e; CO-R21-97-41, III.2 (State Enforceable only)]~~

~~4.4.5. The permittee shall maintain records of all monitoring data required by Section 4.2.2 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 maintained on site for a period of five years and shall be made available to the Director or his authorized representative upon request. (B410 and A410) [45CSR§30-5.1.e]~~

4.5. Reporting Requirements

~~4.5.1. The permittee shall submit Periodic Reports as specified in 40 C.F.R. §§63.1439(e)(6), 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; C.F.R. §63.1432(l); 40 C.F.R. §63.1439(e)(6)]~~

~~4.5.2. The permittee shall submit reports of start-up, shutdown, and malfunction required by 40 C.F.R. §63.1439(b)(1). 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. §§63.1439(b)(1)]~~

~~4.5.3. For each storage vessel located at a 40 C.F.R. 63, Subpart PPP affected source, the owner or operator shall comply with the HON storage vessel requirements of 40 C.F.R. §§63.119 through 63.123 and the HON leak inspection provisions in 40 C.F.R. §63.148, with the differences noted in 40 C.F.R. §§63.1432 (b) through (p). The reporting requirements for a Group I storage vessel with a closed vent system and flare are as follows: [45CSR34; 40 C.F.R. §63.1432(a)]~~

~~4.5.3.1. An owner or operator who elects to comply with 4.1.1 by installing a closed vent system and control device shall submit, as part of the next Periodic Report required by 40 C.F.R. §63.1439(e)(6), the information specified in 4.5.3.1.a and 4.5.3.1.b. [45CSR34; 40 C.F.R. §§63.122(a)(4), 63.122(g) and 63.152(e); 40 C.F.R. §63.1432(f)]~~

~~a. As required by 4.2.1.1.a, the Periodic Report shall include the information specified in 4.5.3.1.a.i and 4.5.3.1.a.ii for those planned routine maintenance operations that would require the control device not to meet the requirements of 4.1.1.1.a. [45CSR34; 40 C.F.R. §63.122(g)(1)]~~

~~i. A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6 months. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods. [45CSR34; 40 C.F.R. §63.122(g)(1)(i)]~~

~~ii. A description of the planned routine maintenance that was performed for the control device during the previous 6 months. This description shall include the type of maintenance performed and the total number of hours during those 6 months that the control device did not meet the requirements of 4.1.1.1.a due to planned routine maintenance. [45CSR34; 40 C.F.R. §63.122(g)(1)(ii)]~~

~~b. If a flare is used, the Periodic Report shall describe each occurrence when the flare does not meet the general control device requirements specified in 40 C.F.R. §63.11(b) and shall include the information specified in 4.5.3.1.b.i and 4.5.3.1.b.ii. [45CSR34; 40 C.F.R. §63.122(g)(3)]~~

~~i. Identification of the flare which does not meet the general requirements specified in 40 C.F.R. §63.11(b), and [45CSR34; 40 C.F.R. §63.122(g)(3)(i)]~~

~~ii. Reason the flare did not meet the general requirements specified in 40 C.F.R. §63.11(b). [45CSR34; 40 C.F.R. §63.122(g)(3)(ii)]~~

~~(Tank 9704 and Tank 9705)~~

~~4.5.4. **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, except as specified in 40 C.F.R. §§63.1434(b) through (g). [45CSR34; 40 C.F.R. §63.1434(a); 40 C.F.R. 63, Subpart H; 40 C.F.R. §63.182]~~

~~4.5.5. **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.c, 37.11, and 5.2 (State Enforceable only); CO R21-97-41, III.2 (State Enforceable only)]~~

4.6. Compliance Plan

4.6.1. None.

~~APPENDIX A Consent Order CO R21-97-41~~
~~ATTACHMENTS A AND B~~

ATTACHMENT A

Process Area Description and Identification Number	Name of Process Equipment Vented to Control Device and Equipment Identification Number	Maximum Theoretical Emissions (MTE) of the Source (lbs/hr)	Emission Point Identification Number	Control Device Identification Number	Control Device Description	Efficiency of Control Device	Maximum Allowable Hours of Operation (hrs/yr)	Maximum Allowable VOC Emissions	
								lbs/hr	tons/yr
Distribution 401 [†]	Header to Primary Flare [†]	144.55 [†]	410B	B410 [†]	FL	99 [†]	8760 [†]	0.29 [†]	1.27 [†]
Distribution 401 [†]	Header to Backup Flare [†]	144.55 [†]	410A	A410 [†]	FL	99 [†]			

FL – Flare

[†]Revised based on June 14, 2006 letter from J. L. Blatt.

