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**west virginia department of environmental protection**

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Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
Phone: (304) 926-0475 • FAX: (304) 926-0479

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

May 20, 2016

**CERTIFIED MAIL**

**91 7199 9991 7035 6665 8769**

Jay Fedczak  
P.O. Box 8004  
437MacCorkle Avenue, SW  
South charleston, WV 25303

Re: Union Carbide Corporation (UCC)  
South Charleston Operations  
Chlorohydrin Remediation Area  
Permit No.: R13-2840B  
Plant ID No.: 039-00003

Dear Mr. Fedczak:

Your application for a permit as required by Section 5 of 45CSR13 - "Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permit, General Permit, and Procedures for Evaluation" has been approved. The enclosed permit R13-2840B is hereby issued pursuant to Subsection 5.7 of 45CSR13. Please be aware of the notification requirements in the permit which pertain to commencement of construction, modification, or relocation activities; startup of operations; and suspension of operations.

The source is subject to 45CSR30. The permittee has the duty to update the facility's Title V (45CSR30) permit application to reflect the changes permitted herein.

In accordance with 45CSR30- Operating Permit Program, 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. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

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.

**Promoting a healthy environment.**

Should you have any questions or comments, please contact me at (304) 926-0499, extension 1257.

Sincerely,



John Legg  
Permit Writer

Enclosures

*West Virginia Department of Environmental Protection*

*Earl Ray Tomblin  
Governor*

*Division of Air Quality*

*Randy C. Huffman  
Cabinet Secretary*

# Class II Administrative Update Permit



**R13-2840B**

*This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45 C.S.R. 13 — Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the facility listed below is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.*

Issued to:

**Union Carbide Corporation  
South Charleston Facility  
039-00003**

A blue ink signature of William F. Durham, written in a cursive style, positioned above a horizontal line.

*William F. Durham  
Director*

*Issued: May 20, 2016*

Facility Location: South Charleston, Kanawha County, West Virginia  
Mailing Address: PO Box 8361  
South Charleston, WV  
Facility Description: Groundwater/Soil remediation process.  
SIC Codes: 2869  
UTM Coordinates: 440.026 km Easting • 4,246.927 km Northing • Zone 17  
Permit Type: Class II Administrative Update  
Description of  
Change: Specific requirements for scrubber maintenance (acid-washing of packed bed scrubber A42PBS) were established in the permit.

*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.*

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*The source is subject to 45CSR30. Changes authorized by this permit must also be incorporated into the facility's Title V operating permit. Commencement of the operations authorized by this permit shall be determined by the appropriate timing limitations associated with Title V permit revisions per 45CSR30.*

**Table of Contents**

**1.0. Emission Units ..... 3**

**2.0. General Conditions ..... 4**

    2.1. Definitions ..... 4

    2.2. Acronyms ..... 4

    2.3. Authority ..... 5

    2.4. Term and Renewal ..... 5

    2.5. Duty to Comply ..... 5

    2.6. Duty to Provide Information ..... 5

    2.7. Duty to Supplement and Correct Information ..... 6

    2.8. Administrative Permit Update ..... 6

    2.9. Permit Modification ..... 6

    2.10. Major Permit Modification ..... 6

    2.11. Inspection and Entry ..... 6

    2.12. Emergency ..... 6

    2.13. Need to Halt or Reduce Activity Not a Defense ..... 7

    2.14. Suspension of Activities ..... 7

    2.15. Property Rights ..... 7

    2.16. Severability ..... 8

    2.17. Transferability ..... 8

    2.18. Notification Requirements ..... 8

    2.19. Credible Evidence ..... 8

**3.0. Facility-Wide Requirements ..... 9**

    3.1. Limitations and Standards ..... 9

    3.2. Monitoring Requirements ..... 9

    3.3. Testing Requirements ..... 9

    3.4. Recordkeeping Requirements ..... 11

    3.5. Reporting Requirements ..... 11

**4.0. Source-Specific Requirements ..... 13**

    4.1. Limitations and Standards ..... 13

    4.2. Testing Requirements ..... 14

    4.3. Monitoring and Recordkeeping Requirements ..... 15

    4.4. Reporting Requirements ..... 17

**CERTIFICATION OF DATA ACCURACY ..... 18**

**1.0 Emission Units**

<b>Emission Unit ID</b>	<b>Emission Point ID</b>	<b>Emission Unit Description</b>	<b>Year Installed</b>	<b>Design Capacity</b>	<b>Control Device</b>
CLBVE	SVE1	Vapor Extraction System - Chlorobenzene Area	2014	600 scfm	Incinerator (A42INC) & Scrubber (A42PBS)
A42VE	SVE1	Vapor Extraction System - Chlorohydrin Area (Area 42)	2010	1,050 scfm	Incinerator (A42INC) & Scrubber (A42PBS)
A42INC	SVE1	Regenerative Thermal Oxidizer (Incinerator)	2010	2,500 scfm	Scrubber (A42PBS)
A42PBS	SVE1	Packed Bed Caustic Scrubber; Model SPT-36-120	2010	---	N/A

## 2.0. General Conditions

### 2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45 CSR § 30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

### 2.2. Acronyms

<b>CAAA</b>	Clean Air Act Amendments	<b>NO<sub>x</sub></b>	Nitrogen Oxides
<b>CBI</b>	Confidential Business Information	<b>NSPS</b>	New Source Performance Standards
<b>CEM</b>	Continuous Emission Monitor	<b>PM</b>	Particulate Matter
<b>CES</b>	Certified Emission Statement	<b>PM<sub>2.5</sub></b>	Particulate Matter less than 2.5µm in diameter
<b>C.F.R. or CFR</b>	Code of Federal Regulations	<b>PM<sub>10</sub></b>	Particulate Matter less than 10µm in diameter
<b>CO</b>	Carbon Monoxide	<b>Ppb</b>	Pounds per Batch
<b>C.S.R. or CSR</b>	Codes of State Rules	<b>pph</b>	Pounds per Hour
<b>DAQ</b>	Division of Air Quality	<b>ppm</b>	Parts per Million
<b>DEP</b>	Department of Environmental Protection	<b>Ppmv or ppmv</b>	Parts per million by volume
<b>dsem</b>	Dry Standard Cubic Meter	<b>PSD</b>	Prevention of Significant Deterioration
<b>FOIA</b>	Freedom of Information Act	<b>psi</b>	Pounds per Square Inch
<b>HAP</b>	Hazardous Air Pollutant	<b>SIC</b>	Standard Industrial Classification
<b>HON</b>	Hazardous Organic NESHAP	<b>SIP</b>	State Implementation Plan
<b>HP</b>	Horsepower	<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>lbs/hr</b>	Pounds per Hour	<b>TAP</b>	Toxic Air Pollutant
<b>LDAR</b>	Leak Detection and Repair	<b>TPY</b>	Tons per Year
<b>M</b>	Thousand	<b>TRS</b>	Total Reduced Sulfur
<b>MACT</b>	Maximum Achievable Control Technology	<b>TSP</b>	Total Suspended Particulate
<b>MDHI</b>	Maximum Design Heat Input	<b>USEPA</b>	United States Environmental Protection Agency
<b>MM</b>	Million	<b>UTM</b>	Universal Transverse Mercator
<b>MMBtu/hr or mmbtu/hr</b>	Million British Thermal Units per Hour	<b>VEE</b>	Visual Emissions Evaluation
<b>MMCF/hr or mmcf/hr</b>	Million Cubic Feet per Hour	<b>VOC</b>	Volatile Organic Compounds
<b>NA</b>	Not Applicable	<b>VOL</b>	Volatile Organic Liquids
<b>NAAQS</b>	National Ambient Air Quality Standards		
<b>NESHAPS</b>	National Emissions Standards for Hazardous Air Pollutants		

### **2.3. Authority**

This permit is issued in accordance with West Virginia Air Pollution Control Law W.Va. Code §§22-5-1 et seq. and the following Legislative Rules promulgated thereunder:

- 2.3.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation;*

### **2.4. Term and Renewal**

- 2.4.1. This permit supercedes and replaces previously issued Permit R13-2840A. This permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any applicable legislative rule.

### **2.5. Duty to Comply**

- 2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Applications R13-2840, R13-2840A, R13-2840B and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;  
[45CSR§§13-5.11 and 13-10.3]
- 2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;
- 2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;
- 2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses and/or approvals from other agencies; i.e., local, state and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

### **2.6. Duty to Provide Information**

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

## **2.7. Duty to Supplement and Correct Information**

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

## **2.8. Administrative Update**

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.  
[45CSR§13-4]

## **2.9. Permit Modification**

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.  
[45CSR§13-5.4.]

## **2.10. Major Permit Modification**

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.  
[45CSR§13-5.1]

## **2.11. Inspection and Entry**

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

## **2.12. Emergency**

- 2.12.1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission

limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

- 2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are not met.
- 2.12.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and,
  - d. The permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice must contain a detailed description of the emergency, any steps taken to mitigate emission, and corrective actions taken.
- 2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 2.12.5. The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

### **2.13. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

### **2.14. Suspension of Activities**

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

### **2.15. Property Rights**

This permit does not convey any property rights of any sort or any exclusive privilege.

**2.16. Severability**

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

**2.17. Transferability**

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. [45CSR§13-10.1]

**2.18. Notification Requirements**

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

**2.19. Credible Evidence**

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

### 3.0. Facility-Wide Requirements

#### 3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.  
[45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.  
[45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.  
[40CFR§61.145(b) and 45CSR§34]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.  
[45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.  
[45CSR§13-10.5.]
- 3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45 C.S.R. 11.  
[45CSR§11-5.2.]

#### 3.2. Monitoring Requirements

[Reserved]

#### 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 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4 or 45CSR§13-5.4 as 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. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4 or 45CSR§13-5.4 as applicable.
- 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 and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
- d. The permittee shall submit a report of the results of the stack test within sixty (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; and,
  3. A statement of compliance or noncompliance with each permit or rule condition.

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

### 3.4. Recordkeeping Requirements

- 3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.
- 3.4.2. **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§4. *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.
- 3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
- 3.5.3. **Correspondence.** 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 with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

**If to the DAQ:**

Director  
WVDEP  
Division of Air Quality  
601 57th Street, SE  
Charleston, WV 25304-2345

**If to the USEPA:**

Associate Director  
Office of Air Enforcement and Compliance Assistance  
(3AP20)  
U. S. Environmental Protection Agency  
Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

**3.5.4. Operating Fee.**

3.5.4.1. In accordance with 45CSR30 – Operating Permit Program, the permittee shall submit a Certified Emissions Statement (CES) and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

#### 4.0. Source-Specific Requirements

#### 4.1. Limitations and Standards

- 4.1.1. All emissions of regulated pollutants from the Chlorohydrin (Area 42) Vapor Extractive System (A42VE) and Chlorobenzene Area Vapor Extractive System (CLBVE) shall be routed to the Thermal Oxidizer (A42INC).
- 4.1.2. All emissions of regulated pollutants from the Thermal Oxidizer shall be routed to the Packed Bed Scrubber (A42PBS).
- 4.1.3. Criteria pollutant emissions vented from the Packed Bed Scrubber A42PBS shall not exceed the following:

Criteria Pollutant	lb/hr	tpy
NO <sub>x</sub>	0.10	0.44
CO	0.44	1.92
SO <sub>2</sub>	0.01	0.02
PM	0.01	0.01
VOC	3.46	15.07

- 4.1.4. Hazardous Air Pollutant emissions vented from the Packed Bed Scrubber A42PBS shall not exceed the following:

Hazardous Air Pollutant	lb/hr	tpy
1,1,2-Trichloroethane	0.20	0.84
Vinylidene Chloride	0.15	0.65
Ethylene Dichloride	1.53	6.67
Trichloroethene	0.40	1.70
Hydrochloric Acid (HCl)	0.71 <sup>(1)</sup>	3.33 <sup>(2)</sup>
Other Organic HAPs	0.46	1.61
Total HAPs	3.44	14.79

(1) Except when scrubber maintenance (acid-washing) is being performed (see 4.1.9 and 4.1.10).

(2) 3.10 tpy of HCl emissions emitted during normal scrubber operation plus 0.23 tpy of HCl emissions emitted during scrubber maintenance (acid-washing) (see 4.1.9 and 4.1.10.)

- 4.1.5 The regenerative thermal oxidizer shall be designed, operated and maintained so as to reduce emissions of VOCs by at least 98% or to less than 3.46 pounds per hour.
- 4.1.5.1 The thermal oxidizer shall be operated with a firebox temperature of at least 1400°F at all times when the contaminated vent gas is being combusted. Compliance with this requirement shall be based on a daily average.
- 4.1.6 The packed bed scrubber shall be designed, operated and maintained so as to reduce emissions of HCl by at least 99.5% or to no more than 0.71 pounds per hour except when scrubber maintenance (acid-washing) is being performed.
- 4.1.6.1 The packed bed scrubber shall be operated with a daily average pH of the inlet liquid of at least 7.0 when the contaminated vent gas is being combusted except that during periods of scrubber maintenance (acid-washing), the pH of the inlet liquid shall not be included in this daily average.
- 4.1.7 Visible emissions from the thermal oxidizer (TO-1) shall not exceed twenty percent (20%) opacity except that an opacity level of up to forty percent (40%) is permitted during startup periods during the first eight (8) minutes of operation of the unit.  
[45CSR§6-4.3.] & [45CSR§6-4.4.]
- 4.1.8 **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§13-5.11.]
- 4.1.9 Scrubber maintenance (acid-washing) shall be conducted no more than 12 times per year and shall be limited to no more than six (6) hours per each cleaning activity/event.
- 4.1.10. HCl emissions resulting from scrubber maintenance (acid-washing) shall not exceed 37.65 pounds per event and 0.23 tons per year.

## 4.2. Testing Requirements

- 4.2.1. The permittee shall conduct, or have conducted, testing to determine VOC emission rates to the atmosphere according to the schedule in the following table. The initial test shall be conducted within 6 months of commencement of authorized activity. Said testing may be done using a photo ionization detector or other suitable detector or a sample may be collected and sent to a laboratory for analysis. At the time of the aforementioned testing exhaust flow rates shall also be determined in order to calculate hourly VOC emissions.

**Table 4.2.1 - Test Requirements:**

Test Results	Testing Frequency
< 50% of permit limit	Once per 12 months
≥ 50% of permit limit	Once per 6 months

- 4.2.2 At least monthly visual particulate emissions checks of the packed bed scrubber exhaust stack will be conducted. These checks shall be conducted during periods of normal operation and for a sufficient time interval to determine if the unit has visible emissions using the procedures outlined in 40 CFR 60, Appendix A, Method 22. If no visible emissions are noted during four consecutive monthly observation periods, visual emissions checks will be conducted quarterly commencing with the next calendar quarter. If no visible emissions are noted during four consecutive calendar quarters, visual checks may be conducted semiannually. If sources of visible emissions are identified during the survey or at any other time, the permittee shall conduct a 40 CFR 60, Appendix A, Method 9 evaluation within 24 hours and restart monthly visual emission checks. A Method 9 evaluation shall not be required if the visible emission condition is corrected within 24 hours and the incinerator is operated at normal operating conditions. A record of each visible emission check required above shall be maintained on site. Said record shall include but not be limited to, the date, time, name of emission unit, the applicable visible emissions requirement, the results of the check, what action (s), if any, was/were taken, and the name of the observer.
- 4.2.3 The pH of the scrubber liquid shall be measured at least once per day and shall exclude measurements taken during times when scrubber maintenance (acid-washing) is being performed.

### 4.3. Monitoring and Recordkeeping Requirements

- 4.3.1. **Record of Monitoring.** 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.
- 4.3.2. **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 inspection and/or preventative maintenance procedures.
- 4.3.3. **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.

4.3.4. The permittee shall maintain the following records relating to the RTO.

4.3.4.1 Daily average firebox temperature. Said average shall be determined by monitoring the temperature every 15 minutes to determine an hourly average and then averaging the days 24 hourly averages.

4.3.4.2 Completed maintenance and calibrations.

4.3.4.3 Copy of the testing results required by condition 4.2.1 of this permit.

4.3.4.4 Copy of the site specific monitoring plan. The plan may refer to the manufacturers operation and maintenance manual or other documents for procedures covering operation, maintenance, calibrations and inspections.

4.3.4.5 Records of monitoring equipment downtime and corrective actions taken.

4.3.5 The permittee shall maintain the following records relating to the packed bed scrubber.

4.3.5.1 Daily average liquid flow rate of the scrubber. Said average shall be determined by monitoring the flow rate every 15 minutes to determine an hourly average and then averaging the days 24 hourly averages.

4.3.5.2 Daily pH of the scrubber liquid as measured in accordance with 4.2.3.

4.3.5.3 Completed maintenance and calibrations.

4.3.5.4 Copy of the site specific monitoring plan. The plan may refer to the manufacturers operation and maintenance manual or other documents for procedures covering operation, maintenance, calibrations and inspections.

4.3.5.5 Records of monitoring equipment downtime and corrective actions taken.

- 4.3.6. To demonstrate compliance with 4.1.9 and 4.1.10, the permittee shall record the date and duration of each scrubber maintenance (acid-washing) activity.

#### **4.4. Reporting Requirements**

- 4.4.1. Semiannual monitoring reports will be submitted on or before September 15 for the reporting period of January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from the permit requirements will be clearly identified in such reports.

### CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached \_\_\_\_\_, representing the period beginning \_\_\_\_\_ and ending \_\_\_\_\_, and any supporting documents appended hereto, is true, accurate, and complete.

Signature<sup>1</sup> \_\_\_\_\_  
(please use blue ink) Responsible Official or Authorized Representative Date

Name and Title \_\_\_\_\_  
(please print or type) Name Title

Telephone No. \_\_\_\_\_ Fax No. \_\_\_\_\_

<sup>1</sup> This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

- a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
  - (i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or
  - (ii) the delegation of authority to such representative is approved in advance by the Director;
- b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of USEPA); or
- d. The designated representative delegated with such authority and approved in advance by the Director.