

West Virginia Department of Environmental Protection
Earl Ray Tomblin
Governor

Division of Air Quality

Randy C. Huffman
Cabinet Secretary

Class I Administrative Update Permit



R13- 1517C

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 above-referenced facility 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
039-00003

A handwritten signature in blue ink, appearing to read "William F. Durham", written over a horizontal line.

William F. Durham
Director

Issued: March 27, 2015

This permit will supersede and replace Permit R13-1517B.

Facility Location: South Charleston, Kanawha County, West Virginia
Mailing Address: P.O. Box 8361, South Charleston, WV 25303
Facility Description: Specialty Surfactants Chemical Processing Unit
SIC Codes: 2869 – Chemical and Allied Products – Industrial Organic Chemicals, NEC
UTM Coordinates: 440.60 km Easting • 4,226.73 km Northing • Zone 1
Permit Type: Class I Administrative Update
Description of Change: Route Tank 8382 to the Specialty Surfactants Plant water scrubber and update the tank capacities as listed in the Emission Units Table 1.0 (the capacity changes are not a result of any physical or operational changes).

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.

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.

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1.0. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
8400	E-1081-3	8400 Reactor	1976	n/a	C-8110 and C-8130
	E-1084-1 & E-1084-2				n/a
8500	E-1081-3	8500 Reactor	1976	n/a	C-8110 and/or C-8130
	E-1085-1 & E-1085-2				n/a
8600	E-1081-3	8600 Reactor	1976	n/a	C-8130
	E-1084-2 & E-1086-1				n/a
8617	E-1081-3	8617 Reactor	1976	n/a	C-8130
	E-1084-2 & E-1086-3				n/a
8800	E-1081-3	8800 Reactor	1976	n/a	C-8130
	E-1088-1 & E-1084-2				n/a
8310	E-1081-3	Tank 8310	1992	9,300 gal	C-8110 and C-8130
8330	T-8330	Tank 8330	1976	9,818 gal	n/a
8340	E-1081-3	Tank 8340	1944	6,100 gal	C-8110 and C-8130
8353	E-1081-3	Tank 8353	1959	21,500 gal	C-8130
8363	E-1081-3	Tank 8363	1959	21,500 gal	C-8130
8370	E-1081-3	Tank 8370	1975	6,000 gal	C-8130
8528	E-1081-3	Tank 8528	1975	3,550 gal	C-8110 and C-8130
8621	E-1081-3	Tank 8621	1976	7,400 gal	C-8130 or none
8540	E-1081-3	Tank 8540	1994	7,400 gal	C-8110 and C-8130
8101	E-1081-2	Vessel R8101	1977	n/a	E-8105
D-8415	E-1084-2	Triad Hotwell	n/a	n/a	n/a
D-8515	E-1085-2	LCAP Hotwell	n/a	n/a	n/a
8636	E-1086-7	Glycol System C-8636	1975	n/a	n/a
8313	T-8313	Tank 8313	1959	21,500 gal	n/a
8314	T-8314	Tank 8314	1959	21,500 gal	n/a
8320	T-8320	Tank 8320	1959	6,100 gal	n/a

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
8321	T-8321	Tank 8321	1944	6,100 gal	n/a
8322	T-8322	Tank 8322	1944	6,100 gal	n/a
8323	T-8323	8323	1959	21,500 gal	n/a
8324	T-8324	Tank 8324	1959	21,500 gal	n/a
8331	T-8331	Tank 8331	1976	17,500 gal	n/a
8332	T-8332	Tank 8332	1976	16,000 gal	n/a
8333	T-8333	Tank 8333	1959	21,500 gal	n/a
8334	T-8334	Tank 8334	1959	21,500 gal	n/a
8341	T-8341	Tank 8341	1944	6,100 gal	n/a
8343	T-8343	Tank 8343	1959	21,500 gal	n/a
8344	T-8344	Tank 8344	1959	21,500 gal	n/a
8345	T-8345	Tank 8345	1959	21,500 gal	n/a
8346	T-8346	Tank 8346	1959	21,500 gal	n/a
8350	T-8350	Tank 8350	1944	6,100 gal	n/a
8351	T-8351	Tank 8351	1944	6,100 gal	n/a
8352	T-8352	Tank 8352	1945	5,000 gal	n/a
8354	T-8354	Tank 8354	1959	21,500 gal	n/a
8355	T-8355	Tank 8355	1959	21,500 gal	n/a
8356	T-8356	Tank 8356	1959	21,500 gal	n/a
8360	T-8360	Tank 8360	1962	6,100 gal	n/a
8361	T-8361	Tank 8361	1944	6,100 gal	n/a
8362	T-8362	Tank 8362	1942	10,500 gal	n/a
8364	T-8364	Tank 8364	1959	21,500 gal	n/a
8365	T-8365	Tank 8365	1959	n/a	n/a
8366	T-8366	Tank 8366	1959	n/a	n/a
8371	T-8371	Tank 8371	1979	6,100 gal	n/a
8372	T-8372	Tank 8372	1948	6,100 gal	n/a
8373	T-8373	Tank 8373	1952	18,000 gal	n/a
8375	T-8375	Tank 8375	1959	n/a	n/a
8376	T-8376	Tank 8376	1959	n/a	n/a
8380	T-8380	Tank 8380	1976	15,500 gal	n/a
8381	T-8381	Tank 8381	1976	15,500 gal	n/a
8382	E-1081-3	Tank 8382	1993	15,500 gal	C-8130
8383	T-8383	Tank 8383	1952	18,000 gal	n/a

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
8390	T-8390	Tank 8390	1976	15,000 gal	n/a
8391	T-8391	Tank 8391	1976	15,000 gal	n/a
8392	T-8392	Tank 8392	1977	17,500 gal	n/a
8393	T-8393	Tank 8393	1952	18,000 gal	n/a
8420	T-8420	Tank 8420	1976	18,600 gal	n/a
8433	T-8433	Tank 8433	1993	264 gal	n/a
8435	T-8435	Tank 8435	1993	264 gal	n/a
8517	T-8517	Tank 8517	1976	7,900 gal	n/a
8520	T-8520	Tank 8520	1993	300 gal	n/a
8706	T-8706	Tank 8706	1993	1,250 gal	n/a
8709	T-8709	Tank 8709	1993	1,250 gal	n/a
8721	T-8721	Tank 8721	n/a	n/a	n/a
8723	T-8723	Tank 8723	n/a	n/a	n/a
8725	T-8725	Tank 8725	n/a	n/a	n/a
8729	T-8729	Tank 8729	n/a	n/a	n/a
8738	T-8738	Tank 8738	n/a	n/a	n/a
8817	T-8817	Tank 8817	1976	7,400 gal	n/a
8835	T-8835	Tank 8835	1993	300 gal	n/a
L-1001	L-1001	Loading Rack L-1001	n/a	n/a	n/a
L-1002	L-1002	Loading Rack L-1002	n/a	n/a	n/a
L-1003	L-1003	Loading Rack L-1003	n/a	n/a	n/a
L-1004	L-1004	Loading Rack L-1004	n/a	n/a	n/a
L-1005	L-1005	Loading Rack L-1005	n/a	n/a	n/a
8701	E-1087-1	Tank 8701			C-1078-1
n/a	Fugitive	Hopper for Tank 8629	n/a	n/a	n/a
n/a	Fugitive	Funnel for T-8738	n/a	n/a	n/a
n/a	Fugitive	Hopper for Tank 8826	n/a	n/a	n/a
T-8825	Vent Return to Process	Tank 8825	n/a	n/a	n/a
n/a	Fugitive	Funnel for T-8835	n/a	n/a	n/a
C-1087-1	E-1087-1	Baghouse	n/a	n/a	n/a
C-8110	E-1081-3	Caustic Scrubber	n/a	n/a	n/a
C-8130	E-1081-3	Water Scrubber	n/a	n/a	n/a
E-8105	E-1081-2	Condenser	n/a	260 ft ² SA	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 (45CSR§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

CAAA	Clean Air Act Amendments	NO_x	Nitrogen Oxides
CBI	Confidential Business Information	NSPS	New Source Performance Standards
CEM	Continuous Emission Monitor	PM	Particulate Matter
CES	Certified Emission Statement	PM_{2.5}	Particulate Matter less than 2.5 µm in diameter
C.F.R. or CFR	Code of Federal Regulations	PM₁₀	Particulate Matter less than 10µm in diameter
CO	Carbon Monoxide	Ppb	Pounds per Batch
C.S.R. or CSR	Codes of State Rules	Pph	Pounds per Hour
DAQ	Division of Air Quality	Ppm	Parts per Million
DEP	Department of Environmental Protection	Ppm_v or ppmv	Parts per Million by Volume
dscm	Dry Standard Cubic Meter	PSD	Prevention of Significant Deterioration
FOIA	Freedom of Information Act	Psi	Pounds per Square Inch
HAP	Hazardous Air Pollutant	SIC	Standard Industrial Classification
HON	Hazardous Organic NESHAP	SIP	State Implementation Plan
HP	Horsepower	SO₂	Sulfur Dioxide
lbs/hr	Pounds per Hour	TAP	Toxic Air Pollutant
LDAR	Leak Detection and Repair	TPY	Tons per Year
M	Thousand	TRS	Total Reduced Sulfur
MACT	Maximum Achievable Control Technology	TSP	Total Suspended Particulate
MDHI	Maximum Design Heat Input	USEPA	United States Environmental Protection Agency
MM	Million	UTM	Universal Transverse Mercator
MMBtu/hr or mmbtu/hr	Million British Thermal Units per Hour	VEE	Visual Emissions Evaluation
MMCF/hr or mmcf/hr	Million Cubic Feet per Hour	VOC	Volatile Organic Compounds
NA	Not Applicable	VOL	Volatile Organic Liquids
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		

2.3. Authority

This permit is issued in accordance with West Virginia Air Pollution Control Act 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 supersedes and replaces previously issued Permit R13-1517B and those sections of Consent Orders CO-R21-98-22 and CO-R27-97-17-A(94-21) pertaining to the Specialty Surfactants Processing Unit. 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 other 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 Application R13-1517, R13-1517A, R13-1517B, R13-1517C, 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 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; and
- 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 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 emissions, 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 45CSR11.
[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
Charleston, WV 25304-2345

If to the US EPA:
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 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. Emissions to the atmosphere from the Specialty Surfactants Plant shall be limited to the hourly and annual emission limits established in Table 4.1.1.

Table 4.1.1. Emission Limits for Specialty Surfactants Process

Emission Point ID No.	Pollutant	Emission Limits	
		pph	tpy
E-1081-3, E-1081-2, E-1084-1, E-1084-2, E-1085-1, E-1085-2, E-1086-1, E-1086-3, E-1086-4, E-1088-1	SO ₂	—	0.25
	VOC	88.0	9.88
	Ethylene Oxide	0.65	0.0445
	Propylene Oxide	10.8	0.62
	Formaldehyde	0.17	0.0200
	Ethylene Dichloride	0.088	0.009
	THAP ¹	45.0	2.27
T-8313, T-8314, T-8320, T-8321, T-8322, T-8323, T-8324, T-8331, T-8332, T-8333, T-8334, T-8341, T-8343, T-8344, T-8345, T-8346, T-8350, T-8351, T-8352, T-8354, T-8355, T-8356, T-8360, T-8361, T-8362, T-8363, T-8364, T-8365, T-8366, T-8371, T-8372, T-8373, T-8375, T-8376, T-8380, T-8381, T-8383, T-8390, T-8391, T-8392, T-8393, T-8420, T-8433, T-8435, T-8520, T-8706, T-8709, T-8721, T-8723, T-8725, T-8817, T-8835, L-1001, L-1002, L-1003, L-1004, L-1005	PM ₁₀	0.2	0.02
	VOC	69.0	2.45
	Ethylene Oxide	0.09	0.02
	Formaldehyde	0.16	0.02
	Propylene Oxide	12.8	0.1209
	THAP ¹	26.0	0.17
	E-1086-7	Ethylene Glycol	0.01
T-8330	No Regulated Air Pollutant	NA	NA
T-8729	No Regulated Air Pollutant	NA	NA
T-8738	No Regulated Air Pollutant	NA	NA
E-1087-1	PM ₁₀	3.22	0.06

¹ THAP includes: ethylene oxide, propylene oxide, formaldehyde, ethylene dichloride, acetaldehyde, benzyl chloride, cresylic acid, 1,4-dioxane, ethylene glycol, glycol ethers, methanol, toluene, and other HAPs that could be present as trace constituents in raw materials.

[Compliance with this streamlined condition assures compliance with Sections I.4., I.5., and III.2. of CO-R27-97-17-A(94-21), Section III.3. of CO-R21-98-22, and 45CSR§§7-4.1. and -4.2.]

4.1.2. All emissions from the operation of the 8500 Reactor, with the exception of emissions from the production of X-200 Starter, Product CF-10, Product DF-12, or Product DF-18, shall be directed first through the Caustic Scrubber (C-8110) and then through the Water Scrubber (C-8130). Emissions from the production of X-200 Starter, Product CF-10, Product DF-12, and Product DF-18, may be directed from the 8500 Reactor directly to the Water Scrubber (C-8130).

4.1.3. The permittee shall ensure complete reaction by redundant measurement and interlock of starter charge, Ethylene Oxide and Propylene Oxide feed, temperature, and pressure. The process

interlock shall prevent venting until the preset criteria for complete reaction are met. These criteria must include positive isolation of Ethylene Oxide and Propylene Oxide feed.

- 4.1.4. **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.]

- 4.1.5. Emissions from the equipment identified in 5.1.1 above shall be routed to and controlled by those control devices identified in Section 1.0 under Specialty Surfactants prior to venting emissions to the atmosphere, excepting only periods of emergency repairs of control equipment and unanticipated control equipment failure for reasons beyond the reasonable control of the permittee, or as otherwise allowed by this permit or applicable regulation.

In the event that both the Caustic Scrubber (C-8110) and the Water Scrubber (C-8130) are off-line (e.g. due to plant turnaround), storage tank emissions that normally vent to the scrubber system are authorized to be discharged directly to the air. During such outages, there shall be no materials transferred into tanks that normally vent to the scrubber system.

Due to unavoidable malfunction of equipment or other conditions resulting in emissions exceeding the levels established in this permit, the Director may grant the permittee a variance to operate the related production equipment for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the permittee and approved by the Director. During such times, the permittee shall take all reasonable and practicable steps to minimize emissions.

[Compliance with this streamlined condition assures compliance with 45CSR§21-9.3. and 45CSR§27-12.1.]

- 4.1.6. The permittee shall implement a Leak Detection and Repair Program ("LDAR") compliant with the HON equipment leak requirements in 40 CFR 63, Subpart H for all equipment covered by 40 CFR 63, Subpart PPP (as well as equipment in TAP service). For the remainder of the Specialty Surfactants Plant, the permittee shall implement a LDAR Program compliant with 45CSR§21-37, excluding the fugitive emission components associated with the equipment listed below that have been determined as insignificant fugitive emission sources provided that the total organic liquid vapor pressure is maintained at or below 0.01 mm Hg at 20°C.

Tanks 8323, 8324, 8332, 8333, 8343, 8344, 8353, 8354, 8363, 8364, 8373, 8381, 8382, 8383, 8706, 8709, 8721, 8723, and 8725.

For equipment components in the Specialty Surfactants Plant that are in light liquid service less than 300 hours per year, the permittee shall implement a LDAR Program compliant with the heavy liquid provisions of 45CSR§21-37. Periodic reports required by the LDAR program may be submitted as part of the semi-annual periodic reports required by Section 4.5.3.

[Compliance with this streamlined condition assures compliance with 45CSR§ 27-4.1., Section III.3. of CO-R27-97-17-A(94-21), 45CSR§21-37, Section III.2. of CO-R21-98-22, and 40CFR§63.1434.]

- 4.1.7. The permittee shall comply with all applicable standards and requirements of 40CFR Part 63 Subpart PPP – “National Emission Standards for Hazardous Air Pollutants for Polyether Polyols Production”. The subpart includes requirements to limit HAP emissions from polyether polyols manufacturing units – which includes purification systems, reactors and their associated product separator and recovery devices, other associated unit operations, storage vessels, surge control vessels, bottoms receivers, product transfer racks, connected ducts and piping, combustion, recovery, or recapture devices or systems, and equipment leaks. This subpart also includes specific notification, testing, monitoring, recordkeeping, and reporting requirements. The pertinent sections of 40CFR§63.1420 applicable to this facility include, but are not limited to, the following:
[40CFR§63.1420]
- 4.1.7.1 The permittee shall reduce the total epoxide emissions from the applicable 40CFR63 Subpart PPP process vents of the Specialty Surfactants Plant by an aggregated 98 percent.
[40CFR§63.1425(b)(2)(ii)]
- 4.1.8. The permittee shall comply with all applicable requirements of 45CSR7 “To Prevent and Control Particulate Matter Air Pollution from Manufacturing Processes and Associated Operations”, with the exception of any more stringent limitations set forth in this permit.
- 4.1.8.1. The permittee shall not cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in Sections 4.1.8.2 and 4.1.8.3.
[45CSR§7-3.1.] {E-1087-1, T-8706, and T-8709}
- 4.1.8.2. The provisions of Section 4.1.8.1 shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.
[45CSR§7-3.2.] { E-1087-1, T-8706, and T-8709}
- 4.1.8.3. The permittee shall not cause, suffer, allow or permit visible emissions from any storage structure(s) associated with any manufacturing process(es) that pursuant to Section 4.1.8.4 is required to have a full enclosure and be equipped with a particulate matter control device.
[45CSR§7-3.7.]
- 4.1.8.4. The permittee shall not cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR§7-5.1]
- 4.1.9. The permittee shall comply with all applicable requirements of 45CSR21 “Regulation to Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds”, with the exception of any more stringent limitations set forth in this permit.
- 4.1.10. The permittee shall comply with all applicable requirements of 45CSR27 “To Prevent and Control the Emissions of Toxic Air Pollutants”, with the exception of any more stringent limitations set forth in this permit.

4.2. Monitoring Requirements

4.2.1. The permittee shall install, calibrate, and maintain in good working condition the following equipment and record and maintain data from these devices:

a. Caustic Scrubber (C-8110) – Ethylene Oxide and Propylene Oxide Venting

- i. Continuous monitoring and recording instrumentation with automatic alarm to ensure that scrubber liquid level is sufficient and add solution to maintain at least 100 gallons in the base section with the circulation pump on.
- ii. Scrubber circulation flow monitor, alarm, and interlock to prevent venting at less than 6 gpm (3,000 pph) of water flow.
- iii. Scrubber liquid temperature monitor, alarm, and interlock to prevent venting at less than 75°C, (167°F) base liquid temperature.
- iv. 8400 Reactor pressure monitor to automatically control vapor flow to the packed bed scrubber at 120 scfm or less.
- v. Scrubber differential pressure monitor, alarm, and interlock to override reactor pressure control to maintain scrubber differential pressure at 25 inches of water or lower.
- vi. The permittee shall sample, titrate, and record scrubber caustic concentration once per shift during operation and add NaOH as required to maintain at least 2% NaOH concentration.
- vii. The permittee shall blow down half of the scrubber liquid and replace with fresh solution at least weekly. This activity must be performed during periods when the 8400 Reactor is not venting.

b. Water Scrubber (C-8130)

- i. Continuous monitoring and recording instrumentation with automatic alarm to ensure that scrubber liquid level is sufficient and add solution to maintain at least 100 gallons in the base section with the circulation pump on.
- ii. Scrubber make-up water flow monitor, alarm, and interlock to prevent venting at less than 6 gpm (3,000 pph) make-up flow.
- iii. Scrubber liquid temperature monitor, alarm, and interlock to prevent venting at greater than 35°C (95°F) base liquid temperature.
- iv. Scrubber differential pressure monitor, alarm, and interlock to override reactor pressure control to maintain scrubber differential pressure at 25 inches of water or lower.

4.2.2. The permittee shall monitor one of the parameters listed in paragraphs a. through c.:

- a. Time from the end of the epoxide feed to the end of the Extended Cook-Out ("ECO");
- b. The epoxide partial pressure in the closed reactor;
- c. Direct measurement of epoxide concentration in the reactor liquid at the end of the ECO, when the reactor liquid is still in the reactor, or after the reactor liquid has been transferred to another vessel.

[40CFR§63.1427(i)]

4.2.3. For the purpose of determining compliance with the opacity limits of 45CSR7, the permittee shall conduct visible emission checks and/or opacity monitoring and recordkeeping for all emission sources subject to an opacity limit.

The visible emission check shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40CFR Part 60, Appendix

A, Method 22 or from the lecture portion of the 40CFR Part 60, Appendix A, Method 9 certification course.

Visible emission checks shall be conducted each time that solid material is unloaded to Vessel 8701. These checks shall be performed at each source (stack, transfer point, fugitive emission source, etc.) for a sufficient time interval, but no less than one (1) minute, to determine if any visible emissions are present. Visible emission checks shall be performed during periods of facility operation and appropriate weather conditions.

If visible emissions are present, the permittee shall conduct an opacity reading at that source(s) using the procedures and requirements of 45CSR§7A as soon as practicable, but within seventy-two (72) hours of the visual emission check unless corrective action is taken to eliminate the visible emissions.

[45CSR§7A-2.1]{E-1087-1, T-8706, and T-8709}

4.3. Testing Requirements

4.3.1. At the request of the Secretary a performance test shall be conducted to confirm compliance with emission limitations set forth in Section 4.1.1., and to confirm correlation between on-line computer simulation determinations and actual measurements during subject performance tests. Results of such performance tests shall be submitted to the Director of the Division of Air Quality within ninety (90) days following the completion of the aforementioned tests. Tests shall be conducted under those production conditions in which peak emission rates will occur. Thirty (30) days prior to conducting such performance tests, a test protocol shall be submitted to the Director for his approval. The Director must be notified at least fifteen (15) days in advance of the actual dates and times during which the tests will be conducted.

[45CSR§13-6.1]

4.3.2. *Stack testing.* At such reasonable times as the Secretary may designate, the permittee may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases when the Secretary has reason to believe that an emission limitation is being violated. For cause, the Secretary may request the permittee to install such stack gas monitoring devices as the Secretary deems necessary to determine continuing compliance. The data from such devices shall be readily available for review on-site or at such other reasonable location that the Secretary may specify. At the request of the Secretary, such data shall be made available for inspection or copying and the Secretary may require periodic submission of excess emission reports.

[Compliance with this streamlined requirement assures compliance with 45CSR§7-8.1. and 45CSR13-6.1.1 {E-1087-1, T-8706, and T-8709}]

4.3.3. *Compliance testing.* Any such test to determine compliance with particulate matter limitations set forth in Section 4.1.1 shall be conducted in accordance with Method 5 of 40CFR60 Appendix A or Method 201 or 201A of 40CFR§51. All such compliance tests must consist of not less than three (3) test runs; any test run duration shall not be less than sixty (60) minutes and no less than thirty (30) standard cubic feet of exhaust gas must be sampled during each test run. Such tests shall be conducted under such reasonable operating conditions as the Secretary may specify. The Secretary, or a duly authorized representative, may option to witness or conduct such stack tests. Should the Secretary exercise this option to conduct such tests, the registrant shall provide all necessary sampling connections and sampling ports located in a manner as the Secretary may require, power for test equipment and required safety equipment in place such as scaffolding, railings and ladders in order to comply with generally accepted good safety practices.

[45CSR§7-8.1]{E-1087-1, T-8706, and T-8709}

4.3.4. Any stack serving any process source operation or air pollution control device on any process source operation shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures.

[45CSR§7-4.12.] {E-1087-1, T-8706, and T-8709}

- 4.3.5. *Opacity testing.* Any test to determine compliance with the visible emission (opacity) limitations set forth in Sections 4.1.8, except as provided by Condition 4.2.3., shall be conducted by a qualified visible emission observer in accordance with 45CSR7A – “Compliance Test Procedures for 45CSR7 – *To Prevent and Control Particulate Air Pollution from Manufacturing Process Operations*” and Method 22 of 40CFR60 Appendix A. Nothing in this section, however, shall preclude any permittee or the Secretary from using opacity data from a properly installed, calibrated, maintained and operated continuous opacity monitor as evidence to demonstrate compliance or a violation of visible emission requirements. If continuous opacity monitor data results are submitted when determining compliance with visible emission limitations for a period of time during which 45CSR7A or Method 22 data indicates noncompliance, the 45CSR7A or Method 22 data shall be used to determine compliance with the visible emission limitations.
{E-1087-1, T-8706, and T-8709}
- 4.3.6. *Notification of compliance testing.* For any stack emission compliance test to be conducted by the permittee as set forth in Section 4.3, a test protocol shall be submitted to the Secretary at least thirty (30) calendar days prior to the scheduled date of the test. Such compliance test protocol shall be subject to approval by the Secretary. The permittee shall notify the Secretary at least fifteen (15) days in advance of actual test dates and times during which the test (or tests) will be conducted.
{E-1087-1, T-8706, and T-8709}
- 4.3.7. *Alternative test methods.* The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions.
[45CSR§7-8.2] {E-1087-1, T-8706, and T-8709}

4.4. Recordkeeping Requirements

- 4.4.1. **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.
- 4.4.2. **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.
- 4.4.3. **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.
- 4.4.4. Compliance with Sections 4.4.2 and 4.4.3 may be shown by keeping similar records required by the requirements of the Startup, Shutdown, and Malfunction Plan as contained in 40CFR63 Subpart A and as may be amended by specific MACT subpart requirements.
- 4.4.5. To ensure proper operation of Reactor 8400 the permittee shall verify and record that the correct amount of active catalyst has been charged for each batch, except for those reactions which are self-initiating.
- 4.4.6. Unless otherwise specified in this permit, the permittee shall keep copies of all applicable records and reports required by section 5 of this permit and by 40CFR63 Subpart PPP for at least five (5) years. All applicable records shall be maintained in such a manner that they can be readily accessed. The most recent six months of records shall be retained on site or shall be accessible from a central location by computer or other means that provide access within a reasonable time. Access to the most recent six months of records required by 40CFR63 Subpart PPP must be provided within two hours after a request. The remaining four and one-half years of records may be retained offsite. If the permittee submits copies of reports to the WV DAQ and US EPA Regional Office, the permittee is not required to maintain copies of reports. Records may be maintained in hard copy or computer-readable form including, but not limited to, on microfilm, computer, floppy disk, magnetic tape, or microfiche.
[Compliance with this streamlined limit assures compliance with 40CFR§63.1439(a) and 45CSR§21-5.3.b.1.]
- 4.4.7. The permittee shall maintain the records specified in paragraphs a. and b. below, for each product class. The permittee shall also maintain the records related to the initial determination of the percent epoxide emission reduction specified in paragraphs c. through j. below, as applicable, for each product class.
- a. Operating conditions of the product class, including:
 - i. Pressure decay curve;
 - ii. Minimum reaction temperature;
 - iii. Number of hydrogen atoms in the raw material;
 - iv. Minimum catalyst concentration;
 - v. Ratio of Ethylene Oxide/Propylene Oxide at the end of the epoxide feed; and
 - vi. Reaction conditions, including the size of the reactor or batch.

- b. A listing of all products in the product class, along with the information specified in paragraphs a.i. through a.vi. of this section, for each product.
 - c. The concentration of epoxide at the end of the epoxide feed, determined in accordance with 40CFR§63.1427(b)(1).
 - d. The concentration of epoxide at the onset of the ECO, determined in accordance with 40CFR§63.1427(c).
 - e. The uncontrolled epoxide emissions at the onset of the ECO, determined in accordance with 40CFR§63.1427(c)(1). The records shall also include all the background data, measurements, and assumptions used to calculate the uncontrolled epoxide emissions.
 - f. The epoxide emissions at the end of the ECO, determined in accordance with 40CFR§63.1427(d)(1). The records shall also include all the background data, measurements, and assumptions used to calculate the epoxide emissions.
 - g. The percent epoxide reduction for the batch cycle, determined in accordance with 40CFR§63.1427(e)(1). The records shall also include all the background data, measurements, and assumptions used to calculate the epoxide emissions.
 - h. The parameter level, established in accordance with 40CFR§63.1427(i)(3).
 - i. If epoxide emissions occur before the end of the ECO, the permittee shall maintain records of the time and duration of all such emission episodes that occur during the initial demonstration of batch cycle efficiency.
 - j. If the conditions in 40CFR§63.1427(b)(2)(I), (II) and, (111) of this section are met, the owner or operator is not required to maintain the records specified in paragraphs c. and d., but shall maintain the records specified in paragraphs j.i., j.ii., and j.iii. of this section.
 - i. The reactor epoxide partial pressure at the following times:
 - a. At the end of the epoxide feed, determined in accordance with 40CFR§63.1427(b)(2);
 - b. At the onset of the ECO, established in accordance with 40CFR§63.1427(c)(2);
 - c. At the end of the ECO, determined in accordance with 40CFR§63.1427(d)(2).
 - ii. The percent epoxide reduction for the batch cycle, determined in accordance with paragraph 40CFR§63.1427(e)(2). The records shall also include all the measurements and assumptions used to calculate the percent reduction.
 - iii. The reactor epoxide partial pressure at the end of the ECO.
[40CFR§63.1427(j)(1)]
- 4.4.8. The permittee shall maintain the following records for each batch cycle: the product being produced and the product class to which it belongs, and a record of the value of the parameter monitored in accordance with Section 5.2.2. In addition, if epoxide emissions occur before the end of the ECO, the permittee shall maintain records of the time and duration of all such emission episodes.
[40CFR§63.1427(j)(2)]
- 4.4.9. The permittee shall maintain records of all monitoring data required by Section 4.2.3 documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective

measures taken or planned. An example form is supplied as Appendix A. Should a visible emission observation be required to be performed per the requirements specified in 45CSR7A, the data records of each observation shall be maintained per the requirements of 45CSR7A. For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

4.5. Reporting Requirements

- 4.5.1. On a semi-annual basis, the permittee shall report the emission rates of ethylene oxide and propylene oxide, from process vents, as calculated by computer simulation (adjusted if necessary to reflect any changes required by more recent or accurate stack test data) based on actual production data.
- 4.5.2. The permittee, on a semi-annual basis, shall file reports which identify all periods of time during which compliance was not achieved with the operating parameters shown in Section 4.2.1 above. Such reports shall be certified to be accurate and true by a corporate official or his or her designee and filed within sixty (60) days of the end of each semi-annual reporting period. In any such aforementioned period of time, the permittee shall provide information detailing reasons for such excursions and corrective action taken. If there are periods of non-compliance, the report shall so certify. The report(s) may be submitted as part of the Title V semi-annual periodic report.
- 4.5.3. The permittee shall submit semi-annual Periodic Reports as specified in paragraphs a. through f. of this section. Each report shall be submitted no later than sixty (60) days after the end of each six-month period. The semi-annual Periodic Report shall cover the preceding six-month period. This report may be submitted as part of the Title V semi-annual periodic report.
 - a. For equipment leaks, the permittee shall submit the information specified in 40CFR§63.1434(f).
 - b. Reports of each batch cycle for which an ECO excursion occurred, as defined in 40CFR§63.1427(i)(3).
 - c. Notification of each batch cycle when the time and duration of epoxide emissions before the end of the ECO, recorded in accordance with Section 4.4.7., exceed the time and duration of the emission episodes during the initial epoxide emission percentage reduction determination, as recorded in Section 4.4.6.h.
 - d. If any performance tests are reported in a Periodic Report, the following information shall be included:
 - i. One complete test report shall be submitted for each test method used for a particular kind of emission point tested. A complete test report shall contain the information specified in 40CFR§63.1439(e)(5)(i)(B).
 - ii. For additional tests performed for the same kind of emission point using the same method, results and any other information required by the test method to be in the test report shall be submitted, but a complete test report is not required.
 - e. The results for each change made to a primary product determination for a PMPU made under 40CFR§63.1420(e)(3) or (10).
 - f. The results for each reevaluation of the applicability of 40CFR63 Subpart PPP to a storage vessel that begins receiving material from (or sending material to) a process unit that was not included in the initial determination, or a storage vessel that ceases to receive material from

(or send material to) a process unit that was included in the initial determination, in accordance with 40CFR§63.1420(f)(8).

[Compliance with this streamlined limit assures compliance with 40CFR§§63.1427(k)(3), and .1434(f), .1439(e)(6)]

- 4.5.4. The permittee shall comply with the reporting requirements of 40CFR§63.1427(l) – “New polyether polyol products” and 40CFR§63.1427(m) – “Polyether polyol product changes”.
- 4.5.5. The permittee shall submit semi-annual monitoring reports for equipment components subject to the LDAR requirements of 45CSR§21-37 covered under Section 4.1.6. These reports may be submitted on the same schedule as the reports provided per Section 4.5.3. Semi-annual monitoring reports provided per Section 4.5.3, and required by 40CFR Part 63, Subpart PPP, will satisfy the equipment leak monitoring reports required by 45CSR27.

[Compliance with this streamlined limit assures compliance with 45CSR§27-4, 45CSR§21-37.11, and 40CFR§63.1434(f)]

- 4.5.6. Any violation(s) of the allowable visible emission requirement for any emission source discovered during observations using 45CSR7A must be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.

APPENDIX A

Weekly/Monthly/Quarterly Opacity Record
Union Carbide Corporation; South Charleston
Plant ID No. 039-00003; Permit No. R13-1517C

Date of Observation: _____
Date Entered by: _____
Reviewed by: _____
Date Reviewed: _____

Describe the General Weather Conditions:

Stack ID / Vent ID / Emission Point ID	
Stack / Vent / Emission Point Description	
Time of Observation	
Visible Emissions? Yes / No	
Consecutive Months of Visible Emissions	
Comments	

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.

Signature¹

(please use blue ink)

Responsible Official or Authorized Representative

Date

Name & Title

(please print or type)

Name

Title

Telephone No. _____

Fax No. _____

¹ 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 U.S. EPA); or
- d. The designated representative delegated with such authority and approved in advance by the Director.