West Virginia Department of Environmental Protection
Harold D. Ward
Cabinet Secretary

Modification Permit

R13- 2093I

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, Permission to Commence Construction, 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:

Optima Belle LLC
Belle Plant, Belle, WV
039-000663

Laura M. Crowder
Director, Division of Air Quality

Issued: DRAFT

This permit will supercede and replace Permit R13-2093H.

Facility Location:	Belle, Kanawha County, West Virginia
Mailing Address:	901 W. DuPont Avenue, Belle, WV 25015
Facility Description:	Chemical Production Facility
NAICS Code:	325199
UTM Coordinates:	4,232.60 km Northing • 451.90 km Easting • Zone 17
Permit Type:	Modification
Description of Change:	This modification is for adding equipment for a new chemical process and removing equipment from the permit that was damaged and removed from the site.

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.

As a result of the granting of this permit, the source is not subject to 45CSR30.

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1.0. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Small Lots Manufacturing					
103	104.014	A Tank (BI Tank)	2002 (relocated)	<20,000 gal	003, 009, 010
012	104.014	Tank (-20 Brine Tank)	1999	<20,000 gal	009, 010
210	107.022	Packaging Unit	2005 (replacement)		023
116A	107.020	Solids Charge Station			116
115A	104.003B	Solids Charge Station (Rx6)	1988		115
901	104.014	Bulk Liquid Transfer	1981		009, 010
002	104.014[1] 104.014K*	Dryer	1977		004, 009, 010
013	104.006	Tank (-30 Brine Tank)	1977	<20,000 gal	None
104	104.014	Tank	2005	<20,000 gal	009, 010
108	104.014	Tank (FWT)	1961	<20,000 gal	009, 010
108L	104.014	Transfer Rack	2007		009, 010
108L-A	108L-A	Drum/Tote Filling (at Scales)	1961		
108L-B	108L-B	Drum/Tote Filling Reactor (1st Floor)	1961		
108L-C	108L-C	Drum/Tote Filling Reactor (Reactor 10)	2018		
108L-D	108L-D	Drum/Tote Filling Tank (FWT)	1961		
109	104.014	Tank (Extraction Tank)	2019	2,000 gal	009, 010
109L/WWL	104.014	Transfer Rack	1968		009, 010
112	104.014[1] 104.014K*	Tank (J Tank)	1951	<20,000 gal	009, 010
114A	104.003	Solids Charge Station (Rx3)	2005 (replacement)		114
201	104.014[1] 104.014K*	Centrifuge	1961		009, 010
201A	104.014	Bin			009

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
202	104.014[1] 104.014K*	Tank (MLDT)	1988	<20,000 gal	009, 010
203	104.014	Reactor #3	2003		003, 009, 010
203C	104.014	Condenser	1977		009
206	104.014	Reactor #2	1992		003, 009, 010
206PC	104.014	Reactor #2 Primary Condenser	2017		003, 009, 010
206SC	104.014	Reactor #2 Secondary Condenser	2017		003, 009, 010
208	104.014[1] 104.014K*	Reactor #6	1977		009, 010
208P	104.014	Pump			009, 010
208C	104.014	Condenser			009, 010
219	104.014	Reactor #5	1984		003, 009, 010
219C	104.014	Reactor #5 Condenser	2017		003, 009, 010
219S	104-014	Reactor #5 Stripper	2023		003, 009, 010
AC1-3	AC1-3	Alumina Columns	2023		
MSC1-2	MSC1-2	Mole Sieve Columns	2023		
BDS	BDS	Bag Dump Station	2023		DC
R-11	104-014	Reactor #11	2023	4,000 gal	003, 009, 010
R-12	104-014	Reactor #12	2023	4,000 gal	003, 009, 010
R-13	104-014	Reactor #13	2023	3,000 gal	003, 009, 010
R-13C	104-014	Reactor #13 Condenser	2023		003, 009, 010
R-14	104-014	Reactor#14	2023	2,000 gal	003, 009, 010

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
R-15	104-014	Reactor #15	2023	4,000 gal	003, 009, 010
R-16	104-014	Reactor #16	2023	4,000 gal	003, 009, 010
R-17	104-014	Reactor #17	2023	4,000 gal	003, 009, 010
R-18	104-014	Reactor #18	2023	4,000 gal	003, 009, 010
R-19	104-014	Reactor #19	2023	4,000 gal	003, 009, 010
RL114	104-014	Rail Loading at Building 114	Existing/2023		Vapor Returned to R-14, 003, 009, 010
V80	104-014	Charge Vessel V80	2023	750 gal	003, 009, 010
V90	104-014	Charge Vessel V90	2023	750 gal	003, 009, 010
FD2	FD2	Filter Dryer 2	2023	5.0 sq meter	Dust Collector Vapor to R-13
VP	104-014	Vacuum Pump	2023		003, 009, 010
C2	C2	Centrifuge #2	2023		
WCB	WCB	Wet Cake Bin	2023		
CT	CT	Centrate Tank	2023	6,000 gal	
DR	DR	Dryer	2023	150 cu ft	Vapor to R-14
WCC	WCC	Wet Cake Conveyor	2023		
FL1	FL1	Filter 1	2023		
FL2	FL2	Filter 2	2023		
FL3	FL3	Filter 3	2023		
FL4	FL4	Filter 4	2023		
FL5	FL5	Filter 5	2023		

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
FL6	FL6	Filter 6	2023		
FL7	FL7	Filter 7	2023		
TLU3	TLU3	Truck Loading and Unloading	2023		
226	104.014	Caustic Tank (ISO Tank Storing Caustic)	1988	<20,000 gal	009, 010
229	104.014	Tanker Truck	2016		009, 010
232C	104.014	Condenser	2016		009, 010
234A	107.03	Super Sack/Drum Loading from Filter Dryer	2018		116 or 117
237	104.014	Reactor #10	2018 2022 Relocated		009 010
SLM0056	N/A	Caustic Weigh Tank	2017	<20,000 gal	
SLM0071	N/A	Caustic Weigh Tank	2017	<20,000 gal	
SLM0070	104.014	Dean-Stark Tank	2017	<20,000 gal	003, 009, 010
SLM0106	Used during Spills Only, No ID Assigned	Spill Protection Tank	1980	<20,000 gal	
SLM0954	104.014 (if needed)	M/L Waste Tank	1939	<20,000 gal	None, 009 if needed
SLM1104	N/A	Caustic Scrubber Surge Tank	1991	<20,000 gal	Part of Main Scrubber 003
Fugitive	Fugitive	Two (2) Polish Filters (Change Outs)	2016		
Fugitive	Fugitive	One (1) Filter	2016		
Control Devices					
023	107.022	Dust Collector	2005 (replacement)	250 cfm	
116	107.020	Dust Collector	1988	2800 cfm	
115	104.003B	Dust Collector	1978	1300 cfm	

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
009	104.014	Incinerator	1977	10 MMBTU/hr	
010	104.014	Incinerator Scrubber	1977	80 gpm	
003	104.014	Main Scrubber	2007	≥ 150 gpm	
004	104.014[1] 104.014K*	Dryer Condenser	1977	113 cu ft	
114	104.003	Dust Collector	2001	400 cfm	
DCFD	DCFD	Dust Collector	2023		
Building 114					
HK004	141.012	Tank wagon storage	H: 1989 K: Suppliers		HKCD10
HK006	141.012	Tank car or truck storage	Suppliers		HKCD06
HK007	141.007	Tank car	2005		NONE
HK008	141.008	Tank car	2005		NONE
HK009	141.009	Storage Tank (Cyan Tk)	2011	<20,000 gal	NONE
HK010	141.010	Column	1970		NONE
HK013	141.013	Tank (NaCl Brine)	1978	<20,000 gal	NONE
HK014	141.014	Tank (Cyan HUT)	1970	<20,000 gal	NONE
HK015	141.015	Non VOC Storage tank (NaOH Tk)	1987	51,000 gal	NONE
HK016	141.016	Non VOC Tank (Proc Water Tk)	1975	<20,000 gal	NONE
HK101	141.100	Reactor	2003		HKCD03 Or HKCD01/ HKCD02
HK102	141.100	Condenser	1974		HKCD01 HKCD02
HK103	141.100	Reactor	1974		HKCD01 HKCD02
HK104	151.101	Non VOC storage tank (HCl Tk)	2004	35,000 gal	HKCD04
HK105		Column cooler	1974		NONE

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
HK106	141.002	Product loading	1982		NONE
HK107		Building blower	2010	6000 cfm	NONE
HK108	141.011	Non VOC Storage tank (Amm Hyd Tk)	1987	<20,000 gal	HKCD09
Control Devices					
HKCD01	141.100	Thermal oxidizer	1998	7.5 MMBtu/hr	
HKCD02	141.100	Thermal oxidizer scrubber	1998	150 gal/min	
HKCD03	141.001	Scrubber	2008	205 gal.	
HKCD04	151.101	Tank scrubber	2004	300 cfm	
HKCD05	141.004	Scrubber	1974	10 gpm	
HKCD06	141.012	Scrubber	2002	25 gpm	
HKCD07	141.100	Tank	1975	160,000 gal	
HKCD08	141.100	Column	1975	15,000 lb/hr	
HKCD09	141.101	Scrubber	1970		
HKCD10	141.012	Carbon Absorber	2005		

[1] - During Glypure production, the emission source vents directly to atmosphere.

K* - This is a normal emission point for the emission units listed above. The “K*”has been added to indicate that this emission point is for the Krovar® Technical process. During the Krovar® Technical process, the sources vent directly to the atmosphere.

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	**PM_{10}**	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	**SO_2**	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		
MMBtu/hr ***or*** **mmbtu/hr**	Million British Thermal Units per Hour	**UTM**	Universal Transverse Mercator
MMCF/hr ***or*** **mmcf/hr**	Million Cubic Feet per Hour	**VEE**	Visual Emissions Evaluation
NA	Not Applicable	**VOC**	Volatile Organic Compounds
NAAQS	National Ambient Air Quality Standards	**VOL**	Volatile Organic Liquids
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 R13-2093H. 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 R13-2093E thru R13-2093H, R13-0882 thru R13-0882Q, R13-2093 thru R13-2093I 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§§13-5.10 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. Reserved

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 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 sourcespecific 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 sourcespecific 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 or by private carrier with postage prepaid to the address(es), or submitted in electronic format by email as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

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

DAQ Compliance and Enforcement[1]:
DEPAirQualityReports@wv.gov

US EPA:
Section Chief
U.S. Environmental Protection Agency, Region III
Enforcement and Compliance Assurance Division
Air, RCRA and Toxics Branch
Section (3ED21)
Four Penn Center
1600 John F Kennedy Boulevard
Philadelphia, PA 19103-2852

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

3.5.4. **Operating Fee**

3.5.4.1. In accordance with 45CSR22 – Air Quality Management Fee Program, the permittee shall not operate nor cause to operate the permitted facility or other associated facilities on the same or contiguous sites comprising the plant without first obtaining and having in current effect a Certificate to Operate (CTO). Such Certificate to Operate (CTO) shall be renewed annually, shall be maintained on the premises for which the certificate 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. The Small Lots Manufacturing (SLM) unit is defined as the totality of the process equipment listed in Section 1.0: SLM. This process equipment may be operated independently, integrated, or reconfigured as necessary for the specific production needs.

4.1.2. Production in the SLM unit shall be limited to the products that meet the emissions limits in Table 4.1.2.1.

Table 4.1.2.1. SLM Emissions Limitations

Emission Point I.D.	Pollutant	Controlled	
		lb/hr (Max Rate)	ton/yr
Section 1.0 Emission Units and Emission Units with Control Devices Operational as Required Above.	PM	4.08	6.23
	PM10	1.99	3.41
	PM2.5	0.36	1.46
	SO_2	0.04	0.13
	NOx	0.99	4.34
	CO	0.83	3.64
	VOC	22.89	13.38
	Acetonitrile	0.05	0.02
	Benzene	0.01	0.01
	Butyl Carbitol	0.01	0.01
	Catechol	0.16	0.03
	Chromium Compounds	0.89	0.05
	Ethylbenzene	0.01	0.01
	Hexane	0.96	0.27
	Hydrogen Chloride	0.06	0.05
	Methanol	4.77	2.92
	Methylene Chloride	1.87	0.23
	Methyl Tert-Butyl Ether	0.86	0.19
	p-Xylene	0.04	0.01
	Styrene	0.01	0.01
	Titanium Tetrachloride	0.01	0.01
	Toluene	1.77	0.34
	HAPS (MAX)*	7.77	3.43

*The HAPs (MAX) is the sum of the controlled HAPs emissions per processes and not the sum of individual HAPs.

4.1.2.2. The facility-wide emission rate of HAPs (excluding combustion related HAPs) including Building 216 (Small Lots Manufacturing) and Building 114 (Chemical Manufacturing Unit) shall not equal or exceed, ten (10) tons per year of any individual HAP nor 25 tons per year of aggregate HAPs. The listed HAPS in Table 4.1.2.1 are the known HAPs to be emitted from the source. Use of (or release of) any material containing any constituent identified in Section 112(b) of the 1990 Clean Air Act Amendments as a HAP and not listed above shall be in accordance with the following:

a. The permittee shall notify the Director in writing of the material to be used and the HAP(s) contained therein within thirty (30) days after the initial use of the material. Additionally, an MSDS (SDS) sheet for the material shall be supplied at this time to the Director. The notification should include the products that are being produced with the utilization of the material(s).

b. An estimate of emissions associated with the use of the material(s)/production of a product or process shall be determined and incorporated into the record keeping requirements contained herein prior to placing the material into utilization or initiating a new production process.

c. The emission rate of VOC(s) shall not exceed the VOC rate in Table 4.1.2.1. Compliance with the annual emission limits shall be determined using 12-month rolling totals.

d. The emission rate of the HAP(s) contained within the material shall not equal or exceed, on a per-HAP basis, ten (10) tons per year. Compliance with the annual emission limits shall be determined using rolling yearly totals.

e. No new material containing any toxic air pollutant (TAP), as defined by West Virginia Legislative Rule 45CSR27, Section 2.10, shall be used without prior approval of the Director of the Division of Air Quality.

4.1.3. During periods of required operation, the incinerator (009) shall be operated in accordance to the requirements set forth in Section 4.1.3.1. through 4.1.3.3. of this permit.

4.1.3.1. The incinerator (009) shall operate at a temperature maintained between 1,800° F and 2,200° F.

4.1.3.2. The incinerator (009) shall operate with an air flow greater than 8 inches of water column per pressure switch setting. An interlock shall be installed and maintained for the purpose of shutting the process down in the event the air flow pressure falls to 8 inches of water column pressure or below.

4.1.4. During periods of required operation, the incinerator scrubber (010) shall be operated in accordance to the requirements set forth in Section 4.1.4.1. and 4.1.4.2. of this permit.

4.1.4.1. The incinerator scrubber (010) shall operate with a scrubber solution pH level greater than 7.0.

4.1.4.2. The incinerator scrubber (010) shall operate with a scrubber solution flow rate greater than 25 gallons per minute.

4.1.5. During periods of required operation, the Main Scrubber (003) shall be operated in accordance to the requirements set forth in Section 4.1.5.1. and 4.1.5.2. of this permit.

4.1.5.1. The Main Scrubber (003) shall operate with a scrubber solution pH level greater than 7.0 on a rolling hourly average.

4.1.5.2. The Main Scrubber (003) shall operate with a scrubber solution flow rate greater than 150 gallons per minute.

4.1.6. During periods of required operation, the Dryer Condenser (004) shall be operated with a condensate temperature maintained below 40° C.

4.1.7. The permitted facility shall comply with the following:

4.1.7.1. The permittee shall maintain the aggregated hourly and annual control efficiency of 90% or greater, on a site-wide basis, for the following sources listed in Table 4.1.7.1.

Table 4.1.7.1. - §45-21-40.1.a Sources

Equipment ID Per R13-0882D (Unless Otherwise Noted Below)	Equipment ID per Consent Order CO-R21-97-31	Control Plan (RACT or RACM)
003	003	RACM
103	103	RACM
104	104	RACM
110	110	RACM
201	201	RACM
203	203	RACM
206	206	RACM
208	208	RACM
219	301	RACM
226	302	RACM
237 per R13-2093H	204	RACM
901	304	RACM
305	305	RACM

Note: The sources listed above reference maintenance events and short duration activities.

4.1.7.2. The emission limits specified by Section 4.1.2. of this permit and the following requirements supercede and replace the equivalent requirements pertaining to the aforementioned sources contained in Consent Order CO-R21-97-31. All other provisions of Consent Order CO-R21-97-31 are intact and valid.

4.1.7.2.1. On or after May 1, 1996, construction or modification of any emission source having maximum theoretical emissions (MTE) of VOCs equaling or exceeding six pounds per hour (6 pph) shall require the prior approval by the Director of an emission control plan that meets the definition of reasonably available control technology (RACT) on a case-by-case basis for both fugitive and non-fugitive VOC emissions from such source.

All RACT control plans for sources constructed or modified on or after May 1, 1996 shall be embodied in a permit in accordance with 45CSR13 or 45CSR30.

4.1.7.2.2. Physical changes to or changes in the method of operation of an existing emission source listed or required to be listed as part of the facility-wide control efficiency plan which do not result in an increase in it's potential to emit VOCs in a cumulative amount (with cumulative accounting commencing on December 3, 1997) of two pounds per hour (2 pph) or five tons per year (5 tpy) or more, shall not require submittal of a RACT plan, provided that the company can provide information upon request to demonstrate compliance with it's facility-wide VOC emission reduction requirement (RACM or AERP).

4.1.7.2.3. If a modification to an existing source with current maximum theoretical emissions below the threshold of six pounds per hour (6 pph) of VOCs, causes an increase in the MTE that results in the source exceeding the six pounds per hour (6 pph) level for the first time, but the increase is less than two pounds per hour (2 pph) or five tons per year (5 tpy), the permittee shall not be required to submit RACT plans.

4.1.7.2.4. Unless otherwise expressly exempted from Leak Detection and Repair (LDAR) requirements in this permit, the permittee shall implement and maintain LDAR programs for the reduction of fugitive VOC emissions in all manufacturing process units subject to 45CSR§21-40 producing a product or products intermediate or final, in excess of 1000 megagrams (1100 tons) per year in accordance with the applicable methods and criteria of 45CSR§21-37 or alternate procedures approved by the Director. Procedures approved by the Director include 40 CFR Part 60 Subpart VV, 40 CFR Part 61 Subpart V, 40 CFR Part 63 Subpart H, 40 CFR Part 63 Subpart TT, 40 CFR Part 63 Subpart UU, 40 CFR Part 65 Subpart F, and 40 CFR Part 265 Subpart CC. This requirement shall apply to all units irrespective of whether or not such units produce as intermediates or final products, substances on the lists contained with 40 CFR Part 60, 40 CFR Part 61, or 40 CFR Part 63.

4.1.7.2.5. Manufacturing process units may be exempted upon written request of the permittee to the Director. Exempted units are exempted from the frequency of testing as described in 45CSR§21-37, however, LDAR testing of this unit or certification of emission using approved fugitive emission factors will be required every three years, or upon request by the Director or his duly authorized representative. Waiver or rescheduling of LDAR testing every three years may be granted by the Director if written request and justification are submitted by the permittee. Units exempted from LDAR monitoring as required by 45CSR§21-37, are not exempted from testing which may be required under any other applicable State or Federal regulations, orders, or permits. The Director may periodically require verification by the permittee that maintenance and repair procedures associated with approved exemptions are continued and practiced.

4.1.7.2.6. The permittee shall submit to the DAQ a plan for complete, facility-wide implementation of RACT requirements within one hundred eighty (180) days of notification by the Director of the Division of Air Quality that a violation of the National Ambient Air Quality Standards (NAAQS) for ozone (that were in effect on or before May 1, 1996) has occurred. Such plan shall include those sources and activities listed as part of the site-wide control efficiency requirement and may contain an update of existing RACT analyses. Full implementation of such plan shall be completed within two (2) years of approval of the RACT plan by the Director.

4.1.7.2.7. Unless granted a variance pursuant to 45CSR21 Section 9.3, or as approved by the Director as part of a required Start-up, Shutdown, and Malfunction (SSM) Plan mandated under 40CFR63.6(e) or another applicable section of 40CFR63, the owner or operator of the facility shall operate all emission control equipment listed as part of the facility-wide control efficiency plan at all times the facilities are in operation or VOC emissions are occurring from these sources or activities. In the event of a malfunction, and a variance has not been granted, the production unit shall be shutdown or the activity discontinued as expeditiously as possible. The permittee shall comply with 45CSR21 Section 9.3 with respect to all periods of non-compliance with the emission limitations and emissions reduction requests set forth in the facility-wide control efficiency plan resulting from unavoidable malfunctions of equipment.

4.1.7.2.8. If the Permittee or the Director discovers through acquisition of new credible data that the maximum theoretical VOC emission for a source listed in Attachment A differs from the value in Attachment A, a determination shall be made concerning whether the minimum aggregate VOC emission reduction requirement established in the plan and 45CSR21 and determine if any enforcement action is appropriate based upon the compliance determination and whether the Permittee's original plan was predicated upon data obtained in good faith.

4.1.8. Compliance with all annual operating limits shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the quantified operating data at any given time during the previous twelve (12) consecutive calendar months.

4.1.9. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall install, operate, and maintain all pollution control equipment required by this permit in accordance with the manufacturer's specifications so as to provide the guaranteed minimum control efficiency, or with any more stringent control requirements as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.10]

4.1.10. Particulate matter emissions for the incinerator (009) shall not exceed 0.99 lbs/hr.
[45CSR§6-4.1]

4.1.11. Emission of Visible Particulate Matter --No person shall cause, suffer, allow or permit emission of smoke into the atmosphere from any incinerator which is twenty (20%) percent opacity or greater.
[45CSR§6-4.3. (009)]

4.1.12. The provisions of Condition 4.1.11 shall not apply to smoke which is less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per start-up, or six (6) minutes in any sixty (60)-minute period for stoking operations.
[45CSR§6-4.4. (009)]

4.1.13. No person shall 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.
[45CSR§7-3.1. (023, 114A, 115, 116)]

4.1.14. The provisions of Condition 4.1.13 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. (023, 114A, 115, 116)]

4.1.15. Particulate matter emissions from the dust collector (116) shall not exceed 5.0 lbs/hr:
[45CSR§7-4.1. (116)]

4.1.16. Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
[45CSR§6-4.6. (009)]

4.1.17. The Permittee shall comply with the following Process Vent requirements:

a. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by ≥98 percent by weight by venting emissions from a sufficient number of the vents through one or more closed-vent systems to any combination of control devices.

Reduce overall emissions of hydrogen halide and halogen HAP to ≤0.45 kg/hr
[(002, 201, 205, 206, 203C, 208, 208C, 208P, 209, 219)]

4.1.18. The Permittee shall comply with the following wastewater unit requirements:
The Permittee shall operate and maintain a fixed roof for wastewater Tanks 109 and 109L/WWL.
[(109, 109L/WWL)]

4.1.19. The Permittee shall comply with the following transfer rack requirements:
Use a vapor balancing system designed and operated to collect organic HAP vapors displaced from tank trucks and railcars during loading and route the collected HAP vapors to the storage tank from which the liquid being loaded originated or to another storage tank connected by a common header.
[(108L)]

4.1.20. The Permittee shall comply with the following equipment leak requirements as applicable for all equipment that is in organic HAP Service:

(a) Comply with the applicable requirements of 40CFR63, Subpart H and the requirements referenced therein, except as specified below;

(b) The Permittee may elect to comply with the provisions in paragraphs (b)(1) through (5) of this section as an alternative to the applicable provisions in subpart H.

(1) The requirements for pressure testing in 40CFR§63.179(b) or 40CFR§63.1036(b) may be applied to all processes, not just batch processes.

(2) For the purposes of this subpart, pressure testing for leaks in accordance with 40CFR§63.179(b) or 40CFR§63.1036(b) is not required after reconfiguration of an equipment train if flexible hose connections are the only disturbed equipment.

(3) For an existing source, you are not required to develop an initial list of identification numbers for connectors as would otherwise be required under 40CFR§63.1022(b)(1) or 40CFR§63.181(b)(1)(i).

(4) For connectors in gas/vapor and light liquid service at an existing source, you may elect to comply with the requirements in 40CFR§63.169 or 40CFR§63.1029 for connectors in heavy liquid service, including all associated recordkeeping and reporting requirements, rather than the requirements of 40CFR§63.174 or 40CFR§63.1027.

(5) For pumps in light liquid service in an MCPU that has no continuous process vents and is part of an existing source, you may elect to consider the leak definition that defines a leak to be 10,000 parts per million (ppm) or greater as an alternative to the values specified in 40CFR§§63.1026(b)(2)(i) through (iii) or 40CFR§63.163(b)(2).

4.1.21. Air pollution control devices shall be operated as required for the pollutants being generated and controlled as follows:

4.1.21.1. The Main Scrubber (003) shall be used when the process is generating acid gases. The Main Scrubber (003) shall be used when the uncontrolled emission value of acid gases exceeds the controlled hourly and/or yearly emissions in Table 4.1.2.1. If the uncontrolled value of acid gasses does not exceed the controlled permit limit, then the Main Scrubber does not need to be in operation.

4.1.21.2. The Incinerator (009) shall be in operation when the VOC emissions on an uncontrolled basis exceed the controlled hourly and/or yearly emissions in Table 4.1.2.1. The Incinerator (009) is not required to be in operation when the storage tanks are the only sources venting VOC emissions.

4.1.21.3 The Incinerator Scrubber (010) shall be used when the Incinerator (009) is being fed halogenated or sulfur containing compounds and generating acid gases.

4.1.21.4. Dust Collectors 114, 115, 116, 117, 023 shall be used when the emissions units which they control are in operation and dust is being generated.

4.1.22. The CN-3624 process shall not exceed 150 batches/year.

4.2. Monitoring Requirements

4.2.1. For the purpose of determining compliance with the maximum emission rates set forth by Condition 4.1.2. and 4.1.3 of this permit, the permittee shall monitor the production rates of each product produced in the operating unit.
[**(023, 114A, 115, 116, 004, 009, 010)]**

4.2.2. At least monthly, visual emission checks of each emission point subject to a 45CSR7 opacity limit shall be conducted. For units emitting directly into the open air from points other than a stack outlet, visible emissions are to include visible fugitive dust emissions that leave the plant site boundaries. These checks shall be conducted during periods of facility operation at five minute time intervals to determine if the unit has visible emissions using procedures outlined in 40 CFR 60, Appendix A, Method 22. If sources of visible emissions are identified during the survey, or at any other time, the permittee shall conduct an evaluation as outlined in 45CSR§7A-2.1.a,b within twenty-four (24) hours. However, a 45CSR§7A-2.1.a,b evaluation shall not be required more than once per month per emission unit. A 45CSR§7A-2.1.a,b evaluation shall not be required if the visible emission condition is corrected in a timely manner and the units are operated at normal operating conditions. A record of each visible emission check required above shall be maintained on site for a period of no less than five (5) years. 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.
[45CSR§7A-2.1a,b (023, 114, 115, 116)]

4.2.3. For the purpose of determining compliance with the maximum emission limits set forth by Condition 4.1.2. and the operating parameters set forth by Condition 4.1.3. of this permit, the permittee shall provide continuous monitoring of the operating temperature, and minimum air flow rate associated with the Incinerator (009) during periods of routine operation.
[(009)]

4.2.4. For the purpose of determining compliance with the maximum emission limits set forth by Condition 4.1.2 and the operating parameters set forth by Conditions 4.1.4 and 4.1.5 of this permit, the permittee shall provide continuous monitoring of the pH and flow rate of the scrubber solution in the Incinerator Scrubber (010) and Main Scrubber (003), during periods of routine operation.
[(003, 010)]

4.2.5. Reserved.

4.2.6. For the purpose of determining compliance with the maximum emission limits set forth by Condition 4.1.2. and the operating parameters set forth by Condition 4.1.6. of this permit, the permittee shall provide continuous monitoring of the temperature of the condensate discharged from the Dryer Condenser (004) during periods of routine operation.
[(004)]

4.2.7. At least monthly, visual emission checks for the incinerator (009) shall be conducted. These checks shall be conducted during periods of facility operation at five minute time intervals to determine if the unit has visible emissions using procedures outlined in 40 CFR 60, Appendix A, Method 22.

If no visible emissions are noted during four consecutive monthly observations period, visual emissions may be conducted quarterly commencing with the next calendar quarter. If no visible emissions are noted through 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 twenty-four (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 units are operated at normal operating conditions. A record of each visible emission check required above shall be maintained on site for a period of no less than five (5) years. 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.
[45CSR§30-5.1.c (009)]

4.2.8. Compliance with the dust collector particulate matter limits of 4.1.21.4 and 4.1.15 shall be determined by maintenance and inspection of the dust collectors on a semi-annual basis.
[45CSR§30-5.1.c. (023, 114A, 115, 116)]

4.3. Testing Requirements

4.3.1. N/A

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. For the purpose of demonstrating compliance with the monitoring requirements set forth in Section 4.2.1. of this permit, the permittee shall maintain monthly production records documenting the production rate of each of the permitted processes.

4.4.5. For the purpose of demonstrating compliance with the emission limits set forth in Section 4.1.2. of this permit, the permittee shall perform monthly emission estimates based on the records of production maintained in accordance to Section 4.4.4. of this permit. The maximum hourly emissions associated with each affected process shall be based on a monthly average. All annual emissions shall be based on a 12-month rolling total.

4.4.6. You must keep the applicable records specified in paragraphs (a) through (k) of this section.

(a) Each applicable record required by subpart A of this part 63 and in referenced subparts F, G, SS, UU, WW, and GGG of this part 63 and in referenced subpart F of 40 CFR part 65.

(b) Records of each operating scenario as specified in paragraphs (b)(1) through (8) of this section.

(1) A description of the process and the type of process equipment used.

(2) An identification of related process vents, including their associated emissions episodes if not complying with the alternative standard in §63.2505; wastewater point of determination (POD); storage tanks; and transfer racks.

(3) The applicable control requirements of this subpart, including the level of required control, and for vents, the level of control for each vent.

(4) The control device or treatment process used, as applicable, including a description of operating and/or testing conditions for any associated control device.

(5) The process vents, wastewater POD, transfer racks, and storage tanks (including those from other processes) that are simultaneously routed to the control device or treatment process(s).

(6) The applicable monitoring requirements of this subpart and any parametric level that assures compliance for all emissions routed to the control device or treatment process.

(7) Calculations and engineering analyses required to demonstrate compliance.

(8) For reporting purposes, a change to any of these elements not previously reported, except for paragraph (b)(5) of this section, constitutes a new operating scenario.

(c) A schedule or log of operating scenarios for processes with batch vents from batch operations updated each time a different operating scenario is put into effect.

(d) The information specified in paragraphs (d)(1) and (2) of this section for formerly identified 40CFR63, Subpart FFFF Group 1 batch process vents in compliance with a percent reduction emission limit in Table 2 to this subpart if some of the vents are controlled to less the percent reduction requirement.

(1) Records of whether each batch operated was considered a standard batch.

(2) The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.

(e) The information specified in paragraph (e)(2), (3), or (4) of this section, as applicable, for each process with formerly identified 40CFR63, Subpart FFFF Group 2 batch process vents or uncontrolled hydrogen halide and halogen HAP emissions from the sum of all batch and continuous process vents less than 1,000 lb/yr. No records are required for situations described in paragraph (e)(1) of this section.

(1) No records are required if you documented in your notification of compliance status report that the MCPU meets any of the situations described in paragraph (e)(1)(i), (ii), or (iii) of this section.

(i) The MCPU does not process, use, or generate HAP.

(ii) You control the formerly identified as 40CFR63, Subpart FFFF Group 2 batch process vents using a flare that meets the requirements of §63.987.

(iii) You control the formerly identified as 40CFR63, Subpart FFFF Group 2 batch process vents using a control device for which your determination of worst case for initial compliance includes the contribution of all Group 2 batch process vents.

(2) If you documented in your notification of compliance status report that an MCPU has formerly identified as 40CFR63, Subpart FFFF Group 2 batch process vents because the non-reactive organic HAP is the only HAP and usage is less than 10,000 lb/yr, as specified in §63.2460(b)(7), you must keep records of the amount of HAP material used, and calculate the daily rolling annual sum of the amount used no less frequently than monthly. If a record indicates usage exceeds 10,000 lb/yr, you must estimate emissions for the preceding 12 months based on the number of batches operated and the estimated emissions for a standard batch, and you must begin recordkeeping as specified in paragraph (e)(4) of this section. After 1 year, you may revert to recording only usage if the usage during the year is less than 10,000 lb.

(3) If you documented in your notification of compliance status report that total uncontrolled organic HAP emissions from the batch process vents in an MCPU will be less than 1,000 lb/yr for the anticipated number of standard batches, then you must keep records of the number of batches operated and calculate a daily rolling annual sum of batches operated no less frequently than monthly. If the number of batches operated results in organic HAP emissions that exceed 1,000 lb/yr, you must estimate emissions for the preceding 12 months based on the number of batches operated and the estimated emissions for a standard batch, and you must begin recordkeeping as specified in paragraph (e)(4) of this section. After 1 year, you may revert to recording only the number of batches if the number of batches operated during the year results in less than 1,000 lb of organic HAP emissions.

(4) If you meet none of the conditions specified in paragraphs (e)(1) through (3) of this section, you must keep records of the information specified in paragraphs (e)(4)(i) through (iv) of this section.

(i) A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.

(ii) A record of whether each batch operated was considered a standard batch.

(iii) The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.

(iv) Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

(f) A record of each time a safety device is opened to avoid unsafe conditions in accordance with §63.2450(s).

(g) Records of the results of each CPMS calibration check and the maintenance performed, as specified in §63.2450(k)(1).

(h) For each CEMS, you must keep records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(i) For each PUG, you must keep records specified in paragraphs (i)(1) through (5) of this section.

(1) Descriptions of the MCPU and other process units in the initial PUG required by §63.2535(l)(1)(v).

(2) Rationale for including each MCPU and other process unit in the initial PUG (*i.e.,* identify the overlapping equipment between process units) required by §63.2535(l)(1)(v).

(3) Calculations used to determine the primary product for the initial PUG required by §63.2535(l)(2)(iv).

(4) Descriptions of process units added to the PUG after the creation date and rationale for including the additional process units in the PUG as required by §63.2535(l)(1)(v).

(5) The calculation of each primary product redetermination required by §63.2535(l)(2)(iv).

(j) In the SSMP required by §63.6(e)(3), you are not required to include formerly identified 40CFR63, Subpart FFFF Group 2 emission points, unless those emission points are used in an emissions average. For equipment leaks, the SSMP requirement is limited to control devices and is optional for other equipment.

(k) For each bag leak detector used to monitor PM HAP emissions from a fabric filter, maintain records of any bag leak detection alarm, including the date and time, with a brief explanation of the cause of the alarm and the corrective action taken.

4.5. Reporting Requirements

4.5.1. Reserved.

5.0. Source-Specific Requirements [Building 114, Chemical Manufacturing Unit]

5.1. Limitations and Standards

5.1.1. The Chemical Manufacturing unit at Building 114 (B114) is defined as the totality of the process equipment listed in Section 1.0: Building 114. This process equipment may be operated independently, integrated, or reconfigured as necessary for the specific production needs.

5.1.2. Air pollution control devices shall be operated as required for the pollutants being generated and controlled as follows:

5.1.2.1 The Thermal Oxidizer Scrubber (HKCD02) shall be used when the Thermal Oxidizer (HKCD01) is generating acid gases either from the process or from combustion of halogenated or sulfur containing compounds. The Thermal Oxidizer Scrubber (HKCD02)) shall be used when the uncontrolled emission value of acid gases exceeds the controlled hourly and/or yearly emissions in Table 5.1.3.1. If the uncontrolled value of acid gasses does not exceed the controlled permit limit, then the Thermal Oxidizer Scrubber does not need to be in operation.

5.1.2.2. The Thermal Oxidizer (HKCD01) shall be in operation when the VOC emissions on an uncontrolled basis exceed the controlled hourly and/or yearly emissions in Table 5.1.3.1.

5.1.2.3. Scrubbers HKCD03, HKCD04, HKCD05, HKCD06, and HKCD09 shall be used when the emissions units which they control are in operation and generating acid gases.

5.1.3. Production at Building 114 shall be limited to the following processes and associated emission limits: Krenite, Hexazinone and additional products that meet the emissions limits in Table 5.1.3.1. The total number of batches of Krenite and Hexazinone added together shall not exceed 234 batches a year on a rolling 12 month average.

Table 5.1.3.1. B114 Emissions Limitations

Emission Point I.D.	Pollutant	Controlled	
		lb/hr (Max Rate)	ton/yr
Section 1.0 Emission Units and Emission Units with Control Devices Operational as Required Above.	PM	0.06	0.26
	PM10	0.06	0.26
	PM2.5	0.06	0.26
	SO_2	0.01	0.05
	NOx	20.74	18.04
	CO	0.62	2.72
	VOC	21.01	8.24
	Hydrogen Chloride	2.25	0.50
	Methyl chloride	4.60	0.51
	Ammonia (NH3)	2.00	2.41
	Methanol	4.43	5.07
	Ethanol	3.46	1.06
	Tributylamine	0.40	0.08
	Ethyl chloride	7.97	1.13
	Methyl Chloroformate	0.26	0.04
	Triethyl Phosphite	0.07	0.06
	HAPS (MAX)	19.27	7.27

5.1.3.2. The facility-wide HAP emission limits for Section 5.0 shall be followed as stated in Condition 4.1.2.2.

5.1.4. The Thermal Oxidizer (HKCD01) shall be operated in accordance to the following parameters in order to maintain a minimum VOC destruction efficiency of 98%.

a. The air flow rate into the Thermal Oxidizer (HKCD01) shall not exceed a maximum flow rate of 2,800 standard cubic feet per minute.

b. The minimum residence of time of gases through the Thermal Oxidizer (HKCD01) shall be 1.0 second in the reducing zone and 0.75 second in the oxidizing zone.

c. The combustion gases in the oxidizing zone, downstream of the flame zone, shall maintain a minimum temperature of 1450 °F (788 °C).

[(HKCD01)]

5.1.5. The Thermal Oxidizer Scrubber (HKCD02) shall maintain a minimum removal efficiency of 99% for hydrogen chloride and chlorine.
[(HKCD02)]

5.1.6. The Thermal Oxidizer Scrubber (HKCD02) liquor shall maintain a minimum average pH of 7.2 during periods that the hexazinone waste gas, halogenated, or sulfur containing compounds are being fed to the thermal oxidizer.
[(HKCD02)]

5.1.7. Fugitive VOC emission sources vented to the thermal oxidizer/caustic scrubber system shall be included in the facility's approved RACM plan under 45CSR21 for sources considered to be significant.
[(HKCD01, HKCD02)]

5.1.8. Reserved.

5.1.9. Reserved.

5.1.10. Compliance with all annual operating limits shall be determined using a twelve-month rolling total. A twelve-month rolling total shall mean the sum of the quantified operating data at any given time during the previous twelve (12) consecutive calendar months.

5.1.11. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment in Building 114 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.10 (HKCD01, HKCD02, HKCD03, HKCD04, HKCD05, HKCD06, HKCD07, HKCD08, HKCD09, HKCD10)]

5.1.12. The Permittee shall comply with the Hexazinone emissions reduction requirements and the Hexazinone emission limits set forth in Attachment A of this Permit.
[CO-R21-97-31 (Condition III.1.) State-Enforceable Only (141.001)]

5.1.13. Unless otherwise expressly exempted from Leak Detection and Repair (LDAR) requirements, the Permittee shall implement and maintain LDAR programs for the reduction of fugitive VOC emissions in all facility manufacturing process units subject to 45CSR§21-40 producing a product or products intermediate or final, in excess of 1000 megagrams (1100 tons) per year in accordance with the applicable methods and criteria of 45CSR§21-37 given below or alternative procedures approved by the Director. Units exempted from LDAR monitoring as required by 45CSR§21-37, are not exempted from testing which may be required under any other applicable State or Federal regulations, order or permits. The Director may periodically require verification by the Permittee that maintenance and repair procedures associated with approved exemptions are continued and practiced.

1. General. -- The owner or operator of a synthetic organic chemical, polymer, or resin manufacturing facility subject to 45CSR§21-37 shall ensure that:

   a. Any open-ended line or valve is sealed with a second valve, blind flange, cap, or plug except during operations requiring process fluid flow through the open-ended line or valve;

   b. When a second valve is used, each open-ended line or valve equipped with a second valve is operated in such a manner that the valve on the process fluid end is closed before the second valve is closed; and

   c. When a double block-and-bleed system is used, the bleed valve or line is open only during operations that require venting of the line between the block valves and is closed at all other times.

2. Standards: Equipment inspection program. -- The owner or operator of a synthetic organic chemical, polymer, or resin manufacturing facility shall conduct the equipment inspection program described in 45CSR§21-37.4.a through 37.4.c using the test methods specified in 45CSR§21-46.

   a. The owner or operator of a synthetic organic chemical, polymer, or resin manufacturing facility shall conduct quarterly monitoring of each:

      1. Compressor;

      2. Pump in light liquid service;

      3. Valve in light liquid service, except as provided in 45CSR§21-37.5 and 37.6;

      4. Valve in gas/vapor service, except as provided in 45CSR§21-37.5 and 37.6; and

      5. Pressure relief valve in gas/vapor service, except as provided in 45CSR§21-37.5 and 37.6.

   b. The owner or operator of a synthetic organic chemical or resin manufacturing facility shall conduct a weekly visual inspection of each pump in light liquid service.

   c. The owner or operator of a synthetic organic chemical, polymer, or resin manufacturing facility shall monitor each pressure relief valve after each overpressure relief to ensure that the valve has properly reseated and is not leaking.

d. It shall be determined that a leak has been detected when:

1. When an instrument reading of 10,000 parts per million (ppm) or greater is measured; or

2. If there are indications of liquid dripping from the equipment.

e. When a leak is detected, the owner or operator shall affix a weatherproof, readily visible tag in a bright color such as red or yellow, bearing the equipment identification number and the date on which the leak was detected. This tag shall remain in place until the leaking equipment is repaired. An alternative leak identifier system may be used if the owner or operator demonstrates to the Director that the alternative system is equally as effective. The requirements of 45CSR§21-37.4.e apply to any leak detected by the equipment inspection program and to any leak from any equipment that is detected on the basis of sight, sound, or smell.

3. Standards: Alternative standards for valves--skip period leak detection and repair.

a. An owner or operator shall comply initially with the requirements for valves in gas/vapor service and valves in light liquid service as described in 45CSR21-37.3.

b. If the percent of valves leaking is equal or less than 2.0 for two consecutive quarters, an owner or operator may skip alternate quarterly leak detection periods for the valves in gas/vapor and light liquid service.

c. If the percent of valves leaking is equal to or less than 2.0 for five consecutive quarters, an owner or operator may skip three of the quarterly leak detection periods per year for the valves in gas/vapor and light liquid service, provided that each valve shall be monitored once each year.

d. If at any time the percent of valves leaking is greater than 2.0, the owner or operator shall resume compliance with the requirements in 45CSR§21-37.4 but may again elect to comply with the alternative standards in 45CSR§21-37.5.

e. The percent of valves leaking shall be determined by dividing the sum of valves found leaking during current monitoring and previously leaking valves for which repair has been delayed by the total number of valves subject to the requirements of 45CSR§21-37.

f. An owner or operator shall keep a record of the percent of valves found leaking during each leak detection period.

4. Standards: Alternative standards for unsafe-to-monitor valves and difficult-to-monitor valves.

a. Any valve is exempt from the requirements of 45CSR§21-37.4 as an unsafe-to-monitor valve if:

1. The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 45CSR§21-37.4; and

2. The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

b. Any valve is exempt from the requirements of 45CSR§21-37.4 as a difficult-to-monitor valve if:

1. The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters (m) (6.6 feet [ft]) above a support surface; and

2. The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

c. The alternative standards of 45CSR§21-37.5 are not available to valves subject to the requirements of 45CSR§21-37.6.

5. Standards: Equipment repair program. -- The owner or operator of a synthetic organic chemical, polymer, or resin manufacturing facility refinery shall:

a. Make a first attempt at repair for any leak not later than 5 calendar days after the leak is detected; and

b. Repair any leak as soon as practicable, but not later than 15 calendar days after it is detected except as provided in 45CSR§21-37.8.

6. Standards: Delay of repair.

a. Delay of repair of equipment for which a leak has been detected will be allowed if repair is technically infeasible without a process unit shutdown. Repair of such equipment shall occur before the end of the first process unit shutdown after detection of the leak.

b. Delay of repair of equipment will also be allowed for equipment that is isolated from the process and that does not remain in VOC service after detection of the leak.

c. Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, and if valve assembly supplies have been depleted, where valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the first process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

7. Test methods and procedures.

a. In conducting the monitoring required to comply with 45CSR§21-37.4, the owner or operator shall use the test methods specified in 45CSR§21-46.

b. The owner or operator shall demonstrate that a piece of equipment is in light liquid service by showing that all of the following conditions apply:

1. The vapor pressure of one or more of the components is greater than 0.3 kiloPascal (kPa) (0.09 inches of Mercury [in Hg]) at 20°C (68°F). Standard reference texts or ASTM D2879 shall be used to determine the vapor pressures;

2. The total concentration of the pure components having a vapor pressure greater than 0.3 kPa (0.09 in Hg) at 20°C (68°F) is equal to or greater than 20 percent by weight; and

3. The fluid is a liquid at operating conditions;

c. Samples used in conjunction with 45CSR§21-37.9.b shall be representative of the process fluid that is contained in or contacts the equipment.

8. Recordkeeping requirements.

a. Each owner or operator subject to the provisions of this 45CSR§21-37 shall comply with the recordkeeping requirements of 45CSR§21-37.

b. An owner or operator of more than one facility subject to the provisions of 45CSR§21-37 may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility.

c. When each leak is detected as specified in 45CSR§21-37.4, the following information shall be recorded in a log and shall be kept for 3 years in a readily accessible location:

1. The instrument and operator identification numbers and the equipment identification number;

2. The date the leak was detected and the dates of each attempt to repair the leak;

3. The repair methods employed in each attempt to repair the leak;

4. The notation "Above 10,000" if the maximum instrument reading measured by the methods specified in 45CSR§21-46 after each repair attempt is equal to or greater than 10,000 ppm;

5. The notation "Repair Delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak;

6. The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process unit shutdown;

7. The expected date of successful repair of the leak if a leak is not repaired within 15 days;

8. The dates of process unit shutdowns that occur while the equipment is unrepaired; and

9. The date of successful repair of the leak.

d. A list of identification numbers of equipment in vacuum service shall be recorded in a log that is kept in a readily accessible location.

e. The following information for valves complying with 45CSR§21-37.5 shall be recorded in a log that is kept for 3 years in a readily accessible location:

1. A schedule of monitoring; and

2. The percent of valves found leaking during each monitoring period.

f. The following information pertaining to all valves subject to the requirements of 45CSR§21-37.6. shall be recorded in a log that is kept for 3 years in a readily accessible location:

1. A list of identification numbers for valves that are designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve; and

2. A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the schedule for monitoring each valve.

g. The following information shall be recorded in a log that is kept for 3 years in a readily accessible location for use in determining exemptions as provided in 45CSR§21-37.1:

1. An analysis demonstrating the design capacity of the affected facility; and

2. Information and data used to demonstrate that a piece of equipment is not in VOC service.

9. Reporting. -- The owner or operator of any facility containing sources subject to 45CSR§21-37 shall comply with the requirements in Condition 5.5.2.

[45CSR§21-37, CO-R21-97-31 (Condition III.2.) and CO-R21-2001-10A(97) (Condition III.1.) State-Enforceable Only (141.001)]

5.1.14. At all times, including periods of start-up, shutdown, and malfunction, the Permittee shall maintain and operate the VOC emitting sources and associated air pollution control devices subject to Consent Order CO-R21-97-31 in a manner consistent with good air pollution control practices for minimizing emissions.

[CO-R21-97-31 (Condition III.3.) State-Enforceable Only (141.001)]

5.1.15. The Permittee shall comply with the applicable provisions of 45CSR§21-41 regarding test methods and compliance procedures, except as otherwise approved by the Director. These methods are:

1. Test methods. -- The owner or operator of any volatile organic compound (VOC) source required to comply with 45CSR§21-11 through 40 shall, at the owner's or operator's expense, demonstrate compliance by using the methods of 45CSR§21-41 through 47 or alternative methods that are approved by the Director and the U.S. EPA and shall meet all the requirements of this section 41.

2. Preparation of test plan and quality assurance program. -- At least 30 days before the initiation of a required test under 45CSR§21-44, the owner or operator shall submit a test plan that shall be approved by the Director before the results of the test will be considered acceptable. This test plan shall include the following minimum information:

   a. The purpose of the proposed test and the applicable section of 45CSR§21-11 through 40 of this regulation;

   b. A detailed description of the facility to be tested, including a line diagram of the facility, locations of test sites, and facility operation conditions for the test;

   c. A detailed description of the test methods and procedures, equipment, and sampling sites, i.e., a test plan;

   d. A time table for the following:

      1. Date for the compliance test;

      2. Date of submittal of preliminary results to the Director (not later than 30 days after sample collection); and

      3. Date of submittal of final test report (not later than 60 days after completion of on-site sampling); and

   e. Proposed corrective actions should the test results show noncompliance.

   f. Internal QA program. -- The internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of test data precision. An example of internal QA is the sampling and analysis of replicable samples.

   g. External QA program.

      1. The external QA program shall include, at a minimum, application of plans for a test method performance audit (PA) during the performance test.

      2. The external QA program may also include systems audits, which include the opportunity for on-site evaluation by the Director of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.

      3. The PA's shall consist of blind audit samples provided by the Director and analyzed during the performance test to provide a measure of test data bias.

         A. The Director shall require the owner or operator to analyze PA samples during each performance test when audit samples are available.

         B. Information concerning the availability of audit materials for a specific performance test may be obtained by contacting the Emission Measurement Technical Information Center at (919) 541-2237.

C. If the Director has prior knowledge that an audit material is available, he or she may contact the Atmospheric Research and Exposure Assessment Laboratory directly at (919)541-4531.

D. All other audit materials may be obtained by calling (919) 541-7834.

E. The evaluation criteria applied to the interpretation of the PA results and the subsequent remedial actions required of the owner or operator are the sole responsibility of the Director.

3. Process operation. -- The owner or operator shall be responsible for providing:

a. Sampling ports, pipes, lines, or appurtenances for the collection of samples and data required by the test methods and procedures;

b. Safe access to the sample and data collection locations; and

c. Light, electricity, and the utilities required for sample and data collection.

4. Summary of results. -- No later than 30 days after the sample collection, the owner or operator shall submit preliminary results to the Director.

5. Final report. -- No later than 60 days after completion of the on-site sampling, the owner or operator shall submit a test report to the Director. The test report shall include the following minimum information:

a. Process description;

b. Air pollution capture system and control device description;

c. Process conditions during testing;

d. Test results and example calculations;

e. Description of sampling locations and test methods;

f. Quality assurance measures; and

g. Field and analytical data.

[45CSR§21-41, CO-R21-97-31 (Condition III.5.) State-Enforceable Only (141.001)]

5.1.16. Construction or modification of any emission source having maximum theoretical emissions of VOC equaling or exceeding six pounds per hour after May 1, 1996 shall require the prior approval by the Director of an emission control plan that meets the definition of Reasonably Available Control Technology (RACT) on a case-by-case basis for both fugitive and non-fugitive VOC emissions from such source. All RACT control plans for sources constructed or modified (as defined herein) after May 1, 1996 shall be embodied in a permit in accordance with 45CSR13 or 45CSR30.

Physical changes to or changes in the method of operation of an existing emission source listed or required to be listed in Attachment A which do not result in an increase in its potential to emit VOCs in a cumulative amount of two pounds per hour or five tons per year or more (with cumulative accounting commencing on September 10, 1997), shall not require submittal of a RACT plan, provided that, the Permittee continues to comply with it's facility wide VOC emission reduction requirement (RACM or AERP).
[CO-R21-97-31 (Condition III.7.) State-Enforceable Only (141.001)]

5.1.17. Unless granted a variance pursuant to 45CSR§21-9.3, the Permittee shall operate all emission control equipment for those emission sources listed in Attachment A, at all times when the production unit is in operation or when any VOC emitting activity is occurring. In the event that the control equipment is inoperable, the production unit shall be shut down or the activity shall be discontinued as expeditiously as possible.
[CO-R21-97-31 (Condition IV.7.) State-Enforceable Only (141.001)]

5.1.18. The Director may exempt process units from fugitive emission control requirements of 45CSR§21-40.3.a.2 upon receipt of a petition for such exemption from the Permittee which contains a demonstration, satisfactory to the Director, that VOC emissions from the unit are of minor significance. In the event of such exemption, the Permit may be amended accordingly.
[CO-R21-97-31 (Condition IV.11.) State-Enforceable Only (141.001)]

5.1.19. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any incinerator which is twenty (20) percent opacity or greater, except as noted in 5.1.20.
[45CSR§6-4.3. (HKCD01)]

5.1.20. The provisions of 5.1.19 shall not apply to smoke which is less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per start-up.
[45CSR§6-4.4. (HKCD01)]

5.1.21. Particulate matter emissions for the thermal oxidizer (009) shall not exceed 2.18 lbs/hr.
[45CSR§6-4.1. (HKCD01)]

5.1.22. Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
[45CSR§6-4.6. (HKCD01)]

5.1.23. The Permittee shall comply with the following formerly identified 40CFR63, Subpart FFFF Group 1 Storage Tank requirements, except as given in d) below:

Reduce total HAP emissions by ≥95 percent by weight or to ≤20 ppmv of TOC or organic HAP and ≤20 ppmv of hydrogen halide and halogen HAP by venting emissions through a closed vent system to any combination of control devices (excluding a flare)

d) The emission limits given in the paragraph above do not apply during periods of planned routine maintenance. Periods of planned routine maintenance of each control device, during which the control device does not meet the emission limit specified above, must not exceed 240 hours per year (hr/yr). You may submit an application to the Administrator requesting an extension of this time limit to a total of 360 hr/yr.

The application must explain why the extension is needed, it must indicate that no material will be added to the storage tank between the time the 240-hr limit is exceeded and the control device is again operational, and it must be submitted at least 60 days before the 240-hr limit will be exceeded.
[(HK104)]

5.1.24. The Permittee shall comply with the following formerly identified 40CFR63, Subpart FFFF Group 1 Batch Process Vent requirements:

1.a Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by ≥98 percent by weight by venting emissions from a sufficient number of the vents through one or more closed-vent systems to any combination of control devices

And

2.a.i. Reduce overall emissions of hydrogen halide and halogen HAP by ≥99 percent.
[(HK101, HK102, and HK103)]

5.1.25. The Permittee shall comply with the following Control Device requirements:

Thermal Oxidizer HKCD01 shall operate with a temperature of no less than 1,450 degrees F. The Permittee shall monitor this temperature continuously.

Thermal Oxidizer Scrubber HKCD02 shall operate with an average daily pH of no less than 7.2 and a flow rate of no less than 50 gallons per minute. The permittee shall monitor the pH daily and then flow rate continuously.
[(HKCD01 and HKCD02)]

5.1.26. Reserved.

5.1.27. Reserved.

5.1.28. The Permittee shall comply with the following Equipment Leak Requirements as applicable, except as provided in paragraph (b) below:

For all equipment that is in organic HAP Service:

(b) Comply with the applicable requirements of 40CFR63, Subpart H and the requirements referenced therein, except as specified below

If you comply with either Subpart H or Subpart UU of this part 63, you may elect to comply with the provisions in paragraphs (b)(1) through (5) of this section as an alternative to the referenced provisions in Subpart H or Subpart UU of this part.

(1) The requirements for pressure testing in §63.179(b) or §63.1036(b) may be applied to all processes, not just batch processes.

(2) For the purposes of this subpart, pressure testing for leaks in accordance with §63.179(b) or §63.1036(b) is not required after reconfiguration of an equipment train if flexible hose connections are the only disturbed equipment.

(3) For an existing source, you are not required to develop an initial list of identification numbers for connectors as would otherwise be required under §63.1022(b)(1) or §63.181(b)(1)(i).

(4) For connectors in gas/vapor and light liquid service at an existing source, you may elect to comply with the requirements in §63.169 or §63.1029 for connectors in heavy liquid service, including all associated recordkeeping and reporting requirements, rather than the requirements of §63.174 or §63.1027.

(5) For pumps in light liquid service in an MCPU that has no continuous process vents and is part of an existing source, you may elect to consider the leak definition that defines a leak to be 10,000 parts per million (ppm) or greater as an alternative to the values specified in §63.1026(b)(2)(i) through (iii) or §63.163(b)(2).

5.2. Monitoring Requirements

5.2.1. For the purpose of determining compliance with the emission limits set forth by Condition 5.1.3 of this permit, the permittee shall monitor the number of batches produced in each process.

5.2.2. For the purpose of determining compliance with the minimum operating requirements of the Vent Scrubber (HKCD03) set forth in Condition 5.1.2 of this permit, the permittee shall maintain a process control system interlock that continuously monitors water flow into the system and limits steam flow when water flow conditions less than 4,000 gallons per hour occur.
[(HKCD03)]

5.2.3. For the purpose of determining compliance with the maximum emission limits set forth in Condition 5.1.3, the permittee shall monitor the vent stream flow from the reactors (HK101 and HK103) off-gas vent and the Stripper (HKCD08) vent to the Thermal Oxidizer (HKCD01).
[(HKCD01)]

5.2.4. For the purpose of determining compliance with the maximum emission limits set forth by Condition 5.1.3 and 5.1.4, and the operating requirements set forth in Condition 5.1.4 of this permit, the permittee shall provide continuous monitoring of the operating parameters of the Thermal Oxidizer (HKCD01).
[(HKCD01)]

5.2.5. For the purpose of demonstrating compliance with the operating requirements set forth in Condition 5.1.5 and 5.1.6 of this permit, the permittee shall perform visual inspection of the Thermal Oxidizer Scrubber (HKCD02) and Scrubber Liquor Tank. Monitoring shall be conducted on a daily basis during periods of routine operation and include inspections of the liquor pH and any signs of leaks or damage in the connecting equipment.
[(HKCD02)]

5.2.6. At least monthly, visual emission checks for the thermal oxidizer (HKCD01) shall be conducted. For the purpose of these checks, excess visible emissions are to include visible fugitive dust emissions that leave the plant site boundaries. These checks shall be conducted during periods of normal facility operation at five minute time intervals to determine if the unit has visible emissions using procedures outlined in 40 CFR 60, Appendix A, Method 22. If no visible emissions are noted during four consecutive monthly observations period, visual emissions may be conducted quarterly commencing with the next calendar quarter. If no visible emissions are noted through 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 twenty-four (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 units are operated at normal operating conditions. A record of each visible emission check required above shall be maintained on site for a period of no less than five (5) years. 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.
[(HKCD01)]

5.3. Testing Requirements

N/A

5.4. Recordkeeping Requirements

5.4.1. 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.

5.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment in Building 114, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[(HKCD01, HKCD02, HKCD03, HKCD04, HKCD05, HKCD06, HKCD07, HKCD08, HKCD09, HKCD10)]

5.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment in Building 114, 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 must 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.

[(HKCD01, HKCD02, HKCD03, HKCD04, HKCD05, HKCD06, HKCD07, HKCD08, HKCD09, HKCD10)]

5.4.4. For the purpose of demonstrating compliance with the monitoring requirements set forth in Condition 5.2.1. of this permit, the permittee shall maintain monthly production records documenting the total number of batches produced from each of the permitted processes.

5.4.5. For the purpose of demonstrating compliance with the monitoring requirements set forth in Condition 5.2.3. of this permit, the permittee shall maintain hourly records documenting the flow rate into the Thermal Oxidizer (HKCD01).
[(HKCD01)]

5.4.6. For the purpose of demonstrating compliance with the operating requirements set forth in Section 5.1. of this permit, the permittee shall maintain monthly records documenting the hours of operation of the Thermal Oxidizer (HKCD01) and Thermal Oxidizer Scrubber (HKCD02). These records shall document the total time each month the system was operating in the following modes:

a. Combusting gases released from the steam stripper

b. Idling (burning auxiliary fuel only)

c. Out of service

[(HKCD01 and HKCD02)]

5.4.7. For the purpose of demonstrating compliance with the monitoring requirements set forth in Condition 5.2.4 of this permit, the permittee shall maintain continuous temperature readings within the oxidation zone of the thermal oxidizer. The temperature sensor shall record the temperature with an accuracy of ±1% of temperature being monitored or ±0.5 °C whichever is greater.
[(HKCD01)]

5.4.8. For the purpose of demonstrating compliance with the monitoring requirements set forth in Condition 5.2.4 of this permit, the permittee shall maintain records documenting the date, time and duration of each period that, when gas streams are vented to thermal oxidizer, the oxidizing zone temperature is less than 1450 °F (788 °C).
[(HKCD01)]

5.4.9. For the purpose of demonstrating compliance with the monitoring requirements set forth in Condition 5.2.5. of this permit, the permittee shall maintain daily records of the visual inspections conducted on the thermal oxidizer and caustic scrubber system. Any leaks and/or malfunctions shall be documented and maintained in accordance to the requirements set forth by Condition 5.4.3. of this permit.
[(HKCD02)]

5.4.10. You must keep the applicable records specified in paragraphs (a) through (k) of this section.

(a) Each applicable record required by Subpart A of this Part 63 and in referenced Subparts F, G, SS, UU, WW, and GGG of this Part 63 and in referenced Subpart F of 40 CFR part 65.

(b) Records of each operating scenario as specified in paragraphs (b)(1) through (8) of this section.

(1) A description of the process and the type of process equipment used.

(2) An identification of related process vents, including their associated emissions episodes if not complying with the alternative standard in §63.2505; wastewater point of determination (POD); storage tanks; and transfer racks.

(3) The applicable control requirements of this subpart, including the level of required control, and for vents, the level of control for each vent.

(4) The control device or treatment process used, as applicable, including a description of operating and/or testing conditions for any associated control device.

(5) The process vents, wastewater POD, transfer racks, and storage tanks (including those from other processes) that are simultaneously routed to the control device or treatment process(s).

(6) The applicable monitoring requirements of this subpart and any parametric level that assures compliance for all emissions routed to the control device or treatment process.

(7) Calculations and engineering analyses required to demonstrate compliance.

(8) For reporting purposes, a change to any of these elements not previously reported, except for paragraph (b)(5) of this section, constitutes a new operating scenario.

(c) A schedule or log of operating scenarios for processes with batch vents from batch operations updated each time a different operating scenario is put into effect.

(d) The information specified in paragraphs (d)(1) and (2) of this section for formerly identified 40CFR63, Subpart FFFF Group 1 batch process vents in compliance with a percent reduction emission limit in Table 2 to this subpart if some of the vents are controlled to less the percent reduction requirement.

(1) Records of whether each batch operated was considered a standard batch.

(2) The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.

(e) The information specified in paragraph (e)(2), (3), or (4) of this section, as applicable, for each process with formerly identified 40CFR63, Subpart FFFF Group 2 batch process vents or uncontrolled hydrogen halide and halogen HAP emissions from the sum of all batch and continuous process vents less than 1,000 lb/yr. No records are required for situations described in paragraph (e)(1) of this section.

(1) No records are required if you documented in your notification of compliance status report that the MCPU meets any of the situations described in paragraph (e)(1)(i), (ii), or (iii) of this section.

(i) The MCPU does not process, use, or generate HAP.

(ii) You control the formerly identified 40CFR63, Subpart FFFF Group 2 batch process vents using a flare that meets the requirements of §63.987.

(iii) You control the formerly identified 40CFR63, Subpart FFFF Group 2 batch process vents using a control device for which your determination of worst case for initial compliance includes the contribution of all formerly identified 40CFR63, Subpart FFFF Group 2 batch process vents.

(2) If you documented in your notification of compliance status report that an MCPU has formerly identified 40CFR63, Subpart FFFF Group 2 batch process vents because the non-reactive organic HAP is the only HAP and usage is less than 10,000 lb/yr, as specified in §63.2460(b)(7), you must keep records of the amount of HAP material used, and calculate the daily rolling annual sum of the amount used no less frequently than monthly. If a record indicates usage exceeds 10,000 lb/yr, you must estimate emissions for the preceding 12 months based on the number of batches operated and the estimated emissions for a standard batch, and you must begin recordkeeping as specified in paragraph (e)(4) of this section. After 1 year, you may revert to recording only usage if the usage during the year is less than 10,000 lb.

(3) If you documented in your notification of compliance status report that total uncontrolled organic HAP emissions from the batch process vents in an MCPU will be less than 1,000 lb/yr for the anticipated number of standard batches, then you must keep records of the number of batches operated and calculate a daily rolling annual sum of batches operated no less frequently than monthly. If the number of batches operated results in organic HAP emissions that exceed 1,000 lb/yr, you must estimate emissions for the preceding 12 months based on the number of batches operated and the estimated emissions for a standard batch, and you must begin recordkeeping as specified in paragraph (e)(4) of this section. After 1 year, you may revert to recording only the number of batches if the number of batches operated during the year results in less than 1,000 lb of organic HAP emissions.

(4) If you meet none of the conditions specified in paragraphs (e)(1) through (3) of this section, you must keep records of the information specified in paragraphs (e)(4)(i) through (iv) of this section.

(i) A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.

(ii) A record of whether each batch operated was considered a standard batch.

(iii) The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.

(iv) Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

(f) A record of each time a safety device is opened to avoid unsafe conditions in accordance with §63.2450(s).

(g) Records of the results of each CPMS calibration check and the maintenance performed, as specified in §63.2450(k)(1).

(h) For each CEMS, you must keep records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(i) For each PUG, you must keep records specified in paragraphs (i)(1) through (5) of this section.

(1) Descriptions of the MCPU and other process units in the initial PUG required by §63.2535(l)(1)(v).

(2) Rationale for including each MCPU and other process unit in the initial PUG (*i.e.,* identify the overlapping equipment between process units) required by §63.2535(l)(1)(v).

(3) Calculations used to determine the primary product for the initial PUG required by §63.2535(l)(2)(iv).

(4) Descriptions of process units added to the PUG after the creation date and rationale for including the additional process units in the PUG as required by §63.2535(l)(1)(v).

(5) The calculation of each primary product redetermination required by §63.2535(l)(2)(iv).

(j) In the SSMP required by §63.6(e)(3), you are not required to include formerly identified 40CFR63, Subpart FFFF Group 2 emission points, unless those emission points are used in an emissions average. For equipment leaks, the SSMP requirement is limited to control devices and is optional for other equipment.

(k) For each bag leak detector used to monitor PM HAP emissions from a fabric filter, maintain records of any bag leak detection alarm, including the date and time, with a brief explanation of the cause of the alarm and the corrective action taken.

5.5. Reporting Requirements

5.5.1. Reserved.

5.5.2. Reports of excess emissions. -- Except as provided in Condition 5.5.3, the owner or operator of any facility containing sources subject to this section 5 shall, for each occurrence of excess emissions expected to last more than 7 days, within 1 business day of becoming aware of such occurrence, supply the Director by letter with the following information:

a. The name and location of the facility;

b. The subject sources that caused the excess emissions;

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

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

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

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

5.5.3. Variance. -- If the provisions of this regulation cannot be satisfied due to repairs made as the result of routine maintenance or in response to the unavoidable malfunction of equipment, the Director may permit the owner or operator of a source subject to this regulation to continue to operate said source for periods not to exceed 10 days upon specific application to the Director. Such application shall be made prior to the making of repairs and, in the case of equipment malfunction, within 24 hours of the equipment malfunction. Where repairs will take in excess of 10 days to complete, additional time periods may be granted by the Director. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director. During such time periods, the owner or operator shall take all reasonable and practicable steps to minimize VOC emissions. **[45CSR§21-9.3 (141.001)]**

5.5.4. Reserved.

6.0. Source-Specific Requirements [40CFR63, Subpart VVVVVV]

6.1. Limitations and Standards

6.1.1. The Small Lots Manufacturing (SLM) unit is defined as the totality of the process equipment listed in Section 1.0: SLM. This process equipment may be operated independently, integrated, or reconfigured as necessary for the specific production needs.

The owner or operator of a chemical manufacturing process unit (CMPU) is subject to 40 C.F.R. Part 63 Subpart VVVVVV if you meet the conditions as specified in 40 C.F.R. §§63.11494 (a) (1) and (2). 1. The CMPU is located at an area source of hazardous air pollutant (HAP) emissions. 2. HAP listed in Table 1 to 40 C.F.R. Part 63 Subpart VVVVVV (Table 1 HAP) are present in the CMPU, as specified in 40 C.F.R. § 63.11494 (a) (2) (i), (ii), (iii), or (iv).

(i). The CMPU uses as feedstock, any material that contains quinoline, manganese, and/or trivalent chromium at an individual concentration greater than 1.0 percent by weight, or any other Table 1 HAP at an individual concentration greater than 0.1 percent by weight. To determine the Table 1 HAP content of feedstocks, you may rely on formulation data provided by the manufacturer or supplier, such as the Material Safety Data Sheet (MSDS) for the material. If the concentration in an MSDS is presented as a range, use the upper bound of the range.

(iii) Hydrazine and/or Table 1 organic HAP other than quinoline are generated as byproduct and are present in the CMPU in any liquid stream (process or waste), continuous process vent, or batch process vent at an individual concentration greater than 0.1 percent by weight.

(iv) Hydrazine or any Table 1 HAP is produced as a product of the CMPU.

6.1.2. A CMPU includes all process vessels, equipment, and activities necessary to operate a chemical manufacturing process that produces a material or a family of materials described by North American Industry Classification System (NAICS) code 325. A CMPU consists of one or more unit operations and any associated recovery devices. A CMPU also includes each storage tank, transfer operation, surge control vessel, and bottoms receiver associated with the production of such NAICS code 325 materials. [45CSR34, 40 C.F.R. § 63.11494 (b)

6.1.3. 40 C.F.R. Part 63 Subpart VVVVVV applies to each new or existing affected source. The affected source is the facility-wide collection of CMPUs and each heat exchange system and wastewater system associated with a CMPU that meets the criteria specified in 40 C.F.R. §§ 63.11494 (a) and (b). A CMPU using only Table 1 organic HAP is required to control only total CAA section 112(b) organic HAP. A CMPU using only Table 1 metal HAP is required to control only total CAA section 112(b) metal HAP in accordance with 40 C.F.R. § 63.11495 and, if applicable, 40 C.F.R. § 63.11496 (f).

1. An affected source is an existing source if you commenced construction or reconstruction of the affected source before October 6, 2008.

2. An affected source is a new source if you commenced construction or reconstruction of the affected source on or after October 6, 2008.

6.1.4. Management practices.

1. If you have a CMPU subject to 40 C.F.R. Part 63 Subpart VVVVVV, you must comply with 40 C.F.R. §§ 63.11495 (a) (1) through (5). 1. Each process vessel must be equipped with a cover or lid that must be closed at all times when it is in organic HAP service or metal HAP service, except for manual operations that require access, such as material addition and removal, inspection, sampling and cleaning. This requirement does not apply to process vessels containing only metal HAP that are in a liquid solution or other form that will not result in particulate emissions of metal HAP (e.g., metal HAP that is in ingot, paste, slurry, or moist pellet form or other form).

2. You must use any of the methods listed in 40 C.F.R. §§ 63.11495 (a) (2) (i) through (iv) to control total organic HAP emissions from transfer of liquids containing Table 1 organic HAP to tank trucks or railcars. You are not required to comply with this 40 C.F.R. § 63.11495 (a) (2) if you have notified the Administrator in your initial notification that a material is reactive or resinous, and you will not be able to comply with any of the methods in 40 C.F.R. §§ 63.11495 (a) (2) (i) through (iv) for the transfer of such material.
   i. Use submerged loading or bottom loading.
   iv. Vent through a closed-vent system to a control device.

3. You must conduct inspections of process vessels and equipment for each CMPU in organic HAP service or metal HAP service, as specified in 40 C.F.R. §§ 63.11495 (a) (3) (i) through (v), to demonstrate compliance with 40 C.F.R. § 63.11495 (a) (1) and to determine that the process vessels and equipment are sound and free of leaks. Alternatively, except when the subject CMPU contains metal HAP as particulate, inspections may be conducted while the subject process vessels and equipment are in VOC service, provided that leaks can be detected when in VOC service.

   i. Inspections must be conducted at least quarterly.

   ii. For these inspections, detection methods incorporating sight, sound, or smell are acceptable. Indications of a leak identified using such methods constitute a leak unless you demonstrate that the indications of a leak are due to a condition other than loss of HAP. If indications of a leak are determined not to be HAP in one quarterly monitoring period, you must still perform the inspection and demonstration in the next quarterly monitoring period.

   iii. As an alternative to conducting inspections, as specified in 40 C.F.R. § 63.11495 (a) (3) (ii), you may use Method 21 of 40 C.F.R. Part 60 Appendix A-7, with a leak definition of 500 ppmv to detect leaks. You may also use Method 21 with a leak definition of 500 ppmv to determine if indications of a leak identified during an inspection conducted in accordance with 40 C.F.R. § 63.11495 (a) (3) (ii) are due to a condition other than loss of HAP. The procedures in this 40 C.F.R. § 63.11495 (a) (3)(iii) may not be used as an alternative to the inspection required by 40 C.F.R. § 63.11495 (a) (3) (ii) for process vessels that contain metal HAP as particulate.

   iv. Inspections must be conducted while the subject CMPU is operating.

   v. No inspection is required in a calendar quarter during which the subject CMPU does not operate for the entire calendar quarter and is not in organic HAP service or metal HAP service. If the CMPU operates at all during a calendar quarter, an inspection is required.

4. You must repair any leak within 15 calendar days after detection of the leak, or document the reason for any delay of repair. For the purposes of 40 C.F.R. § 63.11495 (a) (4), a leak will be considered “repaired” if a condition specified in 40 C.F.R. § 63.11495 (a) (4) (i), (ii), or (iii) is met.

   i. The visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated, or

   ii. No bubbles are observed at potential leak sites during a leak check using soap solution, or

   iii. The system will hold a test pressure.

5. You must keep records of the dates and results of each inspection event, the dates of equipment repairs, and, if applicable, the reasons for any delay in repair.

6.1.5. Small heat exchange systems.

For each heat exchange system subject to 40 C.F.R Part 63 Subpart VVVVVV with a cooling water flow rate less than 8,000 gallons per minute (gal/min) and not meeting one or more of the conditions in 40 C.F.R. § 63.104 (a), you must comply with 40 C.F.R. § 63.11495 (b) (1) through (3), or as an alternative, you may comply with any one of the requirements in Item 1.a or 1.b of Table 8 to 40 C.F.R Part 63 Subpart VVVVVV.

1. You must develop and operate in accordance with a heat exchange system inspection plan. The plan must describe the inspections to be performed that will provide evidence of hydrocarbons in the cooling water. Among other things, inspections may include checks for visible floating hydrocarbon on the water, hydrocarbon odor, discolored water, and/or chemical addition rates. You must conduct inspections at least once per quarter, even if the previous inspection determined that the indications of a leak did not constitute a leak as defined by 40 C.F.R. § 63.104 (b) (6).

2. You must perform repairs to eliminate the leak and any indications of a leak or demonstrate that the HAP concentration in the cooling water does not constitute a leak, as defined by 40 C.F.R. § 63.104 (b) (6), within 45 calendar days after indications of the leak are identified, or you must document the reason for any delay of repair in your next semiannual compliance report.

3. You must keep records of the dates and results of each inspection, documentation of any demonstrations that indications of a leak do not constitute a leak, the dates of leak repairs, and, if applicable, the reasons for any delay in repair.

6.1.6. Startup, shutdown and malfunction. Startup, shutdown, and malfunction (SSM) provisions in subparts that are referenced in 40 C.F.R. §§ 63.11495 (a) and (b) do not apply.

6.1.7. General duty.

At all times, you must operate and maintain any affected CMPU, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the CMPU. [45CSR34, 40 C.F.R. § 63.11495 (d)

6.1.8. Organic HAP emissions from batch process vents.

You must comply with the requirements in 40 C.F.R. §§ 63.11496 (a) (1) through (4) for organic HAP emissions from your batch process vents for each CMPU using Table 1 organic HAP. If uncontrolled organic HAP emissions from all batch process vents from a CMPU subject to 40 C.F.R. Part 63 Subpart VVVVVV are equal to or greater than 10,000 pounds per year (lb/yr), you must also comply with the emission limits and other requirements in Table 2 to 40 C.F.R. Part 63 Subpart VVVVVV.

1. You must determine the sum of actual organic HAP emissions from all of your batch process vents within a CMPU subject to 40 C.F.R. Part 63 Subpart VVVVVV using process knowledge, engineering assessment, or test data. Emissions for a standard batch in a process may be used to represent actual emissions from each batch in that process. You must maintain records of the calculations. Calculations of annual emissions are not required if you meet the emission standards for batch process vents in Table 2 to 40 C.F.R. Part 63 Subpart VVVVVV.

2. As an alternative to calculating actual emissions for each affected CMPU at your facility, you may elect to estimate emissions for each CMPU based on the emissions for the worst-case CMPU. The worst-case CMPU means the CMPU at the affected source with the highest organic HAP emissions per batch. The worst-case emissions per batch are used with the number of batches run for other affected CMPU. Process knowledge, engineering assessment, or test data may be used to identify the worst case process. You must keep records of the information and procedures used to identify the worst-case process.

3. If your current estimate is that emissions from batch process vents from a CMPU are less than 10,000 pounds per year (lb/yr), then you must keep a record of the number of batches of each process operated per month. Also, you must reevaluate your total emissions from batch process vents prior to making any process changes that affect emission calculations in 40 C.F.R. §§ 63.11496 (a) (1) and (2). If projected emissions increase to 10,000 lb/yr or more, you must be in compliance options for batch process vents in Table 2 to 40 C.F.R. Part 63 Subpart VVVVVV upon initiating operation under the new operating conditions. You must maintain records documenting the results of all updated emissions calculations.

4. As an alternative to determining the HAP emissions, you may elect to demonstrate that the amount of organic HAP used in the process is less than 10,000 lb/yr. You must keep monthly records of the organic HAP usage.

6.1.9. Organic HAP emissions from continuous process vents. You must comply with the requirements in 40 C.F.R. §§ 63.11496 (b) (1) through (3) for organic HAP emissions from your continuous process vents for each CMPU subject to 40 C.F.R. Part 63 Subpart VVVVVV using Table 1 organic HAP. If the total resource-effectiveness (TRE) index value for a continuous process vent is less than or equal to 1.0, you must also comply with the emission limits and other requirements in Table 3 to 40 C.F.R. Part 63 Subpart VVVVVV.

1. You must determine the TRE index value according to the procedures in 40 C.F.R. § 63.115 (d), except as specified in 40 C.F.R. §§ 63.11496 (b) (1) (i) through (iii).

   i. You are not required to calculate the TRE index value if you control emissions in accordance with Table 3 to 40 C.F.R. Part 63 Subpart VVVVVV.

   ii. 40 C.F.R. §§ 63.115 (d) (1) (i) and (ii) (Section 17.2.1. 1. i. - iii.) are not applicable for the purposes of this 40 C.F.R. § 63.11496 (b) (1) (ii).

   iii. You may assume the TRE for a vent stream is > 1.0 if the amount of organic HAP emitted in the vent stream is less than 0.1 pound per hour.

2. If the current TRE index value is greater than 1, you must recalculate the TRE index value before you make any process or operational change that affects parameters in the calculation. If the recalculated TRE is less than or equal to 1.0, then you must comply with one of the compliance options for continuous process vents in Table 3 to 40 C.F.R. Part 63 Subpart VVVVVV before operating under the new operating conditions. You must maintain records of all TRE calculations.

3. If a recovery device as defined in 40 C.F.R. § 63.11502 is used to maintain the TRE index value at a level greater than 1.0 and less than or equal to 4.0, you must comply with 40 C.F.R. § 63.982 (e) and the requirements specified therein.

6.1.10. Combined streams.

If you combine organic HAP emissions from batch process vents and continuous process vents, you must comply with the more stringent standard in Table 2 or Table 3 to 40 C.F.R. Part 63 Subpart VVVVVV that applies to any portion of the combined stream, or you must comply with Table 2 for the batch process vents and Table 3 for the continuous process vents. The TRE index value for continuous process vents and the annual emissions from batch process vents shall be determined for the individual streams before they are combined, and prior to any control (e.g., by subtracting any emission contributions from storage tanks, continuous process vents or batch process vents, as applicable), in order to determine the most stringent applicable requirements.
[45CSR34, 40 C.F.R. § 63.11496 (c)]

6.1.11. Emissions from metal HAP process vents.

You must comply with the requirements in paragraphs (f)(1) and (2) of this section for metal HAP emissions from each CMPU using Table 1 metal HAP. If the collective uncontrolled metal HAP emissions from all metal HAP process vents from a CMPU are equal to or greater than 400 lb/yr, then you must also comply with the emission limits and other requirements in Table 4 to this subpart and in paragraph (f)(3), (4), or (5) of this section. The requirements of this paragraph (f) do not apply to metal HAP process vents from CMPU containing only metal HAP that are in a liquid solution or other form that will not result in particulate emissions of metal HAP (e.g., metal HAP that is in ingot, paste, slurry, or moist pellet form or other form).

(1) You must determine the sum of metal HAP emissions from all metal HAP process vents within a CMPU subject to this subpart, except you are not required to determine the annual emissions if you control the metal HAP process vents within a CMPU in accordance with Table 4 to this subpart or if you determine your total metal HAP usage in the process unit is less than 400 lb/yr. To determine the mass emission rate you may use process knowledge, engineering assessment, or test data. You must keep records of the emissions calculations.

(2) If your current estimate is that total uncontrolled metal HAP emissions from a CMPU subject to this subpart are less than 400 lb/yr, then you must keep records of either the number of batches operated per month (batch vents) or the process operating hours (continuous vents). Also, you must reevaluate your total emissions before you make any process or operational change that affects emissions of metal HAP. If projected emissions increase to 400 lb/yr or more, then you must be in compliance with one of the options for metal HAP process vents in Table 4 to this subpart upon initiating operation under the new operating conditions. You must keep records of all recalculated emissions determinations.

(3) If you have an existing source subject to the HAP metals emission limits specified in Table 4 to this subpart, you must comply with the initial compliance and monitoring requirements in paragraphs (f)(3)(i) through (iii) of this section. You must keep records of monitoring results to demonstrate continuous compliance.
[45CSR34, 40 C.F.R. § 63.11496 (f)]

6.1.12. Startup, shutdown, and malfunction (SSM).
References to SSM provisions in subparts that are referenced in 40 C.F.R. §§ 63.11496 (a) through (h) or Tables 2 through 5 to 40 C.F.R. Part 63 Subpart VVVVVV do not apply.
[45CSR34, 40 C.F.R. § 63.11496 (i)]

6.1.13. Planned routine maintenance for a control device.

Operate in accordance with 40 C.F.R. §§ 63.11497 (b) (1) through (3) for periods of planned routine maintenance of a control device for storage tanks.

1. Add no material to the storage tank during periods of planned routine maintenance.

2. Limit periods of planned routine maintenance for each control device (or series of control devices) to no more than 240 hours per year (hr/yr), or submit an application to the Administrator requesting an extension of this time limit to a total of 360 hr/yr. The application must explain why the extension is needed and it must be submitted at least 60 days before the 240-hour limit will be exceeded.

3. Keep records of the day and time at which planned routine maintenance periods begin and end, and keep a record of the type of maintenance performed.
[45CSR34, 40 C.F.R. § 63.11497 (b)]

6.1.14. References to SSM provisions in subparts that are referenced in 40 C.F.R. § 63.11497 (a) or (b) or Table 5 to 40 C.F.R. Part 63 Subpart VVVVVV do not apply.
[45CSR34, 40 C.F.R. § 63.11497 (c)]

6.1.15. You must comply with the requirements in 40 C.F.R. §§ 63.11498 (a) (1) and (2) and in Table 6, Item 1 to 40 C.F.R. Part 63 Subpart VVVVVV for all wastewater streams from a CMPU subject to 40 C.F.R. Part 63 Subpart VVVVVV. If the partially soluble HAP concentration in a wastewater stream is equal to or greater than 10,000 parts per million by weight (ppmw) and the wastewater stream contains a separate organic phase, then you must also comply with Table 6, Item 2 to 40 C.F.R. Part 63 Subpart VVVVVV for that wastewater stream. Partially soluble HAP are listed in Table 7 to 40 C.F.R. Part 63 Subpart VVVVVV.

1. Except as specified in 40 C.F.R. § 63.11498 (a) (2), you must determine the total concentration of partially soluble HAP in each wastewater stream using process knowledge, engineering assessment, or test data. Also, you must reevaluate the concentration of partially soluble HAP if you make any process or operational change that affects the concentration of partially soluble HAP in a wastewater stream.

2. You are not required to determine the partially soluble concentration in wastewater that is hard piped to a combustion unit or hazardous waste treatment unit, as specified in Table 6, Item 2.b to 40 C.F.R. Part 63 Subpart VVVVVV.

3. Separated organic material that is recycled to a process is no longer wastewater and no longer subject to the wastewater requirements after it has been recycled.

6.2. Monitoring Requirements

N/A

6.3. Testing Requirements

N/A

6.4. Recordkeeping Requirements

6.4.1. Recordkeeping. You must maintain files of all information required by 40 C.F.R. Part 63 Subpart VVVVVV for at least 5 years following the date of each occurrence according to the requirements in 40 C.F.R. § 63.10 (b) (1). If you are subject, you must comply with the recordkeeping and reporting requirements of 40 C.F.R. §§ 63.10 (b) (2) (iii) and (vi) through (xiv), and the applicable requirements specified in 40 C.F.R. §§ 63.11501 (c) (1) through (8).

1. For each CMPU subject to 40 C.F.R. Part 63 Subpart VVVVVV, you must keep the records specified in 40 C.F.R. §§ 63.11501 (c) (1) (i) through (viii).
i. Records of management practice inspections, repairs, and reasons for any delay of repair, as specified in 40 C.F.R. § 63.11495 (a) (5).

ii. Records of small heat exchange system inspections, demonstrations of indications of leaks that do not constitute leaks, repairs, and reasons for any delay in repair as specified in 40 C.F.R. § 63.11495 (b).

iii. If batch process vent emissions are less than 10,000 lb/yr for a CMPU, records of batch process vent emission calculations, as specified in 40 C.F.R. § 63.11496 (a) (1), the number of batches operated each month, as specified in 40 C.F.R. § 63.11496 (a) (3), and any updated emissions calculations, as specified in 40 C.F.R. § 63.11496 (a) (3). Alternatively, keep records of the worst-case processes or organic HAP usage, as specified in 40 C.F.R. § 63.11496 (a) (2) and (4), respectively.

iv. Records of all TRE calculations for continuous process vents as specified in 40 C.F.R. § 63.11496 (b) (2).

vi. Records identifying wastewater streams and the type of treatment they receive, as specified in Table 6 to 40 C.F.R. Part 63 Subpart VVVVVV.

v. Records of metal HAP emission calculations as specified in §63.11496(f)(1) and (2). If total uncontrolled metal HAP process vent emissions from a CMPU subject to this subpart are estimated to be less than 400 lb/yr, also keep records of either the number of batches per month or operating hours, as specified in §63.11496(f)(2).

vi. Records identifying wastewater streams and the type of treatment they receive, as specified in Table 6 to this subpart.

vii. Records of the date, time, and duration of each malfunction of operation of process equipment, control devices, recovery devices, or continuous monitoring systems used to comply with 40 C.F.R. Part 63 Subpart VVVVVV that causes a failure to meet a standard. The record must include a list of the affected sources or equipment, an estimate of the volume of each regulated pollutant emitted over the standard, and a description of the method used to estimate the emissions.

viii. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 C.F.R. § 63.11495 (d), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

2. For batch process vents subject to Table 2 to 40 C.F.R. Part 63 Subpart VVVVVV and continuous process vents subject to Table 3 to 40 C.F.R. Part 63 Subpart VVVVVV, you must keep records specified in 40 C.F.R. §§ 63.11501 (c) (2) (i) or (ii), as applicable.

    i. If you route emissions to a control device other than a flare, keep records of performance tests, if applicable, as specified in 40 C.F.R. §§ 63.998 (a) (2) (ii) and (4), keep records of the monitoring system and the monitored parameters, as specified in 40 C.F.R. §§ 63.998 (b) and (c), and keep records of the closed-vent system, as specified in 40 C.F.R. § 63.998 (d) (1). If you use a recovery device to maintain the TRE above 1.0 for a continuous process vent, keep records of monitoring parameters during the TRE index value determination, as specified in 40 C.F.R. § 63.998 (a) (3).

    ii. If you route emissions to a flare, keep records of the flare compliance assessment, as specified in 40 C.F.R. § 63.998 (a) (1) (i), keep records of the pilot flame monitoring, as specified in 40 C.F.R. §§ 63.998 (a) (1) (ii) and (iii), and keep records of the closed-vent system, as specified in 40 C.F.R. § 63.998 (d) (1).

3. For continuous process vents subject to Table 3 to 40 C.F.R. Part 63 Subpart VVVVVV, keep records of the occurrence and duration of each startup and shutdown of operation of process equipment, or of air pollution control and monitoring equipment.

[45CSR34, 40 C.F.R. §§ 63.11501 (c)(1)(i) through (iv), (c)(1)(vi) through (viii), (c)(2), (c)(8)]

4. For metal HAP process vents subject to Table 4 to this subpart, you must keep records specified in paragraphs (c)(3)(i) or (ii) of this section, as applicable.

   (i) For a new source using a control device other than a baghouse and for any existing source, maintain a monitoring plan, as specified in §63.11496(f)(3)(i), and keep records of monitoring results, as specified in §63.11496(f)(3).

   (ii) For a new source using a baghouse to control metal HAP emissions, keep a site-specific monitoring plan, as specified in §§63.11496(f)(4) and 63.11410(g), and keep records of bag leak detection systems, as specified in §§63.11496(f)(4) and 63.11410(g)(4).

6.5. Reporting Requirements

6.5.1. Semiannual Compliance Reports. You must submit semiannual compliance reports that contain the information specified in 40 C.F.R. §§ 63.11501 (d) (1) through (7), as applicable. Reports are required only for semiannual periods during which you experienced any of the events described in 40 C.F.R. §§ 63.11501 (d) (1) through (8).

1. Deviations.

You must clearly identify any deviation from the requirements of 40 C.F.R. Part 63 Subpart VVVVVV.

3. Delay of leak repair. You must provide the following information for each delay of leak repair beyond 15 days for any process equipment, storage tank, surge control vessel, bottoms receiver, and each delay of leak repair beyond 45 days for any heat exchange system with a cooling water flow rate less than 8,000 gal/min: information on the date the leak was identified, the reason for the delay in repair, and the date the leak was repaired.

4. Process change. You must report each process change that affects a compliance determination and submit a new certification of compliance with the applicable requirements in accordance with the procedures specified in 40 C.F.R. § 63.11501 (b).

5. Data for the alternative standard. If you comply with the alternative standard, as specified in Table 2 to 40 C.F.R. Part 63 Subpart VVVVVV or Table 3 to 40 C.F.R. Part 63 Subpart VVVVVV, report the information required in 40 C.F.R. § 63.1258 (b) (5).

6. Overlapping rule requirements. Report any changes in the overlapping provisions with which you comply.

8. Malfunctions. If a malfunction occurred during the reporting period, the report must include the number of instances of malfunctions that caused emissions in excess of a standard. For each malfunction that caused emissions in excess of a standard, the report must include a list of the affected sources or equipment, an estimate of the volume of each regulated pollutant emitted over the standard, and a description of the method used to estimate the emissions. The report must also include a description of actions you took during a malfunction of an affected source to minimize emissions in accordance with 40 C.F.R. § 63.11495 (d), including actions taken to correct a malfunction.
[45CSR34, 40 C.F.R. §§ 63.11501 (d)(1), (d)(3), (d)(4), (d)(5), (d)(6), (d)(8)]

6.5.2. Affirmative defense for violation of emission standards during malfunction.

In response to an action to enforce the standards set forth in 40 C.F.R. §§ 63.11495 through 63.11499, you may assert an affirmative defense to a claim for civil penalties for violations of such standards that are caused by malfunction, as defined at 40 C.F.R. § 63.2. Appropriate penalties may be assessed if you fail to meet your burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not available for claims for injunctive relief.

1. To establish the affirmative defense in any action to enforce such a standard, you must timely meet the notification requirements in 40 C.F.R. §§ 63.11501 (e) (2), and must prove by a preponderance of evidence that:

   i. The violation:

      A. Was caused by a sudden, infrequent, and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner; and

      B. Could not have been prevented through careful planning, proper design, or better operation and maintenance practices; and

      C. Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and

      D. Was not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and

   ii. Repairs were made as expeditiously as possible when a violation occurred. Off-shift and overtime labor were used, to the extent practicable to make these repairs; and

   iii. The frequency, amount, and duration of the violation (including any bypass) were minimized to the maximum extent practicable; and

   iv. If the violation resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and

   v. All possible steps were taken to minimize the impact of the violation on ambient air quality, the environment and human health; and

   vi. All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and

   vii. All of the actions in response to the violation were documented by properly signed, contemporaneous operating logs; and

   viii. At all times, the affected CMPU was operated in a manner consistent with good practices for minimizing emissions; and

   ix. A written root cause analysis has been prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the violation resulting from the malfunction event at issue. The analysis must also specify, using best monitoring methods and engineering judgment, the amount of any emissions that were the result of the malfunction.

2. Report.

If you seek to assert an affirmative defense, you must submit a written report to the Administrator, with all necessary supporting documentation, that you have met the requirements set forth in 40 C.F.R. § 63.11501 (e) (1). This affirmative defense report must be included in the first periodic compliance report, deviation report, or excess emission report otherwise required after the initial occurrence of the violation of the relevant standard (which may be the end of any applicable averaging period). If such compliance report, deviation report, or excess emission report is due less than 45 days after the initial occurrence of the violation, the affirmative defense report may be included in the second compliance report, deviation report, or excess emission report due after the initial occurrence of the violation of the relevant standard.

ATTACHMENT A

Consent Order Limits

(CO-R21-97-31)

Process Area Description and Identification Number	Name of Process Equipment Vented to Control Device and Equipment Identification Number	Maximum Theoretical Emissions (MTE) of the Source (lbs/hr)	Emission Point Identification Number	Control Device Identification Number	Control Device Description	Efficiency of Control Device	Maximum Allowable Hours of Operation (hrs/yr)	Maximum Allowable VOC Emissions	
								lbs/hr	tons/yr
Small Lots Mfg. (106 - 110) Front End (Isocyanates)	Xylene Storage Tank (101)	5.46	014	009	INC	99.9%	8760	0.047*	0.055*
	Reactor 3 (203)	1.99	014	009	INC	99.9%	8760		
	Reactor 2 (206)	211.0	014	009	INC	99.9%	8760		
	BI Dumpster (103)	7.24	014	009	INC	99.9%	8760		
	Reactor 5 (301)	493.0	014	009	INC	99.9%	8760		
	Isocyanate Storage Tank (302)	5.46	014	009	INC	99.9%	8760		
	Reactor 1 (204)	1.26	014	009	INC	99.9%	8760		
	Scrubber Tank (003)	10.08	014	009	INC	99.9%	8760		
	Isocyanate Loading (304)	0.82	014	009	INC	99.9%	8760		
	Waste Loading (305)	0.03	014	009	INC	99.9%	8760		
Back End N6186	Reactor 6 (208)	8.7	014	009	INC	99.9%	8760		
	Reactor 8 (209)	6.03(a)	014	009	INC	99.9%	8760		
	Centrifuge (201)	1.08	014	009	INC	99.9%	8760		
	MW Storage (110)	3.53	014	009	INC	99.9%	8760		
	Waste Loading (104)	1.72	014	009	INC	99.9%	8760		

* Emission limitations stated in Permit R13-1498
a) Emissions from Reactors 6 and 8 do not occur within the same hour.

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Process Area Description and Identification Number	Name of Process Equipment Vented to Control Device and Equipment Identification Number	Maximum Theoretical Emissions (MTE) of the Source (lbs/hr)	Emission Point Identification Number	Control Device Identification Number	Control Device Description	Efficiency of Control Device	Maximum Allowable Hours of Operation (hrs/yr)	Maximum Allowable VOC Emissions	
								lbs/hr	tons/yr
Hexazinone Intermediate (141)	Reactor (141.103)	31	141.001	141.101	PBS	0% CH_3Cl	8760	260	84.38
	Reactor (141.104)	229	141.001	141.101	PBS	0% CH_3Cl	8760		

ATTACHMENT B

Consent Order Excess Emission Forms

(CO-R21-97-31)

ATTACHMENT B

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

Process Area Description and Identification Number	Emission Point Identification Number	Description of Excess Emission Scenario SU - Start-up SD - Shutdown M - Maintenance (Describe Activity)	Description of Controls and Measures used to Minimize VOC Emissions (During each Scenario)	Duration of Excess Emission Scenario (Hours)	Typical/Maximum Number of Events per Year /	Average/Peak VOC Emissions per Event (Pounds per Hour) /

* Do not include malfunction scenarios

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[1] _____ _____
(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.