West Virginia Department of Environmental Protection
Division of Air Quality

Earl Ray Tomblin
Governor

Randy C. Huffman
Cabinet Secretary

Permit to Operate

Pursuant to

Title V

of the Clean Air Act

Issued to:

~~E. I. DuPont de Nemours & Co., Inc.~~

The Chemours Company FC, LLC

Belle Plant

(Crop Protection: Small Lots Front End, Small Lots Back End, Building 114)

Group 2 of 5

R30-03900001-2011

John A. Benedict
Director

Issued: May 12, 2011 • Effective: May 19, 2011
Expiration: May 12, 2016 • Renewal Application Due: November 12, 2015

Permit Number: **R30-03900001-2011**
Permittee: **~~E. I. DuPont de Nemours & Co., Inc.~~**
The Chemours Company FC, LLC

Facility Name: **Belle Plant**
Permittee Mailing Address: **901 W. DuPont Ave.**
Belle, WV 25015

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Belle, Kanawha County, West Virginia
Facility Mailing Address:	901 W. DuPont Ave. Belle, WV 25015
Telephone Number:	304-357-1000
Type of Business Entity:	Corporation
Facility Description:	Manufacture of various organic and agricultural chemicals
SIC Codes:	2869; 2879
UTM Coordinates:	451.90 km Easting • 4232.60 km Northing • Zone 17

Permit Writer: Mike Egnor

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

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

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

1.1. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Small Lots Front End, Small Lots Back End					
103	104.014	Tank	2002 (relocated)	<20,000 gal	003, 009, 010
012	104.014	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	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	1977	<20,000 gal	None
101	104.014	Tank	1980	<20,000 gal	009, 010
104	104.014	Tank	2005	<20,000 gal	009, 010
108	104.014	Tank	1961	<20,000 gal	009, 010
108L	104.014	Transfer Rack	2007		009, 010
109	104.014	Tank	1968	<20,000 gal	009, 010
109L/WWL	104.014	Transfer Rack	1968		009, 010
112	104.014[1] 104.014K*	Tank	1951	<20,000 gal	009, 010
114A	104.003	Solids Charge Station	2005 (replacement)		114
200	104.014	Gas Cylinders			003, 009, 010
201	104.014[1] 104.014K*	Centrifuge	1961		009, 010
201A	104.014	Bin			009
202	104.014[1] 104.014K*	Tank	1988	<20,000 gal	009, 010
203	104.014	Reactor	2003		003, 009, 010
203C	104.014	Condenser	1977		009
205	104.014	Reactor	1988		003, 009, 010
206	104.014	Reactor	1992		003, 009, 010
208	104.014[1] 104.014K*	Reactor	1977		009, 010
208P	104.014	Pump			009, 010
208C	104.014	Condenser			009, 010
209	104.014[1] 104.014K*	Reactor	1977		009, 010
219	104.014	Reactor	1984		003, 009, 010
226	104.014	Tank	1988	<20,000 gal	009, 010
227	104.014	Tank	2005	<20,000 gal	009, 010
Control Devices					
023	107.022	Dust Collector	2005 (replacement)	250 cfm	

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
116	107.020	Dust Collector	1988	2800 cfm	
115	104.003B	Dust Collector	1978	1300 cfm	
009	104.014	Incinerator	1977	10 MMBTU/hr	
010	104.014	Scrubber	1977	80 gpm	
003	104.014	Scrubber	2007	60 gpm	
004	104.014[1] 104.014K*	Condenser		113 cu ft	
114	104.003	Dust Collector	2001	400 cfm	
Building 114					
HK004	141.004	Tank wagon storage	H: 1989 K: Suppliers		HKCD05
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	1947		NONE
HK010	141.010	Column	1970		NONE
HK013	141.013	Tank	1978		NONE
HK014	141.014	Tank	1970		NONE
HK015	141.015	Non VOC Storage tank	1987		NONE
HK016	141.016	Non VOC Tank	1975		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	2004		HKCD04
HK105		Column cooler	1974		NONE
HK106	141.002	Product loading	1982		NONE
HK107		Building blower	2010	6000 cfm	NONE
HK108	141.011	Non VOC Storage tank	1987		HKCD10
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	141.100	Condenser	1970	185 SQ FT	
HKCD10		Scrubber	2005	5 gpm	

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.

1.2. Active R13, R14, and R19 Permits

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

Permit Number	Date of Issuance
R13-0882H	07/23/2008
R13-2093D	08/08/2007

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.

2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments
CBI	Confidential Business Information
CEM	Continuous Emission Monitor
CES	Certified Emission Statement
C.F.R. *or* CFR	Code of Federal Regulations
CO	Carbon Monoxide
C.S.R. *or* CSR	Codes of State Rules
DAQ	Division of Air Quality
DEP	Department of Environmental Protection
FOIA	Freedom of Information Act
HAP	Hazardous Air Pollutant
HON	Hazardous Organic NESHAP
HP	Horsepower
lbs/hr *or* lb/hr	Pounds per Hour
LDAR	Leak Detection and Repair
m	Thousand
MACT	Maximum Achievable Control Technology
mm	Million
mmBtu/hr	Million British Thermal Units per Hour
mmft^3/hr *or* mmcf/hr	Million Cubic Feet Burned per Hour
NA *or* N/A	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10µm in diameter
pph	Pounds per Hour
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
psi	Pounds per Square Inch
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VEE	Visual Emissions Evaluation
VOC	Volatile Organic Compounds

2.3. Permit Expiration and Renewal

2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]

2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]

2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]

2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

2.5.1. This permit shall be reopened and revised under any of the following circumstances:

a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.

b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.

c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

a. The change must meet all applicable requirements and may not violate any existing permit term or condition.

b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield.

d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.
[45CSR§30-5.8]

2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.
[45CSR§30-5.8.a.]

2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or

b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.

b. The permit shield shall extend to all terms and conditions under each such operating scenario; and

c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. 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; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

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

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would 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.
[45CSR§30-5.1.f.2.]

2.17. Emergency

2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[45CSR§30-5.7.a.]

2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.
[45CSR§30-5.7.b.]

2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.
[45CSR§30-5.2.a.]

2.18.2. Those provisions specifically designated in the permit as “State-enforceable only” shall become “Federally-enforceable” requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. 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 modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required 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.
[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

2.20.1. 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.
[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and

are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.
[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. 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 defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.
[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.
[45CSR§30-5.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.
[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.

b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.
[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person 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 or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40 C.F.R. §61.145(b) and 45CSR34]

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. **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]

3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]

3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

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

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

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

3.1.9. When emissions on an annual basis of one or more of the greenhouse gases listed below are greater than the *de minimis* amounts listed below, all greenhouse gases emitted above the *de minimis* amounts shall be reported to the Secretary under 45CSR§42-4. (see Section 3.5.):

Greenhouse Gas Compound	**tons/year**
carbon dioxide	10,000
methane	476
nitrous oxide	32.6
hydrofluorocarbons	0.855
perfluorocarbons	1.09
sulfur hexafluoride	0.42

[45CSR§42-3.1., State-Enforceable only.]

3.1.10. The permitted facility shall be constructed and operated in accordance with information filed in Permit Application R13-0882G, R13-0882F, R13-0882E, R13-0882D, R13-0882C, R13-0882B, R13-0882A, and R13-0882, R13-2093, R13-2093A, R13-2093B, R13-2093C, R13-2093D, and any amendments thereto. The Director may suspend or revoke a permit if the plans and specification upon which the approval was based are not adhered to.
[45CSR13, Permit No. R13-0882 Condition 2.5.1 and Permit No. R13-2093 Condition 2.5.1]

3.2. Monitoring Requirements

N/A

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such

tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date 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 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

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

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

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

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

3.4. Recordkeeping Requirements

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

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

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

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

[45CSR§30-5.1.c.2.A, 45CSR13, Permit No. R13-0882-(Condition 4.4.1) Permit No. R13-2093 (Condition 4.4.1.)]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.
[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§30-5.1.c. State-Enforceable only.]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
[45CSR§§30-4.4. *and* 5.1.c.3.D.]

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

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

If to the DAQ:	**If to the US EPA:**
Director WVDEP Division of Air Quality 601 57th Street SE Charleston, WV 25304	Associate Director Office of Enforcement and Permits Review (3AP12) U. S. Environmental Protection Agency Region III

1650 Arch Street
Phone: 304/926-0475 Philadelphia, PA 19103-2029
FAX: 304/926-0478

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.
[45CSR§30-8.]

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: R3_APD_Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.
[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.
[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

4. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

5. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

6. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

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

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.
[45CSR§30-5.1.c.3.B.]

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

3.5.10. **Greenhouse Gas Reporting Requirements**. When applicable, as determined in permit section 3.1., greenhouse gas emissions shall be reported pursuant to 45CSR§42-4. including the following:

a. In accordance with a reporting cycle provided by the Secretary, affected sources shall report to the Secretary the quantity of all greenhouse gases emitted above *de minimis* amounts in the years specified by the Secretary.
[45CSR§42-4.1., State-Enforceable only.]

b. Affected sources shall only be required to report annual quantities of anthropogenic non-mobile source greenhouse gases emitted at the stationary source, and shall not be required to report biogenic emissions of greenhouse gases.
[45CSR§42-4.2., State-Enforceable only.]

c. Reports of greenhouse gas emissions submitted to the Secretary under 45CSR§42-4. shall be signed by a responsible official and shall include the following certification statement: "I, the undersigned, hereby certify that the data transmitted to the West Virginia Department of Environmental Protection is true, accurate, and complete, based upon information and belief formed after reasonable inquiry.
[45CSR§42-4.5., State-Enforceable only.]

3.6. Compliance Plan

N/A

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

N/A

4.0 Small Lots Front End, Small Lots Back End

4.1. Limitations and Standards

4.1.1. The Small Lots Manufacturing (SLM) unit shall operate two process lines recognized as "Front-end" and "Back-end". These process lines may be operated independently, integrated, or reconfigured as necessary for the specific products.
[45CSR13, Permit No. R13-0882-(Condition 4.1.1.) (GroupWide)]

4.1.2. Production in the SLM operations shall be limited to the following processes and associated emission limits:

4.1.2.1. The isocyanate process shall be executed in a batch operation on the "Front-end" of SLM in accordance to the requirements and limitations set forth in Condition 4.1.2.1.1. through 4.1.2.1.4. of this permit.

4.1.2.1.1. The isocyanate process shall be limited to the following products:

a. ESPI Benzoic Acid, 2-(Isocyanatosulfonyl)-ethylester

b. MCPSI Benzoic Acid, 2-(Isocyanatosulfonylmethyl)-methyl ester

c. MTSI 3-sulfonylisocyanato-2-thiophenecarboxylate

d. CPSI Benzenesulfonyl Isocyanate, 2-chloro

e. CMBSI Benzoic Acid 2-[(Isocyanato)sulfonyl]-methyl ester

4.1.2.1.2. Dust collector 114 shall be employed by emission point 104.003A to minimize particulate emissions generated during periods in which solids are charged to the reactor.

4.1.2.1.3. Main scrubber (003), incinerator (009), and incinerator scrubber (010) shall be in operation and employed by emission point 104.014 during all periods of isocyanate production.

4.1.2.1.4. The emissions released in association with the isocyanate process shall be limited to the sources, emission points, and associated emissions as shown in Table 4.1.2.1.4. of this permit.

Table 4.1.2.1.4.

Emission Point ID	Sources	Air Pollution Control Device(s) Employed	Pollutants	Controlled Emissions	
				Hourly (lbs/hr)	Annual (lbs/yr)
104.003A	114A	114	PM	0.010	21.9
104.014	012 101 103 203 206 219 901	003 009 010	Ethyl Benzene	0.005	0.74
			HCl	0.034	113.4
			n-butyl isocyanate	0.010	0.24
			Phosgene	0.142	154.2
			Xylene	0.021	2.95

[CO-R21-97-31 (Condition III.1.) Compliance with this streamlined PM limit assures compliance with 45CSR§7-4.1, 45CSR13, Permit No. R13-0882-(Condition 4.1.2.1) (114A, 003, 009, 010)]

4.1.2.2. The D5803 process shall be executed on the "Back-end" of SLM in accordance to the requirements and limitations set forth in Section 4.1.2.2.1. through 4.1.2.2.3. of this permit.

4.1.2.2.1. Dust collector 115 shall be employed by emission point 104.003B to minimize particulate emissions generated during periods in which solids are charged to the reactor.

4.1.2.2.2. Dryer condenser (004), incinerator (009), and incinerator scrubber (010) shall be in operation and employed by emission point 104.014 during all periods of D5803 production.

4.1.2.2.3. The emissions released in association with the D5803 process shall be limited to the sources, emission points, and associated emissions as shown in Table 4.1.2.2.3. of this permit.

Table 4.1.2.2.3.

Emission Point ID	Sources	Air Pollution Control Device(s) Employed	Pollutants	Controlled Emissions	
				Hourly (lb/hr)	Annual (lb/yr)
104.003B	115A	115	PM	0.010	21.9
104.014	002 004 104 108 112 201 202 208 209	004 009 010	Methanol	0.026	194
107.022	210	023	PM	0.010	15.8

[CO-R21-97-31 (Condition III.1.) Compliance with this streamlined PM limit assures compliance with 45CSR§7-4.1, 45CSR13, Permit No. R13-0882-(Condition 4.1.2.2) (115A, 004, 009, 010, 023)]

4.1.2.2.4. Dust collector 023 shall be employed by emission point 107.022 when packaging to drums to minimize particulate emissions generated during periods in which solids are charged to the product drum packaging (210).

4.1.2.3. The sulfonamide drying process shall be executed on the "Back-end" of SLM in accordance to the requirements and limitations set forth in Section 4.1.2.3.1. through 4.1.2.3.4. of this permit.

4.1.2.3.1. The sulfonamide drying process shall be limited to the following products:

a. A5546

b. V9367

c. E9260

4.1.2.3.2. Dryer condenser (004), incinerator (009), and incinerator scrubber (010) shall be in operation and employed by emission point 104.014 during all periods of the sulfonamide drying process.

4.1.2.3.3. Dust collector 023 shall be employed by emission point 107.022 when packaging to drums to minimize particulate emissions generated during periods in which solids are charged to the product drum packaging (210).

4.1.2.3.4. The emissions released in association with the sulfonamide drying process shall be limited to the sources, emission points, and associated emissions as shown in Table 4.1.2.3.4. of this permit.

Table 4.1.2.3.4.

Emission Point ID	Sources	Air Pollution Control Device(s) Employed	Pollutants	Controlled Emissions	
				Hourly (lb/hr)	Annual (lb/yr)
104.014	002	004 009 010	o-dichlorobenzene	0.017	12.5
			Methylene Chloride	0.008	3.0
107.022	210	023	PM	0.010	2.0

[CO-R21-97-31 (Condition III.1) Compliance with this streamlined PM limit assures compliance with 45CSR§7-4.1, 45CSR13, Permit No. R13-0882-(Condition 4.1.2.3) (115A, 004, 009, 010, 023)]

4.1.2.4. The U9069 process shall be executed in accordance to the requirements and limitations set forth in Section 4.1.2.4.1. through 4.1.2.4.4. of this permit.

4.1.2.4.1. Dust collector 114 shall be employed by emission point 104.003A to minimize particulate emissions generated during periods in which solids are charged to the reactor.

4.1.2.4.2. Dryer condenser (004), incinerator (009), and incinerator scrubber (010) shall be in operation and employed by emission point 104.014 during all periods of U9069 process operations.

4.1.2.4.3. Dust collector 023 shall be employed by emission point 107.022 (when packaging to drums) to minimize particulate emissions generated during periods in which solids are charged to the product (drum) packaging (210).

4.1.2.4.4. The emissions released in association with the U9069 process shall be limited to the sources, emission points, and associated emissions as shown in Table 4.1.2.4.4. of this permit.

Table 4.1.2.4.4.

Emission Point ID	Sources	Air Pollution Control Device(s) Employed	Pollutants	Controlled Emissions	
				Hourly (lb/hr)	Annual (lb/yr)
104.003A	114A	114	PM	0.010	21.9
104.014	002 108 112 201 202 203 205 206 208 209 219 226	003 004 009 010	Acetone	0.07	312
107.022	210	023	PM	0.010	15.8

[CO-R21-97-31 (Condition III.1.) Compliance with this streamlined PM limit assures compliance with 45CSR§7-4.1, 45CSR13, Permit No. R13-0882-(Condition 4.1.2.4) (114A, 115A, 004, 009, 010, 023)]

4.1.2.5. The Glycolic Acid process shall be executed on the "Back-end" of SLM in accordance to the requirements and limitations set forth in Section 4.1.2.5.1. and 4.1.2.5.2. of this permit.

4.1.2.5.1. The Glycolic Acid process shall be limited to the production of various quality Glypure products.

4.1.2.5.2. The Glycolic Acid process shall be limited to raw materials having low vapor pressure and operated at a reduced temperature resulting in no emissions being released into the atmosphere.
[45CSR13, Permit No. R13-0882-(Condition 4.1.2.5) (Glycolic Acid Process)]

4.1.2.6. The Fluridone Process (Steps 1 and 2 – Ketone 2 and Steps 3 and 4 Fluridone) shall be executed in the SLM in accordance to the requirements and limitations set forth in Section 4.1.2.6.1. and 4.1.2.6.10. of this permit.

4.1.2.6.1. Reactor (208) shall be cooled to a maximum of 50° C prior to being depressurized (during the step 4 reaction only.)

4.1.2.6.2. The depressurization of Reactor (208) shall be completed in a period no less than 25 minutes (during the step 4 reaction only.)

4.1.2.6.3. The boil-up of Reactor (208) shall be accomplished over a period no less than 235 minutes (during the step 4 reaction only.)

4.1.2.6.4. Incinerator (009) and Incinerator Scrubber (010) shall be in operation and employed by emission point 104.014 during all 4 batch steps reactions of the Fluridone process operations.

4.1.2.6.5. The emissions released in association with the first two batch step reactions of the Fluridone process shall be limited to the sources, emission points, and associated emissions as shown in Table 4.1.2.6.5. of this permit.

Table 4.1.2.6.5.

Emission Point ID	Sources	Air Pollution Control Device(s) Employed	Pollutants	Controlled Emissions	
				Hourly (lb/hr)	Annual (lb/yr)
104.014	101 104 108 109 112 203 205 206 208 219 226 901	009 010	Methanol	0.013	0.35
			Ethanol	0.001	0.02
			Toluene	0.007	0.45
			Acetic Acid	0.010	0.54

4.1.2.6.6. The emissions released in association with the second two batch step reactions of the Fluridone process shall be limited to the sources, emission points, and associated emissions as shown in Table 4.1.2.6.6. of this permit.

Table 4.1.2.6.6.

Emission Point ID	Sources	Air Pollution Control Device(s) Employed	Pollutants	Controlled Emissions	
				Hourly (lb/hr)	Annual (lb/yr)
104.014	101 104 108 109 112 203 205 206 208 209 219 226 901	009 010	Methanol	0.019	0.12
			Toluene	0.083	4.21
			DMA	0.001	0.001
			DMFDMA	0.004	0.02

4.1.2.6.7. Main scrubber (003), incinerator (009), and incinerator scrubber (010) shall be in operation and employed by emission point 114.014 during periods of depressurization of reactor (208).

4.1.2.6.8. The emissions released in association with the depressurization of reactor (208) during the Fluridone process shall be limited to the sources, emission points, and associated emissions as shown in Table 4.1.2.6.8. of this permit.

Table 4.1.2.6.8.

Emission Point ID	Sources	Air Pollution Control Device(s) Employed	Pollutants	Controlled Emissions	
				Hourly (lb/hr)	Annual (lb/yr)
104.014	208	003 009 010	DMA	0.006	0.71
			MMA	0.002	0.17

4.1.2.6.9. Dryer condenser (004), incinerator (009), and incinerator scrubber (010) shall be in operation and employed by emission point 114.014 during all periods of product drying in process dryer (002).

4.1.2.6.10. The emissions released in association with the product drying in dryer (002) during the Fluridone process shall be limited to the sources, emission points, and associated emissions as shown in Table 4.1.2.6.10. of this permit.

Table 4.1.2.6.10.

Emission Point ID	Sources	Air Pollution Control Device(s) Employed	Pollutants	Controlled Emissions	
				Hourly (lb/hr)	Annual (lb/yr)
104.014	002	004 009 010	Toluene	0.029	5.29

[CO-R21-97-31 (Condition III.1.), 45CSR13, Permit No. R13-0882-(Condition 4.1.2.6) (003, 004, 009, 010)]

4.1.2.7. The Krovar® Technical process shall be executed on the "Back-end" of SLM in accordance to the requirements and limitations set forth in Condition 4.1.2.7.1 through 4.1.2.7.3 of this Permit.

4.1.2.7.1. Dust Collector 115A shall be employed by emission point 104.003B to minimize particulate emissions generated during periods in which solids are charged to the reactor.

4.1.2.7.2. The Krovar® Technical process shall be limited to raw materials provided in Permit Application R13-0882G and having low vapor pressure resulting in no emissions being released into the atmosphere.

4.1.2.7.3. Dust collector 023 shall be employed by emission point 107.022 when packaging to drums to minimize particulate emissions generated during periods in which solids are charged to the product drum packaging (210).

[45CSR13, Permit No. R13-0882-(Condition 4.1.2.7) (115A, 023)]

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.

4.1.3.3. Dust collector 023 shall be employed by emission point 107.022 (when packaging to drums) to minimize particulate emissions generated during periods in which solids are charged to the product (drum) packaging (210).
[45CSR13, Permit No. R13-0882-(Condition 4.1.3) (009)]

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.
[45CSR13, Permit No. R13-0882-(Condition 4.1.4) (010)]

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 when employed by all process operations except the Fluridone steps 3 and 4 process. During the operation of the Fluridone steps 3 and 4 process, the Main Scrubber (003) shall not have any minimum pH requirements.

4.1.5.2. The Main Scrubber (003) shall operate with a scrubber solution flow rate greater than 150 gallons per minute.
[45CSR13, Permit No. R13-0882-(Condition 4.1.5) (003)]

4.1.6. During periods of required operation, the Dryer Condenser (004) shall be operated with a condensate temperature maintained below 40° C.
[45CSR13, Permit No. R13-0882-(Condition 4.1.6) (004)]

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.

Equipment ID Per R13-0882D	Equipment ID per Consent Order CO-R21-97-31	Control Plan (RACT or RACM)
003	003	RACM
014	014	RACM
101	101	RACM
103	103	RACM
104	104	RACM
110	110	RACM
201	201	RACM
203	203	RACM
205	204	RACM

206	206	RACM
208	208	RACM
209	209	RACM
219	301	RACM
226	302	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.

[CO-R21-97-31 (Condition III.1., III.2., III.3., III.5., III.6., III.7., IV.7., IV.11.), CO-R21-2001-10A(97) (Condition III.1.), 45CSR13, Permit No. R13-0882-(Condition 4.1.7) (104.014)]

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.

[CO-R21-97-31 (Condition IV.13.) (104.014)]

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.
[45CSR13, Permit No. R13-0882-(Condition 4.1.8) (Groupwide)]

4.1.9. **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§13-5.11, 45CSR13, Permit No. R13-0882-(Condition 4.1.9) (014A, 015A, 023, 003, 004, 009, and 010)]

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

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 MON Group 1 Batch 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

[45CSR34, 40CFR§63.2460(a) (002, 201, 205, 206, 203C, 208, 208C, 208P, 209, 219)]

4.1.18. The Permittee shall comply with the following MON Wastewater Unit requirements:
The Permittee shall operate and maintain a fixed roof for Group 1 Wastewater Tanks 109 and 109L/WWL.
[45CSR34, 40CFR§63.2485(a) and 40CFR§63.133(a)(1) (109, 109L/WWL)]

4.1.19. The Permittee shall comply with the following MON 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.
[45CSR34, 40CFR§63.2475(a) (108L)]

4.1.20. The Permittee shall comply with the following MON Equipment Leak Requirements:

For all equipment that is in organic HAP Service:

(a) Comply with the 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 referenced 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).

[45CSR34, 40CFR§§63.2480(b)(1)-(5)]

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. of this permit, the permittee shall monitor the production rates of each product produced in the operating unit.
[45CSR13, Permit No. R13-0882-(Condition 4.2.1) (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 for a sufficient time interval 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 , 45CSR13, Permit No. R13-0882-(Condition 4.2.2) (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.
[45CSR13, Permit No. R13-0882-(Condition 4.2.3) (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 Condition 4.1.4. of this permit, the permittee shall provide continuous monitoring of the pH and flow rate of the scrubber solution in the Incinerator Scrubber (010), during periods of routine operation.
[45CSR13, Permit No. R13-0882-(Condition 4.2.4) (010)]

4.2.5. 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 4.1.5. of this permit, the permittee shall provide continuous monitoring of the pH and flow rate of the scrubber solution in the Main Scrubber (003), during periods of routine operation.
[45CSR13, Permit No. R13-0882-(Condition 4.2.5) (003)]

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.
[45CSR13, Permit No. R13-0882-(Condition 4.2.6) (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 for a sufficient time interval 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 4.1.2.1.4, 4.1.2.2.3, 4.1.2.3.4, and 4.1.15 shall be determined by maintenance inspection of the dust collectors on a semi-annual basis.
[45CSR§30-5.1.c. (023, 114A, 115, 116)]

4.3. Testing Requirements

N/A

4.4. Recordkeeping Requirements

4.4.1. *Record of Maintenance of Air Pollution Control Equipment.* For all pollution control equipment required by this permit, the permittee shall maintain accurate records of inspection and/or preventative maintenance schedules, the results of the inspection and/or preventative maintenance activities, and any corrective actions taken.
[45CSR13, Permit No. R13-0882-(Condition 4.4.2)]

4.4.2. *Record of Malfunctions, Operational Shutdowns, and Other Events of Air Pollution Control Equipment.* The permittee shall maintain accurate records of all maintenance activities, malfunctions, and other operational shutdowns for designated pollution control equipment or process equipment employed for the purpose of emissions reduction required by this permit. For each such case, the following information, at a minimum, must 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.
[45CSR13, Permit No. R13-0882-(Condition 4.4.3)]

4.4.3. For the purpose of demonstrating compliance with the monitoring requirements set forth in Condition 4.2.1. of this permit, the permittee shall maintain monthly production records documenting the production rate of each of the permitted processes.
[45CSR13, Permit No. R13-0882-(Condition 4.4.4) (115A, 004, 009, 010, 023)]

4.4.4. For the purpose of demonstrating compliance with the emission limits set forth in Condition 4.1.2. of this permit, the permittee shall perform monthly emission estimates based on the records of production maintained in accordance to Condition 4.4.3. 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.
[45CSR13, Permit No. R13-0882-(Condition 4.4.4) (023, 114A, 115, 116, 004, 009, 010)]

4.4.5. You must keep the 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 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 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 Group 2 batch process vents using a flare that meets the requirements of §63.987.

(iii) You control the 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 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 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.

[45CSR34, 40CFR§63.2525]

4.5. Reporting Requirements

4.5.1. (b) Unless the Administrator has approved a different schedule for submission of reports under 40CFR§63.10(a), you must submit each report according to paragraphs (3) through (5).

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than August 31 or February 28, whichever date is the first date following the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40CFR§70.6(a)(3)(iii)(A) or 40CFR§71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(3) and (4) of this section.

(e) The reports must contain the following information:

(1) Company name and address.

(2) Statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) For each SSM during which excess emissions occur, the compliance report must include records that the procedures specified in your startup, shutdown, and malfunction plan (SSMP) were followed or documentation of actions taken that are not consistent with the SSMP, and include a brief description of each malfunction.

(5) The compliance report must contain the information on deviations, as defined in §63.2550, according to paragraphs (e)(5)(i), (ii), (iii), and (iv) of this section.

(i) If there are no deviations from any emission limit, operating limit or work practice standard specified in this subpart, include a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period.

(ii) For each deviation from an emission limit, operating limit, and work practice standard that occurs at an affected source where you are not using a continuous monitoring system (CMS) to comply with the emission limit or work practice standard in this subpart, you must include the information in paragraphs (e)(5)(ii)(A) through (C) of this section. This includes periods of SSM.

(A) The total operating time of the affected source during the reporting period.

(B) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(C) Operating logs of processes with batch vents from batch operations for the day(s) during which the deviation occurred, except operating logs are not required for deviations of the work practice standards for equipment leaks.

(iii) For each deviation from an emission limit or operating limit occurring at an affected source where you are using a CMS to comply with an emission limit in this subpart, you must include the information in paragraphs (e)(5)(iii)(A) through (L) of this section. This includes periods of SSM.

(A) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(B) The date, time, and duration that each CEMS was out-of-control, including the information in §63.8(c)(8).

(C) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(D) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total operating time of the affected source during that reporting period.

(E) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(F) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the affected source during that reporting period.

(G) An identification of each HAP that is known to be in the emission stream.

(H) A brief description of the process units.

(I) A brief description of the CMS.

(J) The date of the latest CMS certification or audit.

(K) Operating logs of processes with batch vents from batch operations for each day(s) during which the deviation occurred.

(L) The operating day or operating block average values of monitored parameters for each day(s) during which the deviation occurred.

(iv) If you documented in your notification of compliance status report that an MCPU has Group 2 batch process vents because the non-reactive HAP is the only HAP and usage is less than 10,000 lb/yr, the 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, or total uncontrolled hydrogen halide and halogen HAP emissions from all batch process vents and continuous process vents in a process are less than 1,000 lb/yr, include the records associated with each calculation required by §63.2525(e) that exceeds an applicable HAP usage or emissions threshold.

(6) If you use a CEMS, and there were no periods during which it was out-of-control as specified in §63.8(c)(7), include a statement that there were no periods during which the CEMS was out-of-control during the reporting period.

(7) Include each new operating scenario which has been operated since the time period covered by the last compliance report and has not been submitted in the notification of compliance status report or a previous compliance report. For each new operating scenario, you must provide verification that the operating conditions for any associated control or treatment device have not been exceeded and that any required calculations and engineering analyses have been performed. For the purposes of this paragraph, a revised operating scenario for an existing process is considered to be a new operating scenario.

(8) Records of process units added to a PUG as specified in §63.2525(i)(4) and records of primary product redeterminations as specified in §63.2525(i)(5).

(9) Applicable records and information for periodic reports as specified in referenced subparts F, G, H, SS, UU, WW, and GGG of this part and subpart F of 40 CFR part 65.

(10) *Notification of process change.* (i) Except as specified in paragraph (e)(10)(ii) of this section, whenever you make a process change, or change any of the information submitted in the notification of compliance status report or a previous compliance report, that is not within the scope of an existing operating scenario, you must document the change in your compliance report. A process change does not include moving within a range of conditions identified in the standard batch, and a nonstandard batch does not constitute a process change. The notification must include all of the information in paragraphs (e)(10)(i)(A) through (C) of this section.

(A) A description of the process change.

(B) Revisions to any of the information reported in the original notification of compliance status report under paragraph (d) of this section.

(C) Information required by the notification of compliance status report under paragraph (d) of this section for changes involving the addition of processes or equipment at the affected source.

(ii) You must submit a report 60 days before the scheduled implementation date of any of the changes identified in paragraph (e)(10)(ii)(A), (B), or (C) of this section.

(A) Any change to the information contained in the precompliance report.

(B) A change in the status of a control device from small to large.

(C) A change from Group 2 to Group 1 for any emission point except for batch process vents that meet the conditions specified in §63.2460(b)(6)(i).

[45CSR34, 40CFR§§63.2520(b)(3)-(5) and (e)]

4.6. Compliance Plan

N/A

5.0 Building 114

5.1. Limitations and Standards

5.1.1. The facility shall be limited to the maximum production rates and operating schedules as set forth in the following requirements:

a. The Krenite process shall be limited to a maximum annual production rate of 100 batches per year.

b. The Hexazinone intermediate and Krenite processes shall be limited to a maximum combined annual production rate of 781 batches per year.

[45CSR13, Permit No. R13-2093 (Condition 4.1.1.)]

5.1.2. During the Krenite process only, gaseous emissions released from the Reactor (HK101) shall be transferred to the Vent Scrubber (HKCD03). Vent Scrubber (HKCD03) shall maintain a minimum water flow of 4,000 pounds per hour and be operated so to provide a minimum guaranteed emissions reduction efficiency of 99.9%.
[45CSR13, Permit No. R13-2093 (Condition 4.1.2.) (HK101, HKCD03)]

5.1.3. During the Krenite process only, emissions released from the Vent Scrubber (HKCD03) through Emission Point 141.001 shall be limited to the pollutants and associated emission rates shown in Table 5.1.3. of this permit.

Table 5.1.3.

Pollutant	Emission Rate	
	Hourly (pounds/hour)	**Annual (tons/year)**
VOC	0.5	0.25
Methanol	0.23	0.11

[45CSR13, Permit No. R13-2093 (Condition 4.1.3.) (HKCD03)]

5.1.4. Emissions transferred to the Thermal Oxidizer (HKCD01) and Thermal Oxidizer Scrubber (HKCD02) shall be released through Emission Point 141.100. The controlled emissions released through Emission Point 141.100 shall be limited to the pollutants and associated emissions rates shown in Table 5.1.4. of this permit.

Table 5.1.4.

Pollutant	**Emission Rate**	
	Hourly (pounds/hour)	**Annual (tons/year)**
Hydrogen Chloride	2.25	1.67
Nitrous Oxides as NO_2	20.0	49.4
Sulfur Dioxide	0.003	0.012
Methyl Chloride	4.60	1.69
Ammonia (NH_3)	2.00	8.06
Methanol	4.20	16.56
Ethanol	3.46	3.55
Tributylamine	0.40	0.28
Ethyl Chloride	7.97	3.78
Methyl Chloroformate	0.26	0.15
Triethyl Phosphite	0.07	0.20

[45CSR13, Permit No. R13-2093 (Condition 4.1.4.) (HKCD01, HKCD02)]

5.1.5. 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).

[45CSR13, Permit No. R13-2093 (Condition 4.1.5.) (HKCD01)]

5.1.6. The Thermal Oxidizer Scrubber (HKCD02) shall maintain a minimum removal efficiency of 99% for hydrogen chloride and chlorine.
[45CSR13, Permit No. R13-2093 (Condition 4.1.6.) (HKCD02)]

5.1.7. The Thermal Oxidizer Scrubber (HKCD02) liquor shall maintain a minimum average pH of 7.2 during periods that the hexazinone waste gas is being fed to the thermal oxidizer.
[45CSR13, Permit No. R13-2093 (Condition 4.1.7.) (HKCD02)]

5.1.8. 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.
[45CSR13, Permit No. R13-2093 (Condition 4.1.8.) (HKCD01, HKCD02)]

5.1.9. Off-gases from the Stripper (HKCD08) shall be vented to the Thermal Oxidizer (HKCD01) and Thermal Oxidizer Scrubber (HKCD02) at all times the Stripper (HKCD08) is in operation. In the event of a malfunction or mechanical outage of the thermal oxidizer and caustic scrubbing system, off-gases from the Stripper (HKCD08) shall be condensed and handled in accordance with 45CSR35.
[45CSR13, Permit No. R13-2093 (Condition 4.1.9.) (HKCD01, HKCD02)]

5.1.10. Off-gases from the reactors (HK101 and HK103) shall be vented to the Thermal Oxidizer (HKCD01) and Thermal Oxidizer Scrubber (HKCD02) at all times the reactors are in operation. In the event of a malfunction or mechanical outage of the Thermal Oxidizer (HKCD01) and Thermal Oxidizer Scrubber (HKCD02) , off gases from the Hexazinone unit can vent to the atmosphere. The Director shall be notified of the malfunction. This notification shall include at a minimum, the cause of the malfunction, the date and duration of the malfunction or outage, an estimate of the mass of emissions discharged during the malfunction or outage, and remedial actions taken to correct the malfunction or outage by letter within 5 days of the shut-down. The Director shall be notified by letter within 5 days of the restart of the thermal oxidizer and caustic scrubbing system.
[45CSR13, Permit No. R13-2093 (Condition 4.1.10.) (HKCD01, HKCD02)]

5.1.11. 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.
[45CSR13, Permit No. R13-2093 (Condition 4.1.11.)]

5.1.12. **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§13-5.11., 45CSR13, Permit No. R13-2093 (Condition 4.1.12.) (HKCD01, HKCD02, HKCD03, HKCD04, HKCD05, HKCD06, HKCD07, HKCD08, HKCD09, HKCD10)]

5.1.13. 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.) (141.001)]

5.1.14. 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.) (141.001)]

5.1.15. 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.) (141.001)]**

5.1.16. 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.) (141.001)]

5.1.17. 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.) (141.001)]

5.1.18. 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.) (141.001)]

5.1.19. 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.) (141.001)]

5.1.21. 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 5.1.22.
[45CSR§6-4.3. (HKCD01)]

5.1.22. The provisions of 5.1.21 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)]

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

5.1.24. 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)]

5.1.25. The Permittee shall comply with the following MON 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.
[45CSR34, 40CFR§§63.2470(a) and (d) (HK104)]

5.1.26. The Permittee shall comply with the following MON 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.
[45CSR34, 40CFR§63.2460(a) (HK101, HK102, and HK103)]

5.1.27. The Permittee shall comply with the following MON 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.
[45CSR34, 40CFR§63.2460(c)(3) (HKCD01 and HKCD02)]

5.1.28. The Permittee shall comply with the following MON Wastewater Unit requirements:

The Permittee shall operate and maintain a fixed roof for Group 1 Wastewater Tanks HK007 and HK008.
[45CSR34, 40CFR§63.2485(a) and 40CFR§63.133(a)(1) (HK007, HK008)]

The Permittee shall operate and maintain a fixed roof for Group 1 Wastewater Tanks HKCD07. If these tanks are used for heating wastewater, or treating by means of an exothermic reaction or the contents of the tank are sparged, the Permittee shall comply with (i) through (iv) below:

(i) A fixed roof and a closed-vent system that routes the organic hazardous air pollutants vapors vented from the wastewater tank to a control device.

(ii) A fixed roof and an internal floating roof that meets the requirements specified in 40CFR§63.119(b) of this subpart;

(iii) An external floating roof that meets the requirements specified in 40CFR§§63.119(c), 63.120(b)(5), and 63.120(b)(6); or

(iv) An equivalent means of emission limitation. Determination of equivalence to the reduction in emissions achieved by the requirements of 40CFR§§(a)(2)(i) through (a)(2)(iii) will be evaluated according to 40CFR§63.102(b) of Subpart F. The determination will be based on the application to the Administrator which shall include the information specified below:

(A) Actual emissions tests that use full-size or scale-model wastewater tanks that accurately collect and measure all organic hazardous air pollutants emissions from a given control technique, and that accurately simulate wind and account for other emission variables such as temperature and barometric pressure, or

(B) An engineering evaluation that the Administrator determines is an accurate method of determining equivalence.

[45CSR34, 40CFR§63.2485(a) and 40CFR§§63.133(a)(1) and (2) (HKCD07)]

(e) *Percent mass removal/destruction option.* The owner or operator of a new or existing source shall comply with paragraph (1) or (2) below for control of 40CFR63, Subpart G Table 8 and/or Table 9 compounds for Group 1 wastewater streams. This option shall not be used for biological treatment processes.

(1) *Reduce mass flow rate of 40CFR63 Subpart G Table 8 and/or Table 9 compounds by 99 percent.* For wastewater streams that are Group 1, the owner or operator shall reduce, by removal or destruction, the mass flow rate of Table 8 and/or Table 9 compounds by 99 percent or more. The removal/destruction efficiency shall be determined by the procedures specified in 40CFR§63.145(c), for noncombustion processes, or 40CFR§63.145(d), for combustion processes.

(2) *Reduce mass flow rate of 40CFR63 Subpart G Table 8 and/or Table 9 compounds by Fr value.* For wastewater streams that are Group 1 for Table 8 and/or Table 9 compounds, the owner or operator shall reduce, by removal or destruction, the mass flow rate by at least the fraction removal (Fr) values specified in Table 9 of this subpart. (The Fr values for Table 8 compounds are all 0.99.) The removal/destruction efficiency shall be determined by the procedures specified in §63.145(c), for noncombustion treatment processes, or 40CFR§63.145(d), for combustion treatment processes.

[45CSR34, 40CFR§63.2485(a) and 40CFR§§63.138(e) (HKCD08)]

5.1.29. The Permittee shall comply with the Group 1 Process Wastewater Stream requirement:

(ii) The Permittee shall have a removal efficiency of Methanol from Wastewater Stream (HKCD03WW) of at least 31%.

(iii) The Permittee shall continuously monitor steam flow rate, wastewater feed mass flow rate, and wastewater feed temperature.

(iv)(a) The Permittee shall report the following data as required by 40CFR§152(c):

(2) The Permittee shall submit the monitoring results for each operating day during which the daily average value of the following parameters are outside the ranges given below:

SF31 (lb steam/lb feed) < 0.1647 – 0.001282 * Tfeed °C

Where SF31 is the steam flow rate to wastewater feed mass ratio in lbs/lbs needed to meet the 31% methanol removal

Tfeed is the temperature of the wastewater feed temperature in degrees Celsius.

(iv)(b) The Permittee shall keep the following records:

(5) The Permittee shall keep continuous records of the parameters listed in (2) above.

[45CSR34, 40CFR§63.2485(a), 40CFR§§63.132(a)(2)(ii)-(iv), 40CFR§63.143(b), 40CFR§§146(d)(1) and (2), and 40CFR§63.147(a)(5) (HKCD03WW)]

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

For all equipment that is in organic HAP Service:

(b) Comply with the 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).

[45CSR34, 40CFR§§63.2480(b)(1)-(5)]

5.2. Monitoring Requirements

5.2.1. For the purpose of determining compliance with the maximum production rates set forth by Condition 5.1.1 of this permit, the permittee shall monitor the number of batches produced in each of the permitted process.
[45CSR13, Permit No. R13-2093 (Condition 4.2.1.)]

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.
[45CSR13, Permit No. R13-2093 (Condition 4.2.2.)]

5.2.3. For the purpose of determining compliance with the maximum emission limits set forth in Condition 5.1.3 and 5.1.4, 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).
[45CSR13, Permit No. R13-2093 (Condition 4.2.3.)]

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 5.1.5. of this permit, the permittee shall provide continuous monitoring of the operating parameters of the Thermal Oxidizer (HKCD01).
[45CSR13, Permit No. R13-2093 (Condition 4.2.4.)]

5.2.5. For the purpose of demonstrating compliance with the operating requirements set forth in Condition 5.1.6 and 5.1.7 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.
[45CSR13, Permit No. R13-2093 (Condition 4.2.5.)]

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 for a sufficient time interval 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 (HKCD01)]

5.3. Testing Requirements

N/A

5.4. Recordkeeping Requirements

5.4.1. **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.
[45CSR13, Permit No. R13-2093 (Condition 4.4.2.) (HKCD01, HKCD02, HKCD03, HKCD04, HKCD05, HKCD06, HKCD07, HKCD08, HKCD09, HKCD10)]

5.4.2. **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.

[45CSR13, Permit No. R13-2093 (Condition 4.4.3.) (HKCD01, HKCD02, HKCD03, HKCD04, HKCD05, HKCD06, HKCD07, HKCD08, HKCD09, HKCD10)]

5.4.3. 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.
[45CSR13, Permit No. R13-2093 (Condition 4.4.4.)]

5.4.4. 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).
[45CSR13, Permit No. R13-2093 (Condition 4.4.5.)

5.4.5. 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

[45CSR13, Permit No. R13-2093 (Condition 4.4.6.)]

5.4.6. 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.
[45CSR13, Permit No. R13-2093 (Condition 4.4.7.)]

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 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).
[45CSR13, Permit No. R13-2093 (Condition 4.4.8.)]

5.4.8. 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.
[45CSR13, Permit No. R13-2093 (Condition 4.4.9.)]

5.4.9. You must keep the 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 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 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 Group 2 batch process vents using a flare that meets the requirements of §63.987.

(iii) You control the 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 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 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.

[45CSR34, 40CFR§63.2525]

5.5. Reporting Requirements

5.5.1. An annual report shall be submitted to the Director within thirty (30) days of the end of each calendar year. This report shall contain at a minimum, the following records of operation:

a. Total annual production records as maintained in accordance to Condition 5.4.4. of this permit.

b. Total annual hours of operation of the Thermal Oxidizer (HKCD01) and Thermal Oxidizer Scrubber (HKCD02) as maintained in accordance to Section 5.4.7. of this permit.

[45CSR13, Permit No. R13-2093 (Condition 4.5.1)]

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.
[45CSR§21-5.2 (141.001)]

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. (b) Unless the Administrator has approved a different schedule for submission of reports under 40CFR§63.10(a), you must submit each report according to paragraphs (3) through (5).

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than August 31 or February 28, whichever date is the first date following the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40CFR§70.6(a)(3)(iii)(A) or 40CFR§71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(3) and (4) of this section.

(e) The reports must contain the following information:

(1) Company name and address.

(2) Statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) For each SSM during which excess emissions occur, the compliance report must include records that the procedures specified in your startup, shutdown, and malfunction plan (SSMP) were followed or documentation of actions taken that are not consistent with the SSMP, and include a brief description of each malfunction.

(5) The compliance report must contain the information on deviations, as defined in §63.2550, according to paragraphs (e)(5)(i), (ii), (iii), and (iv) of this section.

(i) If there are no deviations from any emission limit, operating limit or work practice standard specified in this subpart, include a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period.

(ii) For each deviation from an emission limit, operating limit, and work practice standard that occurs at an affected source where you are not using a continuous monitoring system (CMS) to comply with the emission limit or work practice standard in this subpart, you must include the information in paragraphs (e)(5)(ii)(A) through (C) of this section. This includes periods of SSM.

(A) The total operating time of the affected source during the reporting period.

(B) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(C) Operating logs of processes with batch vents from batch operations for the day(s) during which the deviation occurred, except operating logs are not required for deviations of the work practice standards for equipment leaks.

(iii) For each deviation from an emission limit or operating limit occurring at an affected source where you are using a CMS to comply with an emission limit in this subpart, you must include the information in paragraphs (e)(5)(iii)(A) through (L) of this section. This includes periods of SSM.

(A) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(B) The date, time, and duration that each CEMS was out-of-control, including the information in §63.8(c)(8).

(C) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(D) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total operating time of the affected source during that reporting period.

(E) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(F) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the affected source during that reporting period.

(G) An identification of each HAP that is known to be in the emission stream.

(H) A brief description of the process units.

(I) A brief description of the CMS.

(J) The date of the latest CMS certification or audit.

(K) Operating logs of processes with batch vents from batch operations for each day(s) during which the deviation occurred.

(L) The operating day or operating block average values of monitored parameters for each day(s) during which the deviation occurred.

(iv) If you documented in your notification of compliance status report that an MCPU has Group 2 batch process vents because the non-reactive HAP is the only HAP and usage is less than 10,000 lb/yr, the 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, or total uncontrolled hydrogen halide and halogen HAP emissions from all batch process vents and continuous process vents in a process are less than 1,000 lb/yr, include the records associated with each calculation required by §63.2525(e) that exceeds an applicable HAP usage or emissions threshold.

(6) If you use a CEMS, and there were no periods during which it was out-of-control as specified in §63.8(c)(7), include a statement that there were no periods during which the CEMS was out-of-control during the reporting period.

(7) Include each new operating scenario which has been operated since the time period covered by the last compliance report and has not been submitted in the notification of compliance status report or a previous compliance report. For each new operating scenario, you must provide verification that the operating conditions for any associated control or treatment device have not been exceeded and that any required calculations and engineering analyses have been performed. For the purposes of this paragraph, a revised operating scenario for an existing process is considered to be a new operating scenario.

(8) Records of process units added to a PUG as specified in §63.2525(i)(4) and records of primary product redeterminations as specified in §63.2525(i)(5).

(9) Applicable records and information for periodic reports as specified in referenced subparts F, G, H, SS, UU, WW, and GGG of this part and subpart F of 40 CFR part 65.

(10) *Notification of process change.* (i) Except as specified in paragraph (e)(10)(ii) of this section, whenever you make a process change, or change any of the information submitted in the notification of compliance status report or a previous compliance report, that is not within the scope of an existing operating scenario, you must document the change in your compliance report. A process change does not include moving within a range of conditions identified in the standard batch, and a nonstandard batch does not constitute a process change. The notification must include all of the information in paragraphs (e)(10)(i)(A) through (C) of this section.

(A) A description of the process change.

(B) Revisions to any of the information reported in the original notification of compliance status report under paragraph (d) of this section.

(C) Information required by the notification of compliance status report under paragraph (d) of this section for changes involving the addition of processes or equipment at the affected source.

(ii) You must submit a report 60 days before the scheduled implementation date of any of the changes identified in paragraph (e)(10)(ii)(A), (B), or (C) of this section.

(A) Any change to the information contained in the precompliance report.

(B) A change in the status of a control device from small to large.

(C) A change from Group 2 to Group 1 for any emission point except for batch process vents that meet the conditions specified in §63.2460(b)(6)(i).

[45CSR34, 40CFR§§63.2520(b)(3)-(5) and (e)]

5.6. Compliance Plan

N/A

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