Commonwealth of Kentucky
Energy and Environment Cabinet
Department for Environmental Protection
Division for Air Quality
300 Sower Boulevard, 2nd Floor
Frankfort, Kentucky 40601
(502) 564-3999

Draft

AIR QUALITY PERMIT

Issued under 401 KAR 52:020

Permittee Name:	**ISP Chemicals LLC**
Mailing Address:	**455 North Main Street, Calvert City, KY 42029**
Source Name:	**ISP Chemicals LLC**
Mailing Address:	**455 North Main Street, Calvert City, KY 42029**
Source Location:	**same as above**
Permit ID:	**V-24-024**
Agency Interest #:	**2939**
Activity ID:	**APE20230002**
Review Type:	**Title V, Operating**
Source ID:	**21-157-00003**
Regional Office:	**Paducah Regional Office** **130 Eagle Nest Drive** **Paducah, KY 42003** **(270) 898-8468**
County:	**Marshall**
Application Complete Date:	**September 24, 2024**
Issuance Date:	
Expiration Date:	

For Michael J. Kennedy, P.E.
Director
Division for Air Quality

TABLE OF CONTENTS

Permit Number	Permit Type	Activity#	Complete Date	Issuance Date	Summary of Action
V-24-024	Renewal	APE20230002	9/24/2024		Renewal Permit and inclusion of 502(b)(10) changes

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Energy and Environment Cabinet (Cabinet) hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit was issued under the provisions of Kentucky Revised Statutes (KRS) Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

GAMMA-BUTYROLACTONE (BLO) PROCESS UNIT (Emission Units BL1 and BL2)

Major Process Equipment used in BLO Production

Equipment ID	Description	Date Commenced
211/3411	Ammonia column (common with pyrrolidones unit)	1960
211/3415	Residue tower (common with pyrrolidones unit)	1981
224/3302	Reactor	1960
224/3401	Lights tower (common with pyrrolidones unit)	1960
224/3402	Final tower (common with pyrrolidones unit)	1960
225/3301	Reactor	1964
225/3401	Lights tower (common with pyrrolidones unit)	1965
225/3402	Final tower (common with pyrrolidones unit)	1965

The above list is larger process equipment, not an inclusive list of equipment. Many smaller pieces of equipment are within the process unit such as charge pots, coolers, receivers, seal pots, condensers, etc.

BL1 GAMMA-BUTYROLACTONE (BLO) PROCESS VENTS
01 BLO Process Vent Emissions
Controls: None

02 BLO Process Vent Emissions
Controls: Wickes Boiler 115/5304, E Paracymene Heater 115/5306, or West Paracymene Heater 126/5301 (Emissions accounted for at boiler and heater emission units)

BL2 GAMMA-BUTYROLACTONE (BLO) FUGITIVE EMISSIONS
01 BLO Fugitive VOC
Controls: None

APPLICABLE REGULATIONS:
401 KAR 50:012, General application

401 KAR 63:002, Section 2(4)(a), 40 C.F.R. 63.100 through 63.107, Tables 1 through 4 (Subpart F), National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry

NON-APPLICABLE REGULATIONS:
401 KAR 60:005, Section 2(2)(bbb), 40 C.F.R. 60.480 through 60.489 (Subpart VV), Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006

401 KAR 60:005, Section 2(2)(ppp), 40 C.F.R. 60.660 through 60.668 (Subpart NNN), Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

401 KAR 60:005, Section 2(2)(ttt), 40 C.F.R. 60.700 through 60.708 (Subpart RRR), Standards of Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes

401 KAR 63:002, Section 2(4)(b), 40 C.F.R. 63.110 through 63.153, Tables 1 through 37, and Figure 1 (Subpart G), National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater

401 KAR 63:002, Section 2(4)(c), 40 C.F.R. 63.160 through 63.183, Tables 1 through 4 (Subpart H), National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing

1. **Operating Limitations:**
   Pursuant to 401 KAR 50:012, Section 1(2), all major air contaminant sources shall as a minimum apply control procedures that are reasonable, available, and practical.

   Compliance Demonstration Method:

Emission Unit Type	VOC RAP Control Procedure
Process Vents	Majority of process emissions are vented to three site boilers
Fugitive Equipment Leaks	None-Instrumental monitoring is not reasonable for heavy liquid components
Storage Tanks	Fixed roofs-vapor pressure significantly lower than NSPS storage tank exemption thresholds

2. **Emission Limitations:**
   None

3. **Testing Requirements:**
   Performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

4. **Specific Monitoring Requirements:**
   None

5. **Specific Recordkeeping Requirements:**
   a. The permittee of a chemical manufacturing process unit that meets the criteria specified in 40 CFR 63.100(b)(1) and (b)(3) but does not use as a reactant or manufacture as a product or co-product, any organic hazardous air pollutant listed in table 2 of 40 CFR 63, Subpart F, shall comply only with the requirements of 40 CFR 63.103(e). To comply with this subpart, such chemical manufacturing process units shall not be required to comply with the provisions of subpart A of 40 CFR 63, Subpart F. [40 CFR 63.100(c)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. The permittee of a chemical manufacturing process unit which meets the criteria of 40 CFR 63.100(b)(1) and (3), but not the criteria of 40 CFR 63.100(b)(2), shall comply with the requirements of either 40 CFR 63.103(e)(1) or (2). [40 CFR 63.103(e)]
   (1) Retain information, data, and analysis used to determine that the chemical manufacturing process unit does not use as a reactant or manufacture as a product or co-product any organic hazardous air pollutant. Examples of information that could document this include, but are not limited to, records of chemicals purchased for the process, analyses of process stream composition, engineering calculations, or process knowledge. [40 CFR 63.103(e)(1)]
   (2) When requested by the Administrator, demonstrate that the chemical manufacturing process unit does not use as a reactant or manufacture as a product or co-product any organic hazardous air pollutant. [40 CFR 63.103(e)(2)]

6. Specific Reporting Requirements:
None

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

PYRROLIDONES UNIT (Emission Units PY1 and PY2)

Major Process Equipment

Equipment ID	Description	Date Commenced
211/3303	Reactor	1955
211/3305	Reactor	1992
211/3411	Ammonia column (common with BLO unit)	1960
211/3415	Residue tower (common with BLO unit)	1981
211/--	Tank wagon loading	--
222/3002	Process tank (2,300 gal capacity)	1960
222/3302	Reactor	2008
222/3401	Ammonia Tower	1960
222/3402	Residue Tower	1960
222/3404	Ammonia Stripper	1964
224/3401	Lights tower (common with BLO unit)	1960
224/3402	Final tower (common with BLO unit)	1960
225/3401	Lights tower (common with BLO unit)	1965
225/3402	Final tower (common with BLO unit)	1965
315/3304	Polymerizer (common with 315 building)	1957
315/3307	Reactor (common with 315 building)	1975

The above list is larger process equipment, not an inclusive list of equipment. Many smaller pieces of equipment are within the process unit such as charge pots, coolers, receivers, seal pots, condensers, etc.

PY1 PYRROLIDONES UNIT PROCESS VENTS
01 Pyrrolidones Unit Vent Emissions
Controls: None

PY2 PYRROLIDONES UNIT FUGITIVE EMISSIONS
01 Pyrrolidones Unit Fugitive VOC
Controls: None

APPLICABLE REGULATIONS:
401 KAR 50:012, General application

NON-APPLICABLE REGULATIONS:
401 KAR 60:005, Section 2(2)(bbb), 40 C.F.R. 60.480 through 60.489 (Subpart VV), Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

401 KAR 60:005, Section 2(2)(ppp), 40 C.F.R. 60.660 through 60.668 (Subpart NNN), Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations

401 KAR 60:005, Section 2(2)(ttt), 40 C.F.R. 60.700 through 60.708 (Subpart RRR), Standards of Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes

401 KAR 63:002, Section 2(4)(a), 40 C.F.R. 63.100 through 63.107, Tables 1 through 4 (Subpart F), National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry

401 KAR 63:002, Section 2(4)(b), 40 C.F.R. 63.110 through 63.153, Tables 1 through 37, and Figure 1 (Subpart G), National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater

401 KAR 63:002, Section 2(4)(c), 40 C.F.R. 63.160 through 63.183, Tables 1 through 4 (Subpart H), National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing

1. **Operating Limitations:**
   All major air contaminant sources shall as a minimum apply control procedures that are reasonable, available, and practical. [401 KAR 50:012, Section 1(2)]

   Compliance Demonstration Method:

Emission Unit Type	VOC RAP Control Procedure
Process Vents	None-Each emission unit emits VOC at less than insignificant activity levels, RAP not reasonable for non-HAP insignificant activities
Fugitive Equipment Leaks	None-Instrumental monitoring is not reasonable for heavy liquid components
Storage Tanks	Fixed roofs-vapor pressure significantly lower than NSPS storage tank exemption thresholds

2. **Emission Limitations:**
   None

3. **Testing Requirements:**
   Performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. **Specific Monitoring Requirements:**
   None

5. **Specific Recordkeeping Requirements:**
   None

6. **Specific Reporting Requirements:**
   None

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

VINYL PYRROLIDONES UNIT (Emission Units VP1 and VP2)

Major Process Equipment

Equipment ID	Description	Date Commenced
223/3401	Lights tower	1960
223/3402	Recovered pyrrolidone tower	1960
223/3403	Product tower	1965
223/3501	Stripper	1973
237/3211	High purification tower	1994
326/3304	Prep kettle	1962
326/3305	C vinylator	1962
326/3306	D vinylator	1965
----------	Acetylene Feed system	1956

The above list is larger process equipment, not an inclusive list of equipment. Many smaller pieces of equipment are within the process unit such as charge pots, coolers, receivers, seal pots, condensers, etc.

VP1 VINYL PYRROLIDONES UNIT PROCESS VENTS
01 Vinyl Pyrrolidones Unit Vent Emissions
Controls: None

02 326 Vinyl Pyrrolidones Acetylene Feed System Emissions
Controls: Flare 421/5310

03 326 Vinyl Pyrrolidones Acetylene Feed System Emissions
Controls: None

VP2 VINYL PYRROLIDONES UNIT FUGITIVE EMISSIONS
01 Vinyl Pyrrolidones Unit Fugitive VOC
Controls: None

APPLICABLE REGULATIONS:
401 KAR 63:015, Flares.

401 KAR 63:002, Section 2(4)(a), 40 C.F.R. 63.100 through 63.107, Tables 1 through 4 (Subpart F), National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry.

NON-APPLICABLE REGULATIONS:
401 KAR 50:012, General application.

401 KAR 60:005, Section 2(2)(bbb), 40 C.F.R. 60.480 through 60.489 (Subpart VV), Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

401 KAR 60:005, Section 2(2)(ppp), 40 C.F.R. 60.660 through 60.668 (Subpart NNN), Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations.

401 KAR 60:005, Section 2(2)(ttt), 40 C.F.R. 60.700 through 60.708 (Subpart RRR), Standards of Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes.

401 KAR 63:002, Section 2(4)(b), 40 C.F.R. 63.110 through 63.153, Tables 1 through 37, and Figure 1 (Subpart G), National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater.

401 KAR 63:002, Section 2(4)(c), 40 C.F.R. 63.160 through 63.183, Tables 1 through 4 (Subpart H), National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks.

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

1. **Operating Limitations:**
   Refer to compliance demonstration methods in **Section D.3** and **Section D.4.**

2. **Emission Limitations:**
   a. Pursuant to 401 KAR 63:015, Section 3, no person shall cause, suffer, or allow the emission into the open air of particulate matter from any flare which is greater than twenty (20) percent opacity for more than three (3) minutes in any one (1) day.

      Compliance Demonstration Method:
      Refer to **7. Specific Control Equipment Operating Conditions**.

   b. To preclude applicability of 401 KAR 51:017, total emissions of VOC from the 326 Vinyl Pyrrolidones Acetylene Feed System (VP1 (02) and VP1 (03)), and the Higher Vinyl Ethers (HVE) Acetylene Feed System (261 (02) and 261 (03)), shall not equal or exceed 36 tons per year based on a 12-month rolling total. [401 KAR 52:020, Section 10]

      Compliance Demonstration Method:
      Refer to **5. Specific Recordkeeping Requirements** below, and **Section D.**

3. **Testing Requirements:**
   a. If visible emissions are observed or it is requested by the Division, the permittee shall perform a Method 22 reading for the flare.

   b. Performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

Whenever waste gas is sent to the flare for combustion, the permittee shall monitor the flare for visible emissions and maintain the records described in **5. Specific Recordkeeping Requirements** b. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

a. The permittee of a chemical manufacturing process unit that meets the criteria specified in 40 CFR 63.100(b)(1) and (b)(3) but does not use as a reactant or manufacture as a product or co-product, any organic hazardous air pollutant listed in table 2 of 40 CFR 63, Subpart F, shall comply only with the requirements of 40 CFR 63.103(e). To comply with this subpart, such chemical manufacturing process units shall not be required to comply with the provisions of subpart A of 40 CFR 63, Subpart F. [40 CFR 63.100(c)]

b. The permittee of a chemical manufacturing process unit which meets the criteria of 40 CFR 63.100(b)(1) and (3), but not the criteria of 40 CFR 63.100(b)(2), shall comply with the requirements of either 40 CFR 63.103(e)(1) or (2). [40 CFR 63.103(e)]
   (1) Retain information, data, and analysis used to determine that the chemical manufacturing process unit does not use as a reactant or manufacture as a product or co-product any organic hazardous air pollutant. Examples of information that could document this include, but are not limited to, records of chemicals purchased for the process, analyses of process stream composition, engineering calculations, or process knowledge. [40 CFR 63.103(e)(1)]
   (2) When requested by the Administrator, demonstrate that the chemical manufacturing process unit does not use as a reactant or manufacture as a product or co-product any organic hazardous air pollutant. [40 CFR 63.103(e)(2)]

c. In order to demonstrate compliance with 401 KAR 63:015, the permittee must meet the following requirements:
   (1) Whenever emissions are vented to the flare for combustion, the permittee shall maintain daily records of whether any air emissions were visible from the flare. If no visible emissions are observed, then no further observations or records are required. If visible emissions are observed or it is requested by the Division, the permittee shall perform a Method 22 reading for the flare. The readings shall be recorded in a daily log.
   (2) The permittee shall maintain records of all routine and non-routine maintenance activities performed at the flare.

d. The permittee shall maintain records of the amount of VOC emissions vented from the 326 VP Acetylene Feed System, and whether the emissions were vented to the flare.

6. Specific Reporting Requirements:

None

7. Specific Control Equipment Operating Conditions:

For flare 421/5310, the source has voluntarily elected to comply with the following design requirements of 40 CFR 60.18(c)(3)-(6).

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

An owner/operator has the choice of adhering to either the heat content specifications in 40 CFR 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR 60.18(c)(4) or adhering to the requirements in 40 CFR 60.18(c)(3)(i). [40 CFR 60.18(c)(3)]

a. Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is non-assisted. The net heating value of the gas being combusted shall be determined by the methods specified in 40 CFR 60.18(f)(3). [40 CFR 60.18(c)(3)(ii)]

b. Steam-assisted and non-assisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18(f)(4), less than 18.3 m/sec (60 ft/sec), except as provided in 40 CFR 60.18(c)(4)(ii) and (iii). [40 CFR 60.18(c)(4)(i)]

c. Steam-assisted and non-assisted flares designed for and operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18(f)(4), equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf). [40 CFR 60.18(c)(4)(ii)]

d. Steam-assisted and non-assisted flares designed for and operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18(f)(4), less than the velocity, Vmax, as determined by the method specified in 40 CFR 60.18(f)(5), and less than 122 m/sec (400 ft/sec) are allowed. [40 CFR 60.18(c)(4)(iii)]

e. Flares used to comply with 40 CFR 60.18 shall be steam-assisted, air-assisted, or non-assisted. [40 CFR 60.18(c)(6)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

SOLVENT RECOVERY UNIT (SRU) (Emission Units SR1 and SR2)

Major Process Equipment

Equipment ID	Description	Date Commenced
231/3402	Distillation column	Modified 1989
231/3403	Distillation column	Modified 1989

The above list is larger process equipment, not an inclusive list of equipment. Many smaller pieces of equipment are within the process unit such as charge pots, coolers, receivers, seal pots, condensers, etc. Emissions for SR1 are less than 5 tpy of VOC. Emissions for SR2 are less than 5 tpy of VOC.

SR1 SOLVENT RECOVERY UNIT (SRU) PROCESS VENTS
01 SRU Process Vent Emissions
Controls: 231/3406 Venturi Scrubber

02 SRU Process Vent Emissions
Controls: None

SR2 SOLVENT RECOVERY UNIT (SRU) FUGITIVE EMISSIONS
01 SRU Fugitive VOC
Controls: None

APPLICABLE REGULATIONS:
401 KAR 63:002, Section 2(4)(a), 40 C.F.R. 63.100 through 63.107, Tables 1 through 4 (Subpart F), National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry.

NON-APPLICABLE REGULATIONS:
401 KAR 60:005, Section 2(2)(bbb), 40 C.F.R. 60.480 through 60.489 (Subpart VV), Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006.

401 KAR 60:005, Section 2(2)(ppp), 40 C.F.R. 60.660 through 60.668 (Subpart NNN), Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations.

401 KAR 63:002, Section 2(4)(b), 40 C.F.R. 63.110 through 63.153, Tables 1 through 37, and Figure 1 (Subpart G), National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater.

401 KAR 63:002, Section 2(4)(c), 40 C.F.R. 63.160 through 63.183, Tables 1 through 4 (Subpart H), National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

1. **Operating Limitations:**
   None

2. **Emission Limitations:**
   None

3. **Testing Requirements:**
   Pursuant to 401 KAR 50:045, Section 1, performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. **Specific Monitoring Requirements:**
   None

5. **Specific Recordkeeping Requirements:**
   a. The permittee of a chemical manufacturing process unit that meets the criteria specified in 40 CFR 63.100(b)(1) and (b)(3) but does not use as a reactant or manufacture as a product or co-product, any organic hazardous air pollutant listed in table 2 of 40 CFR 63, Subpart F, shall comply only with the requirements of 40 CFR 63.103(e). To comply with this subpart, such chemical manufacturing process units shall not be required to comply with the provisions of subpart A of 40 CFR 63, Subpart F. [40 CFR 63.100(c)]

   b. The permittee of a chemical manufacturing process unit which meets the criteria of 40 CFR 63.100(b)(1) and (3), but not the criteria of 40 CFR 63.100(b)(2), shall comply with the requirements of either 40 CFR 63.103(e)(1) or (2). [40 CFR 63.103(e)]
      (1) Retain information, data, and analysis used to determine that the chemical manufacturing process unit does not use as a reactant or manufacture as a product or co-product any organic hazardous air pollutant. Examples of information that could document this include, but are not limited to, records of chemicals purchased for the process, analyses of process stream composition, engineering calculations, or process knowledge. [40 CFR 63.103(e)(1)]
      (2) When requested by the Administrator, demonstrate that the chemical manufacturing process unit does not use as a reactant or manufacture as a product or co-product any organic hazardous air pollutant. [40 CFR 63.103(e)(2)]

6. **Specific Reporting Requirements:**
   None

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

VINYL ETHERS UNIT (Emission Units VE1, VE2, and VE3)

Major Process Equipment

Equipment ID	Description	Date Commenced
332/3240	Sludge Collection Tank (5,000 gal)	1992
332/3302	Reactor	1993
332/3401	Flame Arrestor	1965
332/3404	Product Tower	1965
332/3405	Alcohol Column	1965
332/3406	Purge Gas Scrubber	1965
332/3407	Wash Tower	1965
332/3408	Dryer	1965
332/3409	Dryer	1965
332/3410	Dryer	1965
332/3411	Steam Stripper Tower	1954
332/3414	East Reclaim Dryer	2007
332/3415	West Reclaim Dryer	2007
332/3413	Reclaim Wash Tower	2007
333/3001	Methanol storage tank (42,800 gal)	1965
333/3002	Methanol vapor balance tank (42,800 gal)	1965
333/3003	Methanol storage tank (42,800 gal)	1965
333/3101	Organic liquid storage tank (32,500 gal)	1965
333/3102	Organic liquid storage tank (15,450 gal)	1965
333/3103	Organic liquid storage tank (15,450 gal)	1965
333/3104	Organic liquid storage tank (32,500 gal)	1965
333/3105	Organic liquid storage tank (32,500 gal)	1965
333/3106	Organic liquid storage tank (32,500 gal)	1965
333/3107	Organic liquid storage tank (32,500 gal)	1965
333/3108	Organic liquid storage tank (32,500 gal)	1965
333/3109	Organic liquid storage tank (32,500 gal)	1965
332/3206	Catalyst prep tank (1965, 2400 gal)	--
332/3207	Catalyst tank (1965, 1730 gal)	--
--	332 Methanol Purge System Tank Wagon Loading	2010

The above list is larger process equipment, not an inclusive list of equipment. Many smaller pieces of equipment are within the process unit such as charge pots, coolers, receivers, seal pots, condensers, etc.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

VE1 VINYL ETHERS UNIT PROCESS VENTS
01 Vinyl Ethers Unit Process Vent Emissions
Pressurized Tanks 333/3101-3109
Fixed-Roof Storage Tanks 333/3001 and 3003
Vapor Surge Tank 333/3002
332 Methanol Purge System Tank Wagon Loading
Controls: 240 Thermal Oxidizer 421/5312 (Selected Vents)
None (Other Vents)

VE2 VINYL ETHERS UNIT FUGITIVE VOC EMISSIONS
01 Vinyl Ethers Unit Fugitive VOC
Controls: None

VE3 VINYL ETHERS UNIT FUGITIVE METHANOL EMISSIONS
01 Vinyl Ethers Unit Fugitive Methanol
Controls: Leak Detection and Repair

Equipment in Vinyl Ethers Unit MCPUs that are subject to emission limitations or work practice standards under 40 CFR 63, Subpart FFFF:

40 CFR 63, Subpart FFFF Group 1 Source	Description	Compliance Method for Emission Limitation
Group 1 Storage Tank	333/3001 Methanol Storage Tank (42,800 gal)	Vent to Closed Vent System and 240 Thermal Oxidizer
Group 1 Storage Tank	333/3003 Methanol Storage Tank (42,800 gal)	Vent to Closed Vent System and 240 Thermal Oxidizer
Closed Vent System for Group 1 Storage Tank	333/3002 Methanol Vapor Balance Tank (42,800 gal)	Vent to 240 Thermal Oxidizer
*Equipment in Organic HAP Service (no group status)	Valves, pumps, connectors, compressors, agitators, pressure relief devices in liquid service, sampling connection systems, open-ended valves or lines, and instrumentation systems	40 CFR 63, Subpart UU Leak Detection and Repair
Pressure Relief Devices in Organic HAP Gas or Vapor Service	Pressure Relief Devices in Organic HAP Gas or Vapor Service	40 CFR 63 Subpart FFFF Section 63.2480(e) Work Practice Standards

*Equipment shall be identified, pursuant to 40 CFR 63.1022.

APPLICABLE REGULATIONS:
401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

NON-APPLICABLE REGULATIONS:

401 KAR 60:005, Section 2(2)(bbb), 40 C.F.R. 60.480 through 60.489 (Subpart VV), Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006.

401 KAR 60:005, Section 2(2)(ppp), 40 C.F.R. 60.660 through 60.668 (Subpart NNN), Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations.

401 KAR 60:005, Section 2(2)(ttt), 40 C.F.R. 60.700 through 60.708 (Subpart RRR), Standards of Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes.

401 KAR 63:002, Section 2(4)(a), 40 C.F.R. 63.100 through 63.107, Tables 1 through 4 (Subpart F), National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry.

401 KAR 63:002, Section 2(4)(b), 40 C.F.R. 63.110 through 63.153, Tables 1 through 37, and Figure 1 (Subpart G), National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater.

401 KAR 63:002, Section 2(4)(c), 40 C.F.R. 63.160 through 63.183, Tables 1 through 4 (Subpart H), National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks.

1. **Operating Limitations:**
   a. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

   For Group 1 Storage Tanks:
   b. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 18. Closed-Vent Systems and 19. The 240 Thermal Oxidizer.

   c. ***Storage tank degassing.*** Beginning no later than the compliance dates specified in 40 CFR 63.2445(g), for each storage tank subject to item 1 of Table 4 to 40 CFR 63, Subpart FFFF, the permittee must comply with 40 CFR 63.2470(f)(1) through (4) during storage tank shutdown operations (*i.e.*, emptying and degassing of a storage tank) until the vapor space concentration in the storage tank is less than 10 percent of the LEL. The permittee must determine the concentration using process instrumentation or portable measurement devices and follow procedures for calibration and maintenance according to manufacturer's specifications. [40 CFR 63.2470(f)]
      (1) Remove liquids from the storage tank as much as practicable. [40 CFR 63.2470(f)(1)]
      (2) Comply with one of the following: [40 CFR 63.2470(f)(2)]
         (i) Reduce emissions of total organic HAP by venting emissions through a closed vent system to a flare. [40 CFR 63.2470(f)(2)(i)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(ii) Reduce emissions of total organic HAP by 95 weight-percent by venting emissions through a closed vent system to any combination of non-flare control devices. [40 CFR 63.2470(f)(2)(ii)]

(iii) Reduce emissions of total organic HAP by routing emissions to a fuel gas system or process and meet the requirements specified in 40 CFR 63.982(d) and the applicable requirements in 40 CFR 63.2450(e)(4). [40 CFR 63.2470(f)(2)(iii)]

For Equipment in Organic HAP Service (Fugitive Equipment Leaks):

d. Beginning no later than the compliance dates specified in 40 CFR 63.2445(g), 40 CFR 63.2450(a)(1) no longer applies. Instead, the permittee must be in compliance with the emission limits and work practice standards in Tables 1 through 7 to 40 CFR 63, Subpart FFFF at all times and must meet the requirements in 40 CFR 63.2455 through 63.2490 except as specified in 40 CFR 63.2450(b) through (v). [40 CFR 63.2450(a)(2)]

(1) The permittee must comply with the requirements of 40 CFR 63, Subpart UU and the requirements referenced therein, except as specified in 40 CFR 63.2480(b) and (d) through (f). [Table 6, item 1.a i. to 40 CFR 63, Subpart FFFF]

Compliance Demonstration Method:

See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 2 through 10.

2. <u>Emission Limitations</u>:

a. To preclude applicability of 401 KAR 51:017, total emissions of VOC from the 332/3411 Steam Stripper Tower shall not equal or exceed 36 tons per year based on a 12-month rolling total. [401 KAR 52:020, Section 10]

Compliance Demonstration Method:

Total VOC emissions shall be calculated on a 12-month rolling basis. Refer to **5. Specific Recordkeeping Requirements.**

b. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

For Group 1 Storage Tanks when vented to 240 Thermal Oxidizer (emissions are controlled by the 240 Thermal Oxidizer along with Group 1 Batch Process Vents from other MCPU outside the VE unit):

c. The permittee shall be in compliance with the emission limits and work practice standards in Table 2 of 40 CFR 63, Subpart FFFF at all times. [40 CFR 63.2450(a)(2)]

d. <u>Requirements for combined emission streams</u>. When organic HAP emissions from different emission types (e.g., continuous process vents, batch process vents, storage tanks, transfer operations, and waste management units) are combined, the permittee must comply with the requirements of either 40 CFR 63.2450(c)(1) or (2). [40 CFR 63.2450(c)]

(1) For a combined stream consisting of emissions from Group 1 batch process vents and any other type of emission stream, the permittee must comply with the requirements of Table 2 to 40 CFR Subpart FFFF and 40 CFR 63.2460 for Group 1 batch process vents,

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

including applicable monitoring, recordkeeping, and reporting. [40 CFR 63.2450(c)(2)(i)]

(i) 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 (except a flare); or [Table 2 Item 1.a. to 40 CFR 63, Subpart FFFF]

(ii) Reduce uncontrolled organic HAP emissions from one or more batch process vents within the process by venting through one or more closed-vent systems to any combination of control devices (excluding a flare) that reduces organic HAP to an outlet concentration ≤ 20 ppmv as TOC or total organic HAP, and for all other batch process vents within the process reduce collective organic HAP emissions as specified in item 1.a of Table 2. [Table 2 Item 1.b. to 40 CFR 63, Subpart FFFF]

e. Requirements for control devices. Except when complying with 40 CFR 63.2485 or 40 CFR 63.2450(e)(7), if the permittee reduces organic HAP emissions by venting emissions through a closed-vent system to any combination of control devices (except a flare) or recovery devices, the permittee must meet the requirements of 40 CFR 63.2450(e)(4) and the requirements of 40 CFR 63.982(c), and the requirements referenced therein. [40 CFR 63.2450(e)(1)]

f. Beginning no later than the compliance dates specified in 40 CFR 63.2445(g), the referenced provisions specified in 40 CFR 63.2450(e)(4)(i) through (xvi) do not apply when demonstrating compliance with 40 CFR Subpart SS. [40 CFR 63.2450(e)(4)]

g. Closed vent system and nonflare control device. Owners or operators who control emissions through a closed vent system to a nonflare control device shall meet the requirements in 40 CFR 63.983 for closed vent systems, the applicable recordkeeping and reporting requirements of 40 CFR 63.998 and 63.999, and the applicable requirements listed in 40 CFR 63.982(c)(2). [40 CFR 63.982(c)]

(1) For process vents, the owner or operator shall meet the requirements applicable to the control devices being used in 40 CFR 63.988; the applicable general monitoring requirements of 40 CFR 63.996 and the applicable performance test requirements and procedures of 40 CFR 63.997; and the monitoring, recordkeeping and reporting requirements referenced therein. The requirements of 40 CFR 63.984 through 63.986 do not apply to process vents. [40 CFR 63.982(c)(2)]

For Group 1 Storage Tanks when vented separately:

h. Beginning no later than the compliance dates specified in 40 CFR 63.2445(g), 40 CFR 63.2450(a)(1) no longer applies. The permittee must be in compliance with the emission limits and work practice standards in Table 4 to 40 CFR 63, Subpart FFFF at all times. [40 CFR 63.2450(a)(2)]

i. The permittee must meet each emission limit in Table 4 to 40 CFR 63, Subpart FFFF that applies to each storage tanks: [40 CFR 63.2470(a)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(1) For Group 1 Storage Tanks where the maximum true vapor pressure of total HAP at the storage temperature is <76.6 kilopascals: shall 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). [Item 1 of Table 4 to 40 CFR 63, Subpart FFFF]

j. Planned routine maintenance. The emission limits in Table 4 to 40 CFR 63, Subpart FFFF for control devices used to control emissions from storage tanks 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 in Table 4 to 40 CFR 63, Subpart FFFF, must not exceed 240 hours per year (hr/yr). The permittee may submit an application to the Division 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. [40 CFR 63.2470(d)]

k. Requirements for control devices. Except when complying with 40 CFR 63.2485 or 40 CFR 63.2450(e)(7), if the permittee reduces organic HAP emissions by venting emissions through a closed-vent system to any combination of control devices (except a flare) or recovery devices, the permittee must meet the requirements of 40 CFR 63.2450(e)(4) and the requirements of 40 CFR 63.982(c), and the requirements referenced therein. [40 CFR 63.2450(e)(1)]

l. Beginning no later than the compliance dates specified in 40 CFR 63.2445(g), the referenced provisions specified in 40 CFR 63.2450(e)(4)(i) through (xvi) do not apply when demonstrating compliance with 40 CFR Subpart SS. [40 CFR 63.2450(e)(4)]

m. Closed vent system and nonflare control device. Owners or operators who control emissions through a closed vent system to a nonflare control device shall meet the requirements in 40 CFR 63.983 for closed vent systems, the applicable recordkeeping and reporting requirements of 40 CFR 63.998 and 63.999, and the applicable requirements listed in 40 CFR 63.982(c)(1). [40 CFR 63.982(c)]

(1) For storage vessels, the owner or operator shall meet the requirements in 40 CFR 63.985 for nonflare control devices and the monitoring, recordkeeping, and reporting requirements referenced therein. No other provisions of 40 CFR 63, Subpart SS apply to storage vessel emissions vented through a closed vent system to a nonflare control device unless specifically required in the monitoring plan submitted under 40 CFR 63.985(c). [40 CFR 63.982(c)(1)]

Compliance Demonstration Method:

(1) See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 18. Closed-Vent Systems and 19. The 240 Thermal Oxidizer for monitoring, recordkeeping, and reporting requirements.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(2) To demonstrate initial compliance with a percent reduction emission limit in Table 2 to 40 CFR 63, Subpart FFFF, the permittee must compare the sums of the controlled and uncontrolled emissions for the applicable Group 1 batch process vents within the process and show that the specified reduction is met. [40 CFR 63.2460(c)(2)(i)]

3. Testing Requirements:

a. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

For Group 1 Storage Tanks:

b. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 19. The 240 Thermal Oxidizer.

4. Specific Monitoring Requirements:

For Group 1 Storage Tanks:

a. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 18. Closed-Vent Systems and 19. The 240 Thermal Oxidizer.

For Equipment in Organic HAP Service (Fugitive Equipment Leaks):

b. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 2 through 10.

5. Specific Recordkeeping Requirements:

a. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

For 332/3411 Steam Stripper Tower:

b. Pursuant to 401 KAR 52:020, Section 10, the permittee shall retain records of the amount of VOC emissions vented from the Steam Stripper Tower on a 12-month rolling basis and whether the emissions were vented to the atmosphere.

401 KAR 51:017, Section 16. Source Obligation

c. The permittee shall monitor and calculate annual actual VOC emissions from the 332/3411 Steam Stripper Tower and maintain a record of the annual actual emissions of VOC, in tons per year on a calendar year basis for ten (10) years. The source shall submit a report to the Division if the annual actual VOC emissions equal or exceed 36 tons per year.

For Group 1 Storage Tanks:

d. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 18. Closed-Vent Systems and 19. The 240 Thermal Oxidizer.

e. For storage tank degassing subject to 40 CFR 63.2470(f), the permittee must maintain records necessary to demonstrate compliance with the requirements in 40 CFR 63.2450(u) including, if appropriate, records of existing standard site procedures used to empty and degas (deinventory) equipment for safety purposes. [40 CFR 63.2470(f)(3)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

For Equipment in Organic HAP Service (Fugitive Equipment Leaks):

f. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 2 through 10.

6. Specific Reporting Requirements:

a. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

For Group 1 Storage Tanks:

b. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 18. Closed-Vent Systems and 19. The 240 Thermal Oxidizer.

For Equipment in Organic HAP Service (Fugitive Equipment Leaks):

c. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 2 through 10.

7. Specific Control Equipment Operating Conditions:

For Group 1 Storage Tanks:

See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 18. Closed-Vent Systems and 19. The 240 Thermal Oxidizer.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

WASTEWATER TREATMENT (Emission Unit WW1)

Major Process Equipment

Equipment ID	Description	Date Commenced
--	Collection system (individual drain systems, junction boxes, and sewers)	2006 – 2007
241/3201	Wastewater surge tank (25,000 gal)	1970s
928/3202	NLS-105 tank (15,000 gal)	2011
928/3203	Diversion tank (170,000 gal)	1970s
928/3205	Transfer tank (30,000 gal)	2007
432/3001 432/3002	Equalization tanks (two, 1.25 MM gal each)	2007
432/3003	Selector tank (70,000 gal)	2007
432/3004 432/3005	Aeration tanks (two)	2007
421/5302	Splitter box	2007
421/5308 421/5309	Clarifiers (two)	1970s
--	Containers	1975-present
313/3004	Storage tank (300,000 gal)	1965

WW1 WASTEWATER TREATMENT OPERATIONS

01 Wastewater Treatment Fugitive Emissions
Controls: None

APPLICABLE REGULATIONS:
401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing. Note: Storage Tank 313/3004 is subject to 40 CFR 63, Subpart FFFF only when storing wastewater that is subject to 40 CFR 63, Subpart FFFF requirements as specified under 40 CFR 63.2435 and 40 CFR 63.2440. When not storing wastewater, see **8. Alternate Operating Scenarios** below.

1. **Operating Limitations:**
   a. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

   b. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 11 through 16 for Process Wastewater Requirements.

2. **Emission Limitations:**
   See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

a. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

b. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 11 through 16 for Process Wastewater Requirements.

4. Specific Monitoring Requirements:

See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 11 through 16 for Process Wastewater Requirements.

5. Specific Recordkeeping Requirements:

a. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

b. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 11 through 16 for Process Wastewater Requirements.

6. Specific Reporting Requirements:

a. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

b. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 11 through 16 for Process Wastewater Requirements.

7. Specific Control Equipment Operating Conditions:

None

8. Alternate Operating Scenarios:

For Storage Tank 313/3004 when not storing wastewater subject to 40 CFR 63, Subpart FFFF: [401 KAR 52:020, Section 10]

a. The permittee shall keep record of the type and amount of contents being stored in Storage Tank 313/3004 whenever there is a change in operating scenario.

b. See Section **F.10** for reporting to the Division.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

240 BUILDING (Emission Units 240, 241, 242, and 245)

Major Process Equipment

Equipment ID	Description	Date Commenced
240/3303	Reactor 1 (2,700 gal)	1968
240/3307	Reactor 3 (4,500 gal)	1987
240/3308	Reactor 4 (4,500 gal)	1992
240/3309	Reactor 2 (3,500 gal)	1993
240/3501	Dryer 2	1967
240/3502	Dryer 1	1967
240/3503	Dryer 3	1987
240/3704	Dryer product handling cyclone	1967
240/3708	Dryer product handling baghouse	1987
240/3709	Dryer product handling baghouse	1987
240/3712	Dryer product handling cyclone	1987
240/3713	Dryer product handling baghouse	1987
242/3001	Benzene storage tank (12,700 gallon)	1967
242/3002	Benzene storage tank (12,700 gallon)	1967
242/3005	Benzene storage tank (40,000 gallon)	1976
242/3104	Maleic anhydride tank (9,000 gallon)	1992
340/3013	Toluene and other non-HAP storage tank (11,000 gal)	1987
340/3014	Toluene and other non-HAP storage tank (16,500 gal)	1965
240/3201	Catalyst pot	1967
240/3202	Receiver	1967
240/3214	Receiver	1968
240/3215	Receiver	1968
240/3224	Dryer feed tank (4500 gal)	1987
240/3226	Receiver	1987
240/3229	Blend / dryer feed tank	1987
240/3233	Blend / dryer feed tank	1987
240/3241	Catalyst pot	1989
240/3243	Catalyst pot	1992
240/3253	Strip tank	1992
240/3254	Dryer feed tank	1992
240/3255	Strip tank (60 gal)	1992
240/32xx	Catalyst pot	2010
240/3260	Catalyst pot	1993
240/3261	Catalyst pot (3 gal)	1994
240/3302	Dryer feed tank	1967
240/3304	Dryer feed tank	1968
--	Tank wagon loading (various locations)	--

The above list is larger process equipment, not an inclusive list of equipment. Many smaller pieces of equipment are within the process unit such as charge pots, coolers, receivers, seal pots, condensers, etc.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

240 240 BUILDING FUGITIVE EMISSIONS
01 240 Building Fugitive VOC
Controls: None

02-04 240 Building Fugitive HAP
Controls: Leak Detection and Repair

241 240 BUILDING PROCESS VENTS
01 240 Building Process Vent Emissions
Controls: 240 Thermal Oxidizer 421/5312 (Selected Process Vents)
None (Other Process Vents)

242 240 BUILDING BENZENE STORAGE VESSELS
01-02 240 Building Benzene Storage Vessel Emissions
Tanks 242/3001, 242/3002, 242/3005
Controls: 240 Thermal Oxidizer 421/5312

245 240 THERMAL OXIDIZER PRODUCTS OF COMBUSTION
01 240 Thermal Oxidizer Combustion Product Emissions
Controls: None

Equipment in 240 Building MCPUs that are subject to emission limitations or work practice standards under 40 CFR 63, Subpart FFFF:

40 CFR 63, Subpart FFFF Group 1 Source	Description	Compliance Method for Emission Limitation
Group 1 Batch Process Vents	Group 1 Batch Process Vents	Vent to Closed Vent System and 240 Thermal Oxidizer
Group 1 Storage Tank	242/3001 Benzene Storage Tank (12,700 gal)	Vent to Closed Vent System and 240 Thermal Oxidizer
Group 1 Storage Tank	242/3002 Benzene Storage Tank (12,700 gal)	Vent to Closed Vent System and 240 Thermal Oxidizer
Group 1 Storage Tank	242/3005 Benzene Storage Tank (40,000 gal)	Vent to Closed Vent System and 240 Thermal Oxidizer
*Equipment in Organic HAP Service (no group status)	Valves, pumps, connectors, compressors, agitators, pressure relief devices in liquid service, sampling connection systems, open-ended valves or lines, and instrumentation systems	40 CFR 63, Subpart UU Leak Detection and Repair
Pressure Relief Devices in Organic HAP Gas or Vapor Service	Pressure Relief Devices in Organic HAP Gas or Vapor Service	40 CFR 63 Subpart FFFF Section 63.2480(e) Work Practice Standards

*Equipment shall be identified, pursuant to 40 CFR 63.1022.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

APPLICABLE REGULATIONS:

401 KAR 57:002, Section 2, 40 C.F.R. 61 (Subpart FF), National Emission Standard for Benzene Waste Operations.

Note: Pursuant to 40 CFR 63.2535(j), compliance with 40 CFR 61, Subpart FF, for a Group 1 or Group 2 wastewater stream that is also subject to the provisions of 40 CFR 61.342(c) through (h), and is not exempt under 40 CFR 61.342(c)(2) or (3), the permittee may elect to comply only with the requirements for Group 1 wastewater streams in 40 CFR 63, Subpart FFFF. If a Group 2 wastewater stream is exempted from 40 CFR 61.342(c)(1) under 40 CFR 61.342(c)(2) or (3), then the permittee is required to comply only with the reporting and recordkeeping requirements specified in 40 CFR 63, Subpart FFFF for Group 2 wastewater streams, and the permittee is exempt from the requirements in 40 CFR part 61, Subpart FF.

401 KAR 57:002, Section 2, 40 C.F.R. 61 (Subpart J), National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene. Pursuant to 40 CFR 61.112(a), each owner or operator subject to the provisions of 40 CFR 61, Subpart J shall comply with the requirements of 40 CFR 61, Subpart V.

401 KAR 57:002, Section 2, 40 C.F.R. 61 (Subpart V), National Emission Standard for Equipment Leaks (Fugitive Emission Sources)

Note: Pursuant to 40 CFR 63.2535(k), for the affected source with equipment that is also subject to the requirements of 40 CFR 61, Subpart V, the permittee may elect to apply 40 CFR 63, Subpart FFFF to all such equipment. If the permittee has an affected source with equipment to which 40 CFR 63, Subpart FFFF does not apply, but which is subject to the requirements of 40 CFR 61 Subpart V, the permittee may elect to apply 40 CFR 63, Subpart FFFF to all such equipment. The permittee shall consider all total organic compounds, minus methane and ethane, in such equipment for purposes of compliance with 40 CFR 63, Subpart FFFF, as if they were organic HAP. Compliance with the provisions of 40 CFR 63, Subpart FFFF, in the manner described in 40 CFR 63.2535(k), will constitute compliance with 40 CFR 61, Subpart V.

401 KAR 57:002, Section 2, 40 C.F.R. 61 (Subpart Y), National Emission Standard for Benzene Emissions from Benzene Storage Vessels.

Note: Pursuant to 40 CFR 63.2535(c), compliance with 40 CFR 61, Subpart Y, for benzene storage tanks 242/3001, 242/3002, and 242/3005 assigned to an MCPU that are also subject to control under 40 CFR 61, Subpart Y, the permittee may elect to comply only with the requirements for Group 1 storage tanks in 40 CFR 63, Subpart FFFF.

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

General requirements for equipment that is not subject to emission limitations or work practice standards under 40 CFR 63, Subpart FFFF are specified in this permit at Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements. Process wastewater, maintenance wastewater, and "certain liquid streams in open systems within an MCPU" requirements are specified at Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 11 through 17.

NON-APPLICABLE REGULATIONS:

401 KAR 60:005, Section 2(2)(bbb), 40 C.F.R. 60.480 through 60.489 (Subpart VV), Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

401 KAR 60:005, Section 2(2)(ttt), 40 C.F.R. 60.700 through 60.708 (Subpart RRR), Standards of Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes.

401 KAR 63:002, Section 2(4)(a), 40 C.F.R. 63.100 through 63.107, Tables 1 through 4 (Subpart F), National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry.

401 KAR 63:002, Section 2(4)(b), 40 C.F.R. 63.110 through 63.153, Tables 1 through 37, and Figure 1 (Subpart G), National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater.

401 KAR 63:002, Section 2(4)(c), 40 C.F.R. 63.160 through 63.183, Tables 1 through 4 (Subpart H), National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks.

1. Operating Limitations:

a. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

b. ***New safety device requirements.*** Beginning no later than the compliance dates specified in 40 CFR 63.2445(g), 40 CFR 63.2450(p) no longer applies. Instead, the permittee must comply with the requirements specified in 40 CFR 63.2480(e). [40 CFR 63.2450(t)]

For Group 1 Batch Process Vents and Group 1 Storage Tanks:

c. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 18. Closed-Vent Systems and 19. The 240 Thermal Oxidizer.

For Equipment in Organic HAP Service (Fugitive Equipment Leaks):

d. Beginning no later than the compliance dates specified in 40 CFR 63.2445(g), 40 CFR 63.2450(a)(1) no longer applies. Instead, the permittee must be in compliance with the emission limits and work practice standards in Tables 1 through 7 to 40 CFR 63, Subpart FFFF at all times. [40 CFR 63.2450(a)(2)]

(1) The permittee must comply with the requirements of 40 CFR 63, Subpart UU and the requirements referenced therein, except as specified in 40 CFR 63.2480(b) and (d) through (f). [Table 6, item 1.A.i. to 40 CFR 63, Subpart FFFF]

Compliance Demonstration Method:

See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 2 through 10.

For Group 1 Storage Tanks:

e. ***Storage tank degassing.*** Beginning no later than the compliance dates specified in 40 CFR 63.2445(g), for each storage tank subject to item 1 of Table 4 to 40 CFR 63, Subpart FFFF, the permittee must comply with 40 CFR 63.2470(f)(1) through (4) during storage tank shutdown operations (*i.e.*, emptying and degassing of a storage tank) until the vapor space concentration in the storage tank is less than 10 percent of the LEL. The permittee must

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

determine the concentration using process instrumentation or portable measurement devices and follow procedures for calibration and maintenance according to manufacturer's specifications. [40 CFR 63.2470(f)]

(1) Remove liquids from the storage tank as much as practicable. [40 CFR 63.2470(f)(1)]

(2) Comply with one of the following: [40 CFR 63.2470(f)(2)]

(i) Reduce emissions of total organic HAP by venting emissions through a closed vent system to a flare. [40 CFR 63.2470(f)(2)(i)]

(ii) Reduce emissions of total organic HAP by 95 weight-percent by venting emissions through a closed vent system to any combination of non-flare control devices. [40 CFR 63.2470(f)(2)(ii)]

(iii) Reduce emissions of total organic HAP by routing emissions to a fuel gas system or process and meet the requirements specified in 40 CFR 63.982(d) and the applicable requirements in 40 CFR 63.2450(e)(4). [40 CFR 63.2470(f)(2)(iii)]

2. Emission Limitations:

a. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

For Group 1 Batch Process Vents, and for Group 1 Storage Tanks and Group 1 Batch Process Vents vented together:

b. The permittee must be in compliance with the emission limits and work practice standards in Table 2 to 40 CFR 63, Subpart FFFF at all times. [40 CFR 63.2450(a)(2)]

c. Requirements for combined emission streams. When organic HAP emissions from different emission types (e.g., continuous process vents, batch process vents, storage tanks, transfer operations, and waste management units) are combined, the permittee must comply with the requirements of either 40 CFR 63.2450(c)(1) or (2). [40 CFR 63.2450(c)]

(1) For a combined stream consisting of emissions from Group 1 batch process vents and any other type of emission stream, the permittee shall comply with the requirements of Table 2 to 40 CFR Subpart FFFF and 40 CFR 63.2460 for Group 1 batch process vents, including applicable monitoring, recordkeeping, and reporting. [40 CFR 63.2450(c)(2)(i)]

(i) 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 (except a flare); or Table 2 to 40 CFR 63, Subpart FFFF. [Table 2 Item 1.a. to 40 CFR 63, Subpart FFFF]

(ii) Reduce uncontrolled organic HAP emissions from one or more batch process vents within the process by venting through one or more closed-vent systems to any combination of control devices (excluding a flare) that reduces organic HAP to an outlet concentration ≤ 20 ppmv as TOC or total organic HAP, and for all other batch process vents within the process reduce collective organic HAP emissions as specified in item 1.a of Table 2. [Table 2 Item 1.b. to 40 CFR 63, Subpart FFFF]

d. Requirements for control devices. Except when complying with 40 CFR 63.2485 or 40 CFR 63.2450(e)(7), if the permittee reduces organic HAP emissions by venting emissions

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

through a closed-vent system to any combination of control devices (except a flare) or recovery devices, the permittee must meet the requirements of 40 CFR 63.2450(e)(4) and the requirements of 40 CFR 63.982(c), and the requirements referenced therein. [40 CFR 63.2450(e)(1)]

e. Beginning no later than the compliance dates specified in 40 CFR 63.2445(g), the referenced provisions specified in 40 CFR 63.2450(e)(4)(i) through (xvi) do not apply when demonstrating compliance with 40 CFR Subpart SS. [40 CFR 63.2450(e)(4)]

f. Closed vent system and nonflare control device. Owners or operators who control emissions through a closed vent system to a nonflare control device shall meet the requirements in 40 CFR 63.983 for closed vent systems, the applicable recordkeeping and reporting requirements of 40 CFR 63.998 and 63.999, and the applicable requirements listed in 40 CFR 63.982(c)(2). [40 CFR 63.982(c)]
   (1) For process vents, the owner or operator shall meet the requirements applicable to the control devices being used in 40 CFR 63.988; the applicable general monitoring requirements of 40 CFR 63.996 and the applicable performance test requirements and procedures of 40 CFR 63.997; and the monitoring, recordkeeping and reporting requirements referenced therein. The requirements of 40 CFR 63.984 through 63.986 do not apply to process vents. [40 CFR 63.982(c)(2)]

For Group 1 Storage Tanks when vented separately:

g. Beginning no later than the compliance dates specified in 40 CFR 63.2445(g), 40 CFR 63.2450(a)(1) no longer applies. The permittee must be in compliance with the emission limits and work practice standards in Table 4 to 40 CFR 63, Subpart FFFF at all times. [40 CFR 63.2450(a)(2)]

h. The permittee must meet each emission limit in Table 4 to 40 CFR 63, Subpart FFFF that applies to each storage tanks: [40 CFR 63.2470(a)]
   (1) For Group 1 Storage Tanks where the maximum true vapor pressure of total HAP at the storage temperature is <76.6 kilopascals shall 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). [Table 4 to 40 CFR 63, Subpart FFFF]

i. Planned routine maintenance. The emission limits in Table 4 to 40 CFR 63, Subpart FFFF for control devices used to control emissions from storage tanks do not apply during periods of planned routine maintenance. Under the provisions of 40 CFR 63.2470(d), the Division has granted an extension of up to 360 hours per year of planned routine maintenance for the 240 Thermal Oxidizer. Periods of planned routine maintenance of each control device, during which the control device does not meet the emission limit specified in Table 4 to 40 CFR 63, Subpart FFFF, must not exceed 360 hours per year (hr/yr). No material shall be added to the storage tank between the time 240-hr/yr of planned routine maintenance is reached and the time the control device is again operational. [40 CFR 63.2470(d)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

j. Requirements for control devices. Except when complying with 40 CFR 63.2485 or 40 CFR 63.2450(e)(7), if the permittee reduces organic HAP emissions by venting emissions through a closed-vent system to any combination of control devices (except a flare) or recovery devices, the permittee must meet the requirements of 40 CFR 63.2450(e)(4) and the requirements of 40 CFR 63.982(c), and the requirements referenced therein. [40 CFR 63.2450(e)(1)]

k. Beginning no later than the compliance dates specified in 40 CFR 63.2445(g), the referenced provisions specified in 40 CFR 63.2450(e)(4)(i) through (xvi) do not apply when demonstrating compliance with 40 CFR Subpart SS. [40 CFR 63.2450(e)(4)]

l. Closed vent system and nonflare control device. Owners or operators who control emissions through a closed vent system to a nonflare control device shall meet the requirements in 40 CFR 63.983 for closed vent systems, the applicable recordkeeping and reporting requirements of 40 CFR 63.998 and 63.999, and the applicable requirements listed in 40 CFR 63.982(c)(1). [40 CFR 63.982(c)]
   (1) For storage vessels, the owner or operator shall meet the requirements in 40 CFR 63.985 for nonflare control devices and the monitoring, recordkeeping, and reporting requirements referenced therein. No other provisions of 40 CFR 63, Subpart SS apply to storage vessel emissions vented through a closed vent system to a nonflare control device unless specifically required in the monitoring plan submitted under 40 CFR 63.985(c). [40 CFR 63.982(c)(1)]

3. Testing Requirements:

a. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

For Group 1 Batch Process Vents and Group 1 Storage Tanks:

b. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 18. Closed-Vent Systems and 19. The 240 Thermal Oxidizer.

4. Specific Monitoring Requirements:

a. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

For Group 1 Batch Process Vents and Group 1 Storage Tanks:

b. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 18. Closed-Vent Systems and 19. The 240 Thermal Oxidizer.

For Equipment in Organic HAP Service (Fugitive Equipment Leaks):

c. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 2 through 10.

5. Specific Recordkeeping Requirements:

a. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

For Group 1 Batch Process Vents and Group 1 Storage Tanks:

b. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 18. Closed-Vent Systems and 19. The 240 Thermal Oxidizer.

For Equipment in Organic HAP Service (Fugitive Equipment Leaks):

c. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 2 through 10.

For Group 1 Storage Tanks:

d. For storage tank degassing subject to 40 CFR 63.2470(f), the permittee must maintain records necessary to demonstrate compliance with the requirements in 40 CFR 63.2450(u) including, if appropriate, records of existing standard site procedures used to empty and degas (deinventory) equipment for safety purposes. [40 CFR 63.2470(f)(3)]

6. <u>Specific Reporting Requirements</u>:

For Group 1 Batch Process Vents and Group 1 Storage Tanks:

See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 18. Closed-Vent Systems and 19. The 240 Thermal Oxidizer.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

236 BUILDING (Emission Units 361, 362, 363, 364, 365, 366, and 36F)

Major Process Equipment

Equipment ID	Description	Date Commenced
236/3004	Process tank (6,000 gal)	1987
236/3005	Process tank (6,000 gal)	1987
236/3006	Process tank (15,000 gal)	1987
236/3010	Water tank (25,000 gal)	1990
236/3203	Hold tank (340 gal)	1967
236/3221	Reslurry tank (2,380 gal)	1967
236/3229	Blend tank (200 gal)	1968
236/3234	Cyclone separator	1983
236/3251	Blend tank (12,000 gal)	1987
236/3259	Blend tank (5,000 gal)	1989
236/3277	Dryer feed tank (8,000 gal)	1992
236/3285	Acid treatment tank (6,000 gal)	1992
236/3286	Acid treatment tank (6,000 gal)	1992
236/3287	Filter feed tank	1992
236/3296	Blend tank (12,000 gal)	1992
236/3304	Process tank	1967
236/3305	Process tank	1967
236/3306	Reactor (1,270 gal)	1967
236/3309	Process tank	1967
236/3311	Process tank	1967
236/3312	Process tank	1967
236/3315	Reactor (1,500 gal)	1985
236/3319	Reactor (1,900 gal)	1986
236/3320	Reactor (3,800 gal)	1987
236/3321	Reactor (1,900 gal)	1986
236/3322	Reactor (3,800 gal)	1985
236/3323	Reactor (3,000 gal)	1987
236/3324	Reactor (12,000 gal)	2004
236/3327	Reactor (3,800 gal)	1988
236/3328	Reactor (12,000 gal)	2006
236/3329	Reactor (3,000 gal)	1992
236/3330	Reactor (6,000 gal)	1992
236/3331	Reactor (3,200 gal)	1997
236/3332	Reactor (3,500 gal)	1997
236/3333	Reactor (3,500 gal)	1997
236/3401	Column	1970
236/3501	Spray dryer (836 lb/hr batch maximum solids, 7.5 mmBtu/hr natural gas firing rate)	1967
236/3503	Spray dryer (836 lb/hr batch maximum solids, 7.5 mmBtu/hr natural gas firing rate)	1984
236/3504	Drum dryer	1987

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Equipment ID	Description	Date Commenced
236/3505	Drum dryer	1987
236/3506	Drum dryer	1987
236/3509	Drum dryer	1997
236/36104	Filter	1992
236/36105	Filter	1992
236/3701	Product recovery cyclone for dryer 3501	2001
236/3708	Product recovery cyclone for dryer 3503	1998
236/32107	Dryer feed tank (8,000 gal)	1997
236124DR	Tank wagon loading	
321/3030	Storage tank (19,000 gal)	1998

The above list is larger process equipment, not an inclusive list of equipment. Many smaller pieces of equipment are within the process unit such as charge pots, coolers, receivers, seal pots, condensers, etc.

361 236 BUILDING PROCESS VENT ORGANICS
01 236 Building Process Vent Organics
Controls: 240 Thermal Oxidizer 421/5312 (selected process vents)
236 Regenerative Thermal Oxidizer (selected process vents)
Scrubber 236/5306 for Dryer 236/3501
Scrubber 236/5336 for Dryer 236/3503
Scrubber 236/3402
Scrubber 236/5375
None (other process vents)

362 DRYER 236/3501 – CYCLONE 236/3701 PROCESS PARTICULATE
01 Dryer 236/3501 and Process Cyclone Process PM Emissions
Controls: Scrubber 236/5306

363 DRYER 236/3501 NATURAL GAS COMBUSTION
01 Dryer 236/3501 Combustion Product Emissions
Controls: Scrubber 236/5306

364 DRYER 236/3503 – CYCLONE 236/3708 PROCESS PARTICULATE
01 Dryer 236/3503 and Process Cyclone Process PM Emissions
Controls: Scrubber 236/5336

365 DRYER 236/3503 NATURAL GAS COMBUSTION
01 Dryer 236/3503 Combustion Product Emissions
Controls: Scrubber 236/5336

366 236 RTO PRODUCTS OF COMBUSTION
01 236 RTO Combustion Product Emissions
Controls: None

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

36F 236 BUILDING FUGITIVE EMISSIONS
01 236 Building Fugitive VOC
Controls: None

02-06 236 Building Fugitive HAP
Controls: Leak Detection and Repair

Equipment in 236 Building MCPUs that are subject to emission limitations or work practice standards under 40 CFR 63, Subpart FFFF:

40 CFR 63, Subpart FFFF Group 1 Source	Description	Compliance Method for Emission Limitation
Group 1 Batch Process Vents	Group 1 Batch Process Vents	Vent to Closed Vent System and 240 Thermal Oxidizer or 236 Regenerative Thermal Oxidizer
*Equipment in Organic HAP Service (no group status)	Valves, pumps, connectors, compressors, agitators, pressure relief devices in liquid service, sampling connection systems, open-ended valves or lines, and instrumentation systems	40 CFR 63, Subpart UU Leak Detection and Repair
Pressure Relief Devices in Organic HAP Gas or Vapor Service	Pressure Relief Devices in Organic HAP Gas or Vapor Service	40 CFR 63 Subpart FFFF Section 63.2480(e) Work Practice Standards

*Equipment shall be identified, pursuant to 40 CFR 63.1022.

APPLICABLE REGULATIONS:
401 KAR 59:005, General provisions

401 KAR 59:010, New process operations.

401 KAR 61:020, Existing process operations.

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

General requirements for equipment that is not subject to emission limitations or work practice standards under 40 CFR 63, Subpart FFFF are specified in this permit at Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements. Process wastewater, maintenance wastewater, and "certain liquid streams in open systems within an MCPU" requirements are specified at Section B, 40 CFR 63, Subpart FFFF – 11 through 17.

NON-APPLICABLE REGULATIONS:
401 KAR 60:005, Section 2(2)(bbb), 40 C.F.R. 60.480 through 60.489 (Subpart VV), Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Industry for Which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006.

401 KAR 60:005, Section 2(2)(ttt), 40 C.F.R. 60.700 through 60.708 (Subpart RRR), Standards of Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes.

401 KAR 63:002, Section 2(4)(a), 40 C.F.R. 63.100 through 63.107, Tables 1 through 4 (Subpart F), National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry.

401 KAR 63:002, Section 2(4)(b), 40 C.F.R. 63.110 through 63.153, Tables 1 through 37, and Figure 1 (Subpart G), National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater.

401 KAR 63:002, Section 2(4)(c), 40 C.F.R. 63.160 through 63.183, Tables 1 through 4 (Subpart H), National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks.

1. **Operating Limitations:**
   a. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

   b. ***New safety device requirements.*** Beginning no later than the compliance dates specified in 40 CFR 63.2445(g), 40 CFR 63.2450(p) no longer applies. Instead, the permittee must comply with the requirements specified in 40 CFR 63.2480(e). [40 CFR 63.2450(t)]

   For Group 1 Batch Process Vents:
   c. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 18. Closed-Vent Systems and 19. The 240 Thermal Oxidizer, and 20. The 236 Regenerative Thermal Oxidizer.

   For Equipment in Organic HAP Service (Fugitive Equipment Leaks):
   d. Beginning no later than the compliance dates specified in 40 CFR 63.2445(g), 40 CFR 63.2450(a)(1) no longer applies. Instead, the permittee must be in compliance with the emission limits and work practice standards in Tables 1 through 7 to 40 CFR 63, Subpart FFFF at all times. [40 CFR 63.2450(a)(2)]
      (1) The permittee must comply with the requirements of 40 CFR 63, Subpart UU and the requirements referenced therein, except as specified in 40 CFR 63.2480(b) and (d) through (f). [Table 6, item 1. A. i. to 40 CFR 63, Subpart FFFF]

   Compliance Demonstration Method:
   See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 2 through 10.

2. **Emission Limitations:**
   236/3701 Cyclone and 236/5306 Scrubber for Dryer 236/3501

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

236/3708 Cyclone and 236/5336 Scrubber for Dryer 236/3503

a. Particulate emissions shall not exceed 2.34 lbs/hr. [401 KAR 59:010, Section 3(2)]

Compliance Demonstration Method:
The permittee shall be in compliance based upon emissions information provided to the Division, proper operation of the control devices, and based on the following formula:

PMt emissions (lbs/hr) = (processing rate) * (emission factor) * (1 – %CE)

where PMt = Total Particulate Matter and %CE = Control Efficiency

b. No person shall cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)(a)]

Compliance Demonstration Method:
See **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements**.

236/3506 Drum Dryer

c. To preclude applicability of 401 KAR 51:017, total emissions of VOC from the 236/3506 Drum Dryer shall not equal or exceed 36 tons per year based on a 12-month rolling total. [401 KAR 52:020, Section 10]

Compliance Demonstration Method:
Refer to **5. Specific Recordkeeping Requirements** e. below.

For Group 1 Batch Process Vents and Equipment in Organic HAP Service (Fugitive Equipment Leaks):

d. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

e. The permittee must be in compliance with the emission limits and work practice standards in Table 2 to 40 CFR 63, Subpart FFFF at all times. [40 CFR 63.2450(a)(2)]

f. The permittee must meet each emission limit in Table 2 to 40 CFR 63, Subpart FFFF that applies. [40 CFR 63.2460(a)]
   (1) 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 (except a flare); or [Table 2 Item 1.a. to 40 CFR 63, Subpart FFFF]
   (2) Reduce uncontrolled organic HAP emissions from one or more batch process vents within the process by venting through one or more closed-vent systems to any combination of control devices (excluding a flare) that reduces organic HAP to an outlet concentration ≤ 20 ppmv as TOC or total organic HAP, and for all other batch

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

process vents within the process reduce collective organic HAP emissions as specified in item 1.a of Table 2. [Table 2 Item 1.b. to 40 CFR 63, Subpart FFFF]

g. Requirements for control devices. Except when complying with 40 CFR 63.2485 or 40 CFR 63.2450(e)(7), if the permittee reduces organic HAP emissions by venting emissions through a closed-vent system to any combination of control devices (except a flare) or recovery devices, the permittee must meet the requirements of 40 CFR 63.2450(e)(4) and the requirements of 40 CFR 63.982(c), and the requirements referenced therein. [40 CFR 63.2450(e)(1)]

Compliance Demonstration Method:
Initial compliance. To demonstrate initial compliance with a percent reduction emission limit in Table 2 to 40 CFR 63, Subpart FFFF, the permittee must compare the sums of the controlled and uncontrolled emissions for the applicable Group 1 batch process vents within the process and show that the specified reduction is met. [40 CFR 63.2460(c)(2)(i)]

h. Beginning no later than the compliance dates specified in 40 CFR 63.2445(g), the referenced provisions specified in 40 CFR 63.2450(e)(4)(i) through (xvi) do not apply when demonstrating compliance with 40 CFR Subpart SS. [40 CFR 63.2450(e)(4)]

i. Closed vent system and nonflare control device. Owners or operators who control emissions through a closed vent system to a nonflare control device shall meet the requirements in 40 CFR 63.983 for closed vent systems, the applicable recordkeeping and reporting requirements of 40 CFR 63.998 and 63.999, and the applicable requirements listed in 40 CFR 63.982(c)(2). [40 CFR 63.982(c)]
   (1) For process vents, the owner or operator shall meet the requirements applicable to the control devices being used in 40 CFR 63.988; the applicable general monitoring requirements of 40 CFR 63.996 and the applicable performance test requirements and procedures of 40 CFR 63.997; and the monitoring, recordkeeping and reporting requirements referenced therein. The requirements of 40 CFR 63.984 through 63.986 do not apply to process vents. [40 CFR 63.982(c)(2)]

Compliance Demonstration Method:
For Group 1 Batch Process Vents, see Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 18. Closed-Vent Systems and 19. The 240 Thermal Oxidizer and 20. The 236 Regenerative Thermal Oxidizer.

For Group 1 Batch Process Vents:

j. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 18. Closed-Vent Systems and 19. The 240 Thermal Oxidizer and 20. The 236 Regenerative Thermal Oxidizer.

3. Testing Requirements:

a. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

For Group 1 Batch Process Vents:

b. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 18. Closed-Vent Systems and 19. The 240 Thermal Oxidizer and 20. The 236 Regenerative Thermal Oxidizer.

4. Specific Monitoring Requirements:

236/3701 Cyclone and 236/5306 Scrubber for Dryer 236/3501
236/3708 Cyclone and 236/5336 Scrubber for Dryer 236/3503

a. The permittee shall perform a qualitative visual observation during daylight hours of the opacity of emissions at each stack on a monthly basis and maintaining a log of the observations. If visible emissions from the stacks are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]

For Group 1 Batch Process Vents:

b. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 18. Closed-Vent Systems and 19. The 240 Thermal Oxidizer and 20. The 236 Regenerative Thermal Oxidizer.

For Equipment in Organic HAP Service (Fugitive Equipment Leaks):

c. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 2 through 10.

5. Specific Recordkeeping Requirements:

236/3701 Cyclone and 236/5306 Scrubber for Dryer 236/3501
236/3708 Cyclone and 236/5336 Scrubber for Dryer 236/3503

a. The permittee shall maintain a log of the qualitative visual observations made as specified in **4. Specific Monitoring Requirements** including the date, time, initials of observer, whether any emissions were observed (yes/no), and any U.S. EPA Reference Method 9 readings taken. If a visual observation was not performed, the reason for not performing it shall also be recorded. [401 KAR 52:020, Section 10]

b. The permittee shall record and retain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of each scrubber. [401 KAR 50:055, Section 2(5)]

c. The permittee shall maintain records of all maintenance activities performed at the scrubbers. [401 KAR 52:020, Section 10]

236/3506 Drum Dryer

d. The permittee shall calculate and maintain a record of actual emissions, in tons per year on a calendar year basis, of VOC from the drum dryer. Calculations shall be performed, and records retained for ten years following the change. The calculations shall be used to document that actual emissions are less than the 36 ton/yr projected actual emission rate

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

used to demonstrate non-applicability of 401 KAR 51:017. The source shall submit a report to the Division if the annual actual VOC emissions equal or exceed 36 tons per year. [401 KAR 51:017, Section 16(5)(c)2.b.]

e. The permittee shall keep records of the actual VOC emissions from the 236/3506 Drum Dryer on a 12-month rolling basis. [401 KAR 52:020, Section 10]

f. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

For Group 1 Batch Process Vents:

g. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 18. Closed-Vent Systems and 19. The 240 Thermal Oxidizer and 20. The 236 Regenerative Thermal Oxidizer.

For Equipment in Organic HAP Service (Fugitive Equipment Leaks):

h. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 2 through 10.

6. <u>Specific Reporting Requirements</u>:

a. Refer to Section F.7 for reporting to the Division.

b. Pursuant to 401 KAR 59:005, Section 3(1)(d) or KRS 224.10-100 (19), the Division shall be notified of any modification (as defined in 401 KAR 59:001) to this affected facility. This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Cabinet may request additional relevant information subsequent to this notice.

c. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

For Group 1 Batch Process Vents:

d. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 18. Closed-Vent Systems and 19. The 240 Thermal Oxidizer and 20. The 236 Regenerative Thermal Oxidizer.

For Equipment in Organic HAP Service (Fugitive Equipment Leaks):

e. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 2 through 10.

7. <u>Specific Control Equipment Operating Conditions:</u>

For Group 1 Batch Process Vents:

See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 18. Closed-Vent Systems and 19. The 240 Thermal Oxidizer and 20. The 236 Regenerative Thermal Oxidizer.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

315 BUILDING (Emission Units 151, 152, and 153)

Major Process Equipment

Equipment ID	Description	Date Commenced
305/3101	Diethyl sulfate storage tank (11,500 gal)	1956
315/3006	Process tank	1962
315/3007	Process tank	1962
315/3227	Receiver (1500 gal)	1960
315/3246	Receiver (3000 gal)	2001
315/3248	Charge pot (13 gal)	1967
315/3251	Acrylic acid process tank (320 gal)	1969
315/3275	Charge pot (450 gal)	1987
315/3276	Charge pot (100 gal)	1987
315/3281	Catalyst pot (15 gal)	1989
315/3282	Catalyst pot (25 gal)	1989
315/3283	Catalyst pot (100 gal)	1990
315/3290	Receiver (180 gal)	1991
315/3293	Receiver (2500 gal)	1991
315/3300	Blend tank (4,000 gal)	1956
315/3301	Reactor (4,000 gal)	1957
315/3302	Reactor (4,000 gal)	1957
315/3303	Reactor (4,000 gal)	1957
315/3304	Reactor (4,000 gal)	1957
315/3305	Process tank (8,000 gal)	1956
315/3306	Reactor (4,500 gal)	1990
315/3307	Reactor (4,000 gal)	1975
315/3308	Process tank (8,000 gal)	1960
315/3310	Dryer/Feed Tank	1963
315/3311	Dryer	1963
315/3312	Reactor (2,500 gal)	1964
315/3313	Process tank (5,000 gal)	1964
315/3315	Reactor (4,500 gal)	1986
315/3404	Distillation column	1994
315/3504	Evaporator	1975
315/3710	Packaging bin	1992
315024DR	Tank wagon loading	NA
315074DR	Tank wagon loading	NA

The above list is larger process equipment, not an inclusive list of equipment. Many smaller pieces of equipment are within the process unit such as charge pots, coolers, receivers, seal pots, condensers, etc.

151 315 BUILDING PROCESS VENT ORGANICS

01 315 Building Process Vent Organics

Controls: 315 Thermal Oxidizer 421/5311 (selected process vents)
None (other process vents)

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

152 315 THERMAL OXIDIZER PRODUCTS OF COMBUSTION
01 315 Thermal Oxidizer Combustion Product Emissions
Controls: None

153 315 BUILDING FUGITIVE EMISSIONS
01 315 Building Fugitive VOC
Controls: None

02-03 315 Building Fugitive HAP
Controls: Leak Detection and Repair

Equipment in 315 Building MCPUs that are subject to emission limitations or work practice standards under 40 CFR 63, Subpart FFFF:

40 CFR 63, Subpart FFFF Group 1 Source	Description	Compliance Method for Emission Limitation
*Equipment in Organic HAP Service (no group status)	Valves, pumps, connectors, compressors, agitators, pressure relief devices in liquid service, sampling connection systems, open-ended valves or lines, and instrumentation systems	40 CFR 63, Subpart UU Leak Detection and Repair
Pressure Relief Devices in Organic HAP Gas or Vapor Service	Pressure Relief Devices in Organic HAP Gas or Vapor Service	40 CFR 63 Subpart FFFF Section 63.2480(e) Work Practice Standards

*Equipment shall be identified, pursuant to 40 CFR 63.1022.

APPLICABLE REGULATIONS:
401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

General requirements for equipment that is not subject to emission limitations or work practice standards under 40 CFR 63, Subpart FFFF are specified in this permit at Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements. Process wastewater, maintenance wastewater, and "certain liquid streams in open systems within an MCPU" requirements are specified at Section B, 40 CFR 63, Subpart FFFF – 11 through 17. Requirements for MCPU where information exists that suggests ethylene oxide could be present are specified at Section B, Group Requirements for 40 CFR 63, Subpart FFF – 21 Ethylene Oxide Determinations.

NON-APPLICABLE REGULATIONS:
401 KAR 63:002, Section 2(4)(a), 40 C.F.R. 63.100 through 63.107, Tables 1 through 4 (Subpart F), National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

401 KAR 60:005, Section 2(2)(bbb), 40 C.F.R. 60.480 through 60.489 (Subpart VV), Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006.

401 KAR 60:005, Section 2(2)(ppp), 40 C.F.R. 60.660 through 60.668 (Subpart NNN), Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations.

401 KAR 60:005, Section 2(2)(ttt), 40 C.F.R. 60.700 through 60.708 (Subpart RRR), Standards of Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes.

401 KAR 63:002, Section 2(4)(b), 40 C.F.R. 63.110 through 63.153, Tables 1 through 37, and Figure 1 (Subpart G), National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater.

401 KAR 63:002, Section 2(4)(c), 40 C.F.R. 63.160 through 63.183, Tables 1 through 4 (Subpart H), National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks.

1. **Operating Limitations:**
   a. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

   For Equipment in Organic HAP Service (Fugitive Equipment Leaks):
   b. Beginning no later than the compliance dates specified in 40 CFR 63.2445(g), 40 CFR 63.2450(a)(1) no longer applies. Instead, the permittee must be in compliance with the emission limits and work practice standards in Tables 1 through 7 to 40 CFR 63, Subpart FFFF at all times. [40 CFR 63.2450(a)(2)]
      (1) The permittee must comply with the requirements of 40 CFR 63, Subpart UU and the requirements referenced therein, except as specified in 40 CFR 63.2480(b) and (d) through (f). [Table 6, item 1. A. i. to 40 CFR 63, Subpart FFFF]

   Compliance Demonstration Method:
   See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 2 through 10.

2. **Emission Limitations:**
   None

3. **Testing Requirements:**
   a. Pursuant to 401 KAR 50:045, Section 1, performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

   b. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 21. Ethylene Oxide Determinations.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

For Equipment in Organic HAP Service (Fugitive Equipment Leaks):

See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 2 through 10.

5. Specific Recordkeeping Requirements:

a. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

For Equipment in Organic HAP Service (Fugitive Equipment Leaks):

b. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 2 through 10.

c. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 21. Ethylene Oxide Determinations.

6. Specific Reporting Requirements:

a. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

For Equipment in Organic HAP Service (Fugitive Equipment Leaks):

b. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 2 through 10.

c. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 21. Ethylene Oxide Determinations

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

200 BUILDING (Emission Units 001, 002, 003, 004 and 005)

Major Process Equipment

Equipment ID	Description	Date Commenced
200/3204	Dryer feed tank (100 gal)	1955
200/3207	Dryer feed tank (570 gal)	1965
200/3003	Process tank, vent 200029SG (4000 gal)	1965
200/3005	Process tank, vent 200032SG (4000 gal)	1965
200/3006	Process tank, vent 200033SG (8000 gal)	1965
200/3009	Process tank, vent 200047SG (4000 gal)	2004
200/3010	Process tank, vent 200048SG (4000 gal)	2004
200/3011	Process tank, vent 200049SG (4000 gal)	2004
200/3301	Reactor (1,000 gal)	1956
200/3302	Reactor (1,000 gal)	1956
200/3303	Reactor (4,000 gal)	1966
200/3304	Reactor (4,000 gal)	1966
200/3501	Steam spray dryer (740 lb/hr batch average solids)	1955 modified 1998
200/3502	Gas spray dryer (1,500 lb/hr maximum solids, 11 mmBtu/hr natural gas firing rate)	Modified 1997
200/3701	Primary cyclone process collector for steam spray dryer	1955
200/3702	Primary cyclone process collector for steam spray dryer	1955
200/3705	Primary cyclone process collector for gas spray dryer	1964
200/3717	Secondary cyclone process collector for steam spray dryer	1988
200/3718	Secondary cyclone process collector for gas spray dryer	1993

The above list is larger process equipment, not an inclusive list of equipment. Many smaller pieces of equipment are within the process unit such as charge pots, coolers, receivers, seal pots, condensers, etc.

001 200 BUILDING PROCESS VENT ORGANICS
01 200 Building Process Vent Organics
Controls: None

002 STEAM SPRAY DRYER AND CYCLONE COLLECTORS PROCESS PARTICULATE
01 Dryer 200/3501 and Process Cyclones Process PM Emissions
Controls: Baghouse 200/3641

003 GAS SPRAY DRYER AND CYCLONE COLLECTORS PROCESS PARTICULATE
01 Dryer 200/3502 and Process Cyclones Process PM Emissions
Controls: Venturi Scrubber 200/5369

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

004 GAS SPRAY DRYER NATURAL GAS COMBUSTION
01 Dryer 200/3502 Combustion Product Emissions
Controls: Venturi Scrubber 200/5369

005 200 BUILDING FUGITIVE EMISSIONS
01 200 Building Fugitive VOC
Controls: None

APPLICABLE REGULATIONS:
401 KAR 59:005, General provisions

401 KAR 59:010, New process operations.

40 CFR 64, Compliance Assurance Monitoring (CAM). (200 Gas Spray Dryer and Venturi Scrubber 200/5369).

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

No equipment in the 200 Building is subject to emission limitations or work practice standards under 40 CFR 63, Subpart FFFF. General requirements for equipment that is not subject to emission limitations or work practice standards under 40 CFR 63, Subpart FFFF are specified in this permit at Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements. Process wastewater, maintenance wastewater, and "certain liquid streams in open systems within an MCPU" requirements are specified at Section B, 40 CFR 63, Subpart FFFF – 11 through 17.

NON-APPLICABLE REGULATIONS:
401 KAR 60:005, Section 2(2)(bbb), 40 C.F.R. 60.480 through 60.489 (Subpart VV), Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006.

401 KAR 60:005, Section 2(2)(ttt), 40 C.F.R. 60.700 through 60.708 (Subpart RRR), Standards of Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes.

401 KAR 63:002, Section 2(4)(a), 40 C.F.R. 63.100 through 63.107, Tables 1 through 4 (Subpart F), National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry.

401 KAR 63:002, Section 2(4)(b), 40 C.F.R. 63.110 through 63.153, Tables 1 through 37, and Figure 1 (Subpart G), National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

401 KAR 63:002, Section 2(4)(c), 40 C.F.R. 63.160 through 63.183, Tables 1 through 4 (Subpart H), National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks.

1. **Operating Limitations:**
   None

2. **Emission Limitations:**
   a. **Cyclones 200/3701, 200/3702, and 200/3717 (Central Vacuum System for Steam Spray Dryer 200/3501) controlled by Baghouse 200/3641 and Cyclones 200/3705, 200/3712, and 200/3718 (Central Vacuum System for Gas Spray Dryer 200/3502) controlled by Venturi Scrubber 200/5369:**
   Particulate matter emissions shall not exceed 2.34 lbs/hr. [401 KAR 59:010, Section 3(2)]

   Compliance Demonstration Method:
   For the Central Vacuum System for Steam Spray Dryer 200/3501, and the Central Vacuum System for Gas Spray Dryer 200/3502, compliance is averaged over a period that covers a complete operation of the batch process and is based on the following formula:

   PMt emissions (lbs/hr) = (processing rate) *(emission factor) * (1 – %CE)
   where PMt = Total Particulate Matter
   %CE = Control Efficiency

   Monthly visual observations, as specified in **4. Specific Monitoring Requirements** below, will be performed to indicate proper operation of the air pollution control equipment.

   b. No person shall cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)(a)]

   Compliance Demonstration Method:
   (1) The permittee shall perform a qualitative visual observation during daylight hours of the opacity of emissions at each stack on a monthly basis and maintaining a log of the observations. If visible emissions from the stacks are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]
   (2) See **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements** below.

3. **Testing Requirements:**
   Performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division. [401 KAR 50:045 Section 1]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

a. **Baghouse 200/3641 (EU 002):**
For the purpose of demonstrating continuing compliance with the opacity and particulate emission limits contained in 401 KAR 59:010, the permittee shall: [401 KAR 52:020, Section 10]
(1) Monitor and maintain daily records of the pressure drop across the baghouse,
(2) Perform annual visual inspections of the filter material and
(3) Perform qualitative monthly visual observations of the control device or stack.

b. **Venturi Scrubber 200/5369 (EU 003):**
(1) For the purpose of demonstrating continuing compliance with the opacity and particulate emission limits contained in 401 KAR 59:010, the permittee shall monitor and maintain daily records of the water pressure drop across the scrubber. [401 KAR 52:020, Section 10]
(2) The following procedures are included in the Compliance Assurance Monitoring (CAM) plan, pursuant to 40 CFR 64:
(i) The pressure drop across the scrubber is measured with a differential pressure gauge.
(ii) The minimum pressure drop is 4.0 inches of water as a 12-hour average. An excursion is defined as a 12-hour average pressure drop outside this range. Excursions trigger an inspection, corrective action, and a reporting requirement.
(iii) Pressure taps are located at the inlet and outlet of the venturi scrubber.
(iv) The pressure gauges are calibrated annually.
(v) The differential pressure drop across the venturi scrubber is electronically recorded, with non-electronic (paper) records retained if the electronic monitoring system is not operating.

c. **Cyclones 200/3705, 200/3712, and 200/3718 (Central Vacuum System for Gas Spray Dryer 200/3502) controlled by Venturi Scrubber 200/5369 (EU 003):**
The permittee shall perform and maintain records of qualitative monthly visual observations of the control device or stack.

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain records of the specific monitoring of control equipment and visual inspections, refer to **4. Specific Monitoring Requirements**.

b. **Cyclones 200/3701, 200/3702, and 200/3717 (Central Vacuum System for Steam Spray Dryer 200/3501) controlled by Baghouse 200/3641 (EU 002), and**
Cyclones 200/3705, 200/3712, and 200/3718 (Central Vacuum System for Gas Spray Dryer 200/3502) controlled by Venturi Scrubber 200/5369 (EU 003):
(1) The permittee shall record and retain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facilities, and any malfunction of the air pollution control devices. [401 KAR 50:055, Section 2(5)]
(2) The permittee shall maintain a log of the qualitative visual observations made as specified in **2. Emission Limitation** b. **Compliance Demonstration Method** including the date, time, initials of observer, whether any emissions were observed

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(yes/no), and any U.S. EPA Reference Method 9 readings taken. If a visual observation was not performed, the reason for not performing it shall also be recorded. [401 KAR 52:020, Section 10]

(3) See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

6. Specific Reporting Requirements:

a. Refer to Section F.7, F.8, and F.9.

b. The Division shall be notified of any modification (as defined in 401 KAR 59:001) to this affected facility. This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Cabinet may request additional relevant information subsequent to this notice. [401 KAR 52:020, Section 10]

c. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

7. Specific Control Equipment Operating Conditions:

Baghouse 200/3641 (EU 002) and Venturi Scrubber 200/5369 (EU 003):

a. The Baghouse and Venturi Scrubber shall control particulate emissions and be operated in accordance with manufacturer's specifications and/or standard operating procedures at all times any of the associated emission units listed above are in operation. [401 KAR 52:020, Section 10]

b. Pursuant to 40 CFR Part 64, Venturi Scrubber 200/5369 (EU 003) shall operate at a minimum of 4.0 inches water pressure drop (12-hour average).

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

334 BUILDING (Emission Unit 341)

Major Process Equipment

Equipment ID	Description	Date Commenced
334/3506	Reactor #1	1989
334/3507	Reactor #2	1988
334/3715	Surge hopper	1988
334/3716	Product recovery cyclone for blender 3717 (650.5 lb/hr batch average process weight)	1988
334/3717	Ribbon blender	1988

The above list is larger process equipment, not an inclusive list of equipment. Many smaller pieces of equipment are within the process unit such as charge pots, coolers, receivers, seal pots, condensers, etc.

341 334 BUILDING PROCESS VENTS
01 334 Building Process Vent Emissions
Controls: Scrubber 334/3231 for product recovery cyclone 334/3716
None for other vents

APPLICABLE REGULATIONS:
401 KAR 59:005, General provisions.

401 KAR 59:010, New process operations.

NON-APPLICABLE REGULATIONS:
401 KAR 60:005, Section 2(2)(bbb), 40 C.F.R. 60.480 through 60.489 (Subpart VV), Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006.

401 KAR 60:005, Section 2(2)(ttt), 40 C.F.R. 60.700 through 60.708 (Subpart RRR), Standards of Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes.

401 KAR 63:002, Section 2(4)(a), 40 C.F.R. 63.100 through 63.107, Tables 1 through 4 (Subpart F), National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry.

401 KAR 63:002, Section 2(4)(b), 40 C.F.R. 63.110 through 63.153, Tables 1 through 37, and Figure 1 (Subpart G), National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

401 KAR 63:002, Section 2(4)(c), 40 C.F.R. 63.160 through 63.183, Tables 1 through 4 (Subpart H), National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks.

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

1. **Operating Limitations:**
   None

2. **Emission Limitations:**
   Product Recovery Cyclone 334/3716
   (Controlled by 334/3231 Scrubber)
   a. Pursuant to 401 KAR 59:010, Section 3(2), the maximum particulate emissions shall not exceed 2.34 lbs/hr.

      Compliance Demonstration Method:
      The permittee shall retain initial permit calculations or test results indicating that particulate emissions are less than the 401 KAR 59:010 allowable emission rate averaged over a period that covers a complete operation of the batch process.

   b. No person shall cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)(a)]

      Compliance Demonstration Method:
      See **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements** below.

3. **Testing Requirements:**
   Pursuant to 401 KAR 50:045, Section 1, performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. **Specific Monitoring Requirements:**
   Product Recovery Cyclone 334/3716
   (Controlled by 334/3231 Scrubber)
   The permittee shall perform a qualitative visual observation during daylight hours of the opacity of emissions at each stack on a monthly basis and maintaining a log of the observations. If visible emissions from the stacks are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

Product Recovery Cyclone 334/3716
(Controlled by 334/3231 Scrubber)

a. The permittee shall retain initial permit calculations or test results indicating that particulate emissions are less that the 401 KAR 59:010 allowable emission rate. [401 KAR 52:020, Section 10]

b. The permittee shall record and retain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the process equipment or air pollution control equipment. [401 KAR 59:005, Section 3(2)]

c. The permittee shall maintain a log of the qualitative visual observations made as specified in **4. Specific Monitoring Requirements** including the date, time, initials of observer, whether any emissions were observed (yes/no), and any U.S. EPA Reference Method 9 readings taken. If a visual observation was not performed, the reason for not performing it shall also be recorded. [401 KAR 52:020, Section 10]

334/3231 Scrubber

d. The permittee shall record and retain records of maintenance performed on the scrubber. [401 KAR 52:020, Section 10]

6. Specific Reporting Requirements:

a. Refer to Section F.7, F.8, and F.9.

b. The Division shall be notified of any modification (as defined in 401 KAR 59:001) to this affected facility. This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Cabinet may request additional relevant information subsequent to this notice. [401 KAR 52:020, Section 10]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

243 BUILDING (Emission Units AF1 and AF2)

Major Process Equipment Used in Polymer Production

Equipment ID	Description	Date Commenced
243/3201	Process Feed Tank (17,966 gal)	2023
243/3202	Bulk Storage Tank (5,794 gal)	2023
243/3203	Bulk Storage Tank (5,794 gal)	2023
243/3204	Bulk Storage Tank (17,966 gal)	2023
243/3205	Bulk Storage Tank (17,966 gal)	2023
243/3206	Bulk Storage Tank (17,966 gal)	2023
243/3207	Mix Tank (4,069 gal)	2023
243/3208	Process Feed Tank (157 gal)	2023
243/3209	Process Feed Tank (484 gal)	2023
243/3210	Process Feed Tank (484 gal)	2023
243/3211	Process Feed Tank (484 gal)	2023
243/3212	Process Feed Tank (334 gal)	2023
243/3215	Process Feed Tank (334 gal)	2023
243/3216	Process Tank (8,567 gal)	2023
243/3218	Process Tank (700 gal)	2023
243/3219	Process Tank (14 gal)	2023
243/3220	Process Tank (10 gal)	2023
243/3221	Knockout Pot (25 gal)	2023
243/3223	Process Tank (1 gal)	2023
243/3301	Reactor (1,980 liters)	2023
--	Tank Wagon Loading	2023
--	Drum and Tote Filling	2023

The above list is larger process equipment, not an inclusive list of equipment. Many smaller pieces of equipment are within the process unit such as charge pots, coolers, receivers, seal pots, condensers, etc.

AF1 243 BUILDING PROCESS VENT ORGANIC EMISSIONS
01 243 Building Process Vent Organic Emissions
Controls: None

AF2 243 BUILDING FUGITIVE ORGANIC EMISSIONS
01 243 Building Fugitive Organic Emissions
Controls: None

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

General requirements for equipment that is not subject to emission limitations or work practice standards under 40 CFR 63, Subpart FFFF are specified in this permit at Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements. Process wastewater, maintenance wastewater, and "certain liquid streams in open systems within an MCPU" requirements are specified at Section B, 40 CFR 63, Subpart FFFF – 11 through 17. Requirements for MCPU where information exists that suggests ethylene oxide could be present are specified at Section B, Group Requirements for 40 CFR 63, Subpart FFF – 21 Ethylene Oxide Determinations.

401 KAR 63:002, Section 2(1), 40 C.F.R. 63.1 through 63.16, Table 1 (Subpart A), General Provisions.

NON-APPLICABLE REGULATIONS:

401 KAR 60:005, Section 2(1), 40 C.F.R. 60.1 through 60.19, Table 1 (Subpart A), General provisions.

401 KAR 60:005, Section 2(2)(r), 40 C.F.R. 60.110b through 60.117b (Subpart Kb) Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.

40 C.F.R. 60.480b through 60.489b (Subpart VVb), Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After April 25, 2023.

40 C.F.R. 60.700a through 60.710a (Subpart RRRa), Standards of Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes for Which Construction, Reconstruction, or Modification Commenced After April 25, 2023.

401 KAR 63:002, Section 2(4)(a), 40 C.F.R. 63.100 through 63.107, Tables 1 through 4 (Subpart F), National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry.

401 KAR 63:002, Section 2(4)(b), 40 C.F.R. 63.110 through 63.153, Tables 1 through 37, and Figure 1 (Subpart G), National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater.

401 KAR 63:002, Section 2(4)(c), 40 C.F.R. 63.160 through 63.183, Tables 1 through 4 (Subpart H), National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

1. **Operating Limitations:**
   None

2. **Emission Limitations:**
   None

3. **Testing Requirements:**
   a. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 21. Ethylene Oxide Determinations.

   b. Performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. **Specific Monitoring Requirements:**
   None

5. **Specific Recordkeeping Requirements:**
   See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 21. Ethylene Oxide Determinations.

6. **Specific Reporting Requirements:**
   See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 21. Ethylene Oxide Determinations.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

HIGHER VINYL ETHERS (HVE) UNIT (Emission Units 261 and 262)

Major Process Equipment

Equipment ID	Description	Date Commenced
326/3301	Prep kettle	1956
326/3302	Reactor A	1956
326/3303	Reactor B	1962
--	Tank wagon loading	--
	Acetylene feed system	1956

The above list is larger process equipment, not an inclusive list of equipment. Many smaller pieces of equipment are within the process unit such as charge pots, coolers, receivers, seal pots, condensers, etc.

261 HIGHER VINYL ETHERS (HVE) UNIT PROCESS VENT EMISSIONS
01 HVE Unit Process Vent Emissions
Controls: None

02 HVE Unit Acetylene Feed System Emissions
Controls: Flare 421/5310

03 HVE Unit Acetylene Feed System Emissions
Controls: None

262 HIGHER VINYL ETHERS (HVE) UNIT FUGITIVE EMISSIONS
01 HVE Unit Fugitive VOC
Controls: None

APPLICABLE REGULATIONS:
401 KAR 63:015, Flares.

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

NON-APPLICABLE REGULATIONS:
401 KAR 60:005, Section 2(2)(bbb), 40 C.F.R. 60.480 through 60.489 (Subpart VV), Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006.

401 KAR 60:005, Section 2(2)(ttt), 40 C.F.R. 60.700 through 60.708 (Subpart RRR), Standards of Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes.

401 KAR 63:002, Section 2(4)(a), 40 C.F.R. 63.100 through 63.107, Tables 1 through 4 (Subpart F), National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

401 KAR 63:002, Section 2(4)(b), 40 C.F.R. 63.110 through 63.153, Tables 1 through 37, and Figure 1 (Subpart G), National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater.

401 KAR 63:002, Section 2(4)(c), 40 C.F.R. 63.160 through 63.183, Tables 1 through 4 (Subpart H), National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks.

1. **Operating Limitations:**
   Refer to compliance demonstration method in **Section D.3**.

2. **Emission Limitations:**
   a. Pursuant to 401 KAR 63:015, Section 3, no person shall cause, suffer, or allow the emission into the open air of particulate matter from any flare which is greater than twenty (20) percent opacity for more than three (3) minutes in any one (1) day.

      Compliance Demonstration Method:
      Refer to **5. Specific Recordkeeping Requirements** and **7. Specific Control Equipment Operating Conditions**, below.

   b. To preclude applicability of 401 KAR 51:017, total emissions of VOC from the Vinyl Pyrrolidones Acetylene Feed System (VP1 (02) and VP1 (03)), and the Higher Vinyl Ethers (HVE) Acetylene Feed System (261 (02) and 261 (03)), shall not equal or exceed 36 tons per year based on a 12-month rolling total.

      Compliance Demonstration Method:
      Refer to **5. Specific Recordkeeping Requirements** below, and **Section D.3**.

3. **Testing Requirements:**
   If visible emissions are observed or it is requested by the Division, the permittee shall perform a Method 22 reading for the flare.

4. **Specific Monitoring Requirements:**
   Whenever waste gas is sent to the flare for combustion, the permittee shall monitor the flare for visible emissions and maintain the records described in **5. Specific Recordkeeping Requirements** a.

5. **Specific Recordkeeping Requirements:**
   a. In order to demonstrate compliance with 401 KAR 63:015, the permittee shall meet the following requirements: [401 KAR 52:020, Section 10]
      (1) Whenever emissions are vented to the Flare for combustion, the permittee shall maintain daily records of whether any air emissions were visible from the flare. If no visible emissions are observed, then no further observations or records are required. If visible emissions are observed or it is requested by the Division, the permittee shall perform a Method 22 reading for the flare. The readings shall be recorded in a daily log.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(2) The permittee shall maintain records of all routine and non-routine maintenance activities performed at the flare.
(3) The permittee shall maintain records of any actions taken to correct the problem, if visual emissions are observed.

b. The permittee shall retain records of the amount of VOC emissions vented from the HVE Acetylene Feed System and whether the emissions were vented to the flare. [401 KAR 52:020, Section 10]

c. See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

6. Specific Reporting Requirements:
See Section B, Group Requirements for 40 CFR 63, Subpart FFFF – 1. General Requirements.

7. Specific Control Equipment Operating Conditions:
For flare 421/5310, the source has elected to comply with the following design requirements of 40 CFR 60.18(c)(3)-(6):
An owner/operator has the choice of adhering to either the heat content specifications in paragraph (c)(3)(ii) of this section and the maximum tip velocity specifications in paragraph (c)(4) of this section or adhering to the requirements in 40 CFR 60.18(c)(3)(i). [40 CFR 60.18(c)(3)]

a. Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is non-assisted. The net heating value of the gas being combusted shall be determined by the methods specified in 40 CFR 60.18(f)(3). [Pursuant to 40 CFR 60.18(c)(3)(ii)]

b. Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4) of this section, less than 18.3 m/sec (60 ft/sec), except as provided in 40 CFR 60.18c)(4) (ii) and (iii). [40 CFR 60.18(c)(4)(i)]

c. Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18 (f)(4), equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf). [40 CFR 60.18(c)(4)(ii)]

d. Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18(f)(4), less than the velocity, Vmax, as determined by the method specified in 40 CFR 60.18(f)(5), and less than 122 m/sec (400 ft/sec) are allowed. [40 CFR 60.18(c)(4)(iii)]

e. Flares used to comply with 40 CFR 60.18 shall be steam-assisted, air-assisted, or nonassisted. [40 CFR 60.18(c)(6)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

WICKES BOILER (Emission Unit 0AC)

0AC	**WICKES BOILER 115/5304**
Rated capacity:	79 mmBtu/hr heat input
Constructed:	1958, Modified 2003
	Natural Gas and Hydrogen Fired
01	**Wickes – BLO Hydrogen By-Product**
Controls:	None
02	**Wickes – Natural Gas**
Controls:	None

EAST PARACYMENE HEATER (Emission Unit 0AD)

0AD	**EAST (STRUTHERS) PARACYMENE HEATER 115/5306**
Rated capacity:	19 mmBtu/hr heat input
Constructed:	1961, modified 2007
	Natural Gas and Hydrogen Fired
02	**East Paracymene – Natural Gas**
Controls	None
03	**East Paracymene – BLO Hydrogen By-Product**
Controls:	None

WEST PARACYMENE HEATER (Emission Unit WPH)

WPH	**WEST (FIRST THERMAL SYSTEMS) PARACYMENE HEATER 126/5301**
Rated capacity:	13 mmBtu/hr heat input
Constructed:	1990, Modified 2001
	Natural Gas and Hydrogen Fired
02	**W Paracymene – Natural Gas**
Controls:	None
03	**W Paracymene – BLO Hydrogen By-Product**
Controls:	None

APPLICABLE REGULATIONS:

401 KAR 59:005, General provisions.

401 KAR 59:015, New indirect heat exchangers.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

401 KAR 60:005, Section 2(2)(d), 40 C.F.R. 60.40c through 60.48c (Subpart Dc), Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

401 KAR 63:002, Section 2(4)(iiii), 40 C.F.R. 63.7480 through 63.7575, Tables 1 through 13 (Subpart DDDDD), National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.

1. **Operating Limitations:**
   a. The permittee must conduct a tune-up of the boiler or process heater annually as specified in 40 CFR 63.7540 as follows: [40 CFR 63.7500(a)(1) and Table 3 of 40 CFR 63, Subpart DDDDD]
      (1) The permittee must conduct the tune-up while burning the type of fuel (or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler or process heater over the 12 months prior to the tune-up. [40 CFR 63.7540(a)(10)]
      (2) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment; [40 CFR 63.7540(a)(10)(i)]
      (3) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available; [40 CFR 63.7540(a)(10)(ii)]
      (4) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown); [40 CFR 63.7540(a)(10)(iii)]
      (5) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available; and [40 CFR 63.7540(a)(10)(iv)]
      (6) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [to 40 CFR 63.7540(a)(10)(v)]

   b. At all times, the permittee must operate and maintain any affected source (as defined in 40 CFR 63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7500(a)(3)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c. The permittee must complete an initial tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi) no later than the compliance date specified in 40 CFR 63.7495, except as specified in 40 CFR 63.7510(j). The permittee must complete the one-time energy assessment specified in Table 3 to 40 CFR 63, Subpart DDDDD no later than the compliance date specified in 40 CFR 63.7495. [40 CFR 63.7510(e)]

d. If the permittee is required to meet an applicable tune-up work practice standard, the permittee must conduct an annual performance tune-up according to 40 CFR 63.7540(a)(10). Each annual tune-up specified in 40 CFR 63.7540(a)(10) shall be no more than 13 months after the previous tune-up. [40 CFR 63.7515(d)]

e. The permittee must complete the subsequent tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi) and the schedule described in 40 CFR 63.7540(a)(13) for units that are not operating at the time of their scheduled tune-up. [40 CFR 63.7515(g)]

f. If the unit is not operating on the required date for a tune-up, the tune-up shall be conducted within 30 calendar days of startup. [40 CFR 63.7540(a)(13)]

g. During a startup period or shutdown period, the permittee of an affected facility subject to 40 CFR 63.75000 shall meet the work practice standards established in 40 CFR 63, Table 3 to Subpart DDDDD, as established in 401 KAR 63:002, Section 2(4)(iii). [401 KAR 59:015, Section 7. (2)(a)]

2. <u>Emission Limitations</u>:

a. The permittee shall not cause emissions of particulate and sulfur dioxide emissions to exceed the following limits: [401 KAR 59:015, Section 4 and Section 5]

Equipment	Particulate Limit (lb/MMBtu)	Sulfur Dioxide Limit (lb/MMBtu)
Wickes	0.344	1.30
East Paracymene	0.44	1.94
West Paracymene	0.53	2.70

Compliance Demonstration Method:

(1) While burning natural gas or BLO hydrogen by-product, the permittee shall be assumed to be in compliance with the particulate emission standards specified above. The permittee shall keep annual (calendar year) records of the types of fuels burned.

(2) While burning natural gas or BLO hydrogen by-product, the permittee shall be assumed to be in compliance with the sulfur dioxide emission standards specified above. The permittee shall keep annual (calendar year) records of the types of fuels burned.

b. The permittee shall not cause emissions of particulate matter in excess of 20 percent opacity, except: [401 KAR 59:015, Section 4(2)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(1) A maximum of 40 percent opacity shall be allowed for a maximum of 6 consecutive minutes in any 60 minutes during fire box cleaning or soot blowing; and [401 KAR 59:015, Section 4(2)(b)]
(2) For emissions from an affected facility caused by building a new fire, emissions during the period required to bring the boiler up to operating conditions shall be allowed, if the method used is recommended by the manufacturer and the time does not exceed the manufacturer's recommendations. [401 KAR 59:015, Section 4(2)(c)])]

Compliance Demonstration Method:
While burning natural gas or BLO hydrogen by-product, the permittee shall be assumed to be in compliance with the opacity standard specified above. The permittee shall keep annual (calendar year) records of the types of fuels burned.

3. Testing Requirements:

a. To demonstrate that a gaseous fuel other than natural gas or refinery gas qualifies as an other gas 1 fuel, as defined in 40 CFR 63.7575, the permittee shall conduct a fuel specification analyses for mercury according to the procedures in 40 CFR 63.7521(g) through (i) and Table 6 to 40 CFR 63, Subpart DDDDD, as applicable, except as specified in 40 CFR 63.7521(f)(1) through (4), or as an alternative where fuel specification analysis is not practical, the permittee must measure mercury concentration in the exhaust gas when firing only the gaseous fuel to be demonstrated as another gas 1 fuel in the boiler or process heater according to the procedures in Table 6 to 40 CFR 63, Subpart DDDDD. [40 CFR 63.7521(f)]

b. The permittee must obtain a single fuel sample for each fuel type for fuel specification of gaseous fuels. [40 CFR 63.7521(h)]

c. The permittee must determine the concentration in the fuel of mercury, in unit of microgram per cubic meter, dry basis, of each sample for each other gas 1 fuel type according to the procedures in Table 6 to 40 CFR 63, Subpart DDDDD. [40 CFR 63.7521(i)]

d. If the permittee elects to demonstrate that a gaseous fuel meets the specifications of another gas 1 fuel as defined in 40 CFR 63.7575, the permittee must conduct an initial fuel specification analysis according to 40 CFR 63.7521(f) through (i) and according to the frequency listed in 40 CFR 63.7540(c) and maintain records of the results of the testing as outlined in 40 CFR 63.7555(g). For samples where the initial mercury specification has not been exceeded, the permittee shall include a signed certification with the Notification of Compliance Status that the initial fuel specification test meets the gas specification outlined in the definition of other gas 1 fuels. [40 CFR 63.7530(g)]

e. If the permittee elects to demonstrate that the unit meets the specification for mercury for the unit designed to burn gas 1 subcategory, the permittee must follow the sampling

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

frequency specified in 40 CFR 63.7540(c)(1) through (4) and conduct this sampling according to the procedures in 40 CFR 63.7521(f) through (i). [40 CFR 63.7540(c)]

(1) If the initial mercury constituents in the gaseous fuels are measured to be equal to or less than half of the mercury specification as defined in 40 CFR 63.7575, the permittee does not need to conduct further sampling. [40 CFR 63.7540(c)(1)]

(2) If the initial mercury constituents are greater than half but equal to or less than 75 percent of the mercury specification as defined in 40 CFR 63.7575, the permittee must conduct semi-annual sampling. If 6 consecutive semi-annual fuel analyses demonstrate 50 percent or less of the mercury specification, the permittee does not need to conduct further sampling. If any semi-annual sample exceeds 75 percent of the mercury specification, the permittee shall return to monthly sampling for that fuel, until 12 months of fuel analyses again are less than 75 percent of the compliance level. [40 CFR 63.7540(c)(2)]

(3) If the initial mercury constituents are greater than 75 percent of the mercury specification as defined in 40 CFR 63.7575, the permittee will conduct monthly sampling. If 12 consecutive monthly fuel analyses demonstrate 75 percent or less of the mercury specification, the permittee may decrease the fuel analysis frequency to semi-annual for that fuel. [40 CFR 63.7540(c)(3)]

(4) If the initial sample exceeds the mercury specification as defined in 40 CFR 63.7575, each affected boiler or process heater combusting this fuel is not part of the unit designed to burn gas 1 subcategory and shall be in compliance with the emission and operating limits for the appropriate subcategory. The permittee may elect to conduct additional monthly sampling while complying with these emissions and operating limits to demonstrate that the fuel qualifies as another gas 1 fuel. If 12 consecutive monthly fuel analyses samples are at or below the mercury specification as defined in 40 CFR 63.7575, each affected boiler or process heater combusting the fuel can elect to switch back into the unit designed to burn gas 1 subcategory until the mercury specification is exceeded. [40 CFR 63.7540(c)(4)]

4. <u>Specific Monitoring Requirements</u>:

a. The permittee must develop a site-specific fuel analysis plan for other gas 1 fuels according to the following procedures and requirements in 40 CFR 63.7521(g)(1) and (2), as follows: [40 CFR 63.7521(g)]

(1) If the permittee intends to use an alternative analytical method other than those required by Table 6 to 40 CFR 63, Subpart DDDDD, the permittee must submit the fuel analysis plan to the Administrator for review and approval no later than 60 days before the date that the permittee intends to conduct the initial compliance demonstration described in 40 CFR 63.7510.

(2) The permittee must include the information contained in 40 CFR 63.7521(g)(2)(i) through (vi) in the fuel analysis plan as follows: [40 CFR 63.7521(g)(2)]

(A) The identification of all gaseous fuel types other than those exempted from fuel specification analysis under 40 CFR 63.7521(f)(1) through (3) anticipated to be burned in each boiler or process heater.

(B) For each anticipated fuel type, the identification of whether the permittee or a fuel supplier will be conducting the fuel specification analysis.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(C) For each anticipated fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the samples if the permittee's procedures are different from the sampling methods contained in Table 6 to 40 CFR 63, Subpart DDDDD. Samples should be collected at a location that most accurately represents the fuel type, where possible, at a point prior to mixing with other dissimilar fuel types. If multiple boilers or process heaters are fueled by a common fuel stream it is permissible to conduct a single gas specification at the common point of gas distribution.

(D) For each anticipated fuel type, the analytical methods from Table 6 to 40 CFR 63, Subpart DDDDD, with the expected minimum detection levels, to be used for the measurement of mercury.

(E) If the permittee requests to use an alternative analytical method other than those required by Table 6 to 40 CFR 63, Subpart DDDDD, the permittee must also include a detailed description of the methods and procedures that they are proposing to use. Methods in Table 6 to 40 CFR 63, Subpart DDDDD shall be used until the requested alternative is approved.

(F) If the permittee will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier shall use the analytical methods required by Table 6 to 40 CFR 63, Subpart DDDDD. When using a fuel supplier's fuel analysis, the permittee is not required to submit the information in 40 CFR 63.7521(g)(2)(iii).

5. <u>Specific Recordkeeping Requirements</u>:

a. The permittee shall keep annual (calendar year) records of the types of fuel burned in the boiler. [401 KAR 52:020, Section 10]

b. Pursuant to 40 CFR 60.48c(g), the permittee shall either:

(1) Record and maintain records of the amount of each fuel combusted during each operating day; or

(2) As an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the permittee of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month; or

(3) As an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the permittee of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60, Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42C to use fuel certification to demonstrate compliance with the SO2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c. The permittee shall record the occurrence and duration of any startup, shutdown, or malfunction in the operation of the indirect heat exchanger. [40 CFR 60.7(b), and 401 KAR 59:005, Section 3(2)]

d. The permittee must maintain on-site and submit, if requested by the Administrator, a report containing the information in 40 CFR 63.7540(a)(10)(vi)(A) through (C), as follows: [40 CFR 63.7540(a)(10)(vi)]
   (1) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;
   (2) A description of any corrective actions taken as a part of the tune-up; and
   (3) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

e. The permittee must keep a copy of each notification and report submitted to comply with 40 CFR 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.7555(a)(1)]

f. The permittee must keep records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). [40 CFR 63.7555(a)(2)]

g. The permittee must comply with 40 CFR 63.7560(a) through (c):
   (1) The permittee's records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1);
   (2) As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record;
   (3) The permittee must keep each record on site, or they shall be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee may keep the records off site for the remaining 3 years.

6. <u>Specific Reporting Requirements</u>:

a. The permittee must include with the Notification of Compliance Status a signed certification that either the energy assessment was completed according to Table 3 to 40 CFR 63, Subpart DDDDD, and that the assessment is an accurate depiction of your facility at the time of the assessment, or that the maximum number of on-site technical hours specified in the definition of energy assessment applicable to the facility has been expended. [40 CFR 63.7530(e)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. For units that are subject only to a requirement to conduct subsequent annual tune-ups according to 40 CFR 63.7540(a)(10), and not subject to emission limits or 40 CFR 63, Subpart DDDDD Table 4 operating limits, the permittee may submit only an annual compliance report, as applicable, as specified in 40 CFR 63.7550(b)(1) through (4), instead of a semi-annual compliance report for the boiler, as follows: [40 CFR 63.7550(b)]
   (1) If submitting an annual report, the first compliance report shall cover the period beginning on the compliance date that is specified for each boiler or process heater in 40 CFR 63.7495 and ending on December 31 within 1 year after the compliance date that is specified for the source in 40 CFR 63.7495.
   (2) The first annual compliance report shall be postmarked or submitted no later than January 31.
   (3) Each subsequent annual compliance reports shall cover the applicable 1-year periods from January 1 to December 31.
   (4) Each subsequent annual compliance reports shall be postmarked or submitted no later than January 31.

c. The permittee must report each instance in which each boiler or process heater did not meet each emission limit and operating limit in Tables 1 through 4 or 11 through 13 to 40 CFR 63, Subpart DDDDD that apply. These instances are deviations from the emission limits or operating limits, respectively, in 40 CFR 63, Subpart DDDDD. These deviations shall be reported according to the requirements in 40 CFR 63.7550. [40 CFR 63.7540(b)]

d. A compliance report shall contain the following information depending on how the facility chooses to comply with the limits set in this rule. [40 CFR 63.7550(c)]
   (1) If the facility is subject to the requirements of a tune up the permittee must submit a compliance report with the information in 40 CFR 63.7550(c)(5)(i) through (iii), (xiv) and (xvii), as follows:
      (i) Company and facility name and address.
      (ii) Process unit information, emissions limitations, and operating parameter limitations.
      (iii) Date of report and beginning and ending dates of the reporting period.
      (iv) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(10). Include the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown.
      (v) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

e. The permittee must submit all reports required by Table 9 of this subpart electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (*http://www.epa.gov/ttn/chief/cedri/index.html*), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

is due, you must submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. [40 CFR 63.7550(h)(3)]

f. Refer to **Section F.7.**

g. The Division shall be notified of modifications (as defined in 401 KAR 59:001) to this affected facility. This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Cabinet may request additional relevant information subsequent to this notice. [40 CFR 60, Subpart A, Section 60.7(a)(4), and 401 KAR 59:005, Section 3(1)(d)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

HOLMAN BOILER (EMISSION UNIT OAE)

0AE **HOLMAN BOILER**
Rated capacity: 88 mmBtu/hr heat input
Constructed: 1992, installed at ISP 2009
Natural Gas Fired

01 **Holman Boiler – Natural Gas**
Controls: None

APPLICABLE REGULATIONS:

401 KAR 59:005, General provisions.

401 KAR 59:015, New indirect heat exchangers.

401 KAR 60:005, Section 2(2)(d), 40 C.F.R. 60.40c through 60.48c (Subpart Dc), Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

401 KAR 63:002, Section 2(4)(iiii), 40 C.F.R. 63.7480 through 63.7575, Tables 1 through 13 (Subpart DDDDD), National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.

1. **Operating Limitations:**
   a. The permittee must conduct a tune-up of the boiler or process heater annually as specified in 40 CFR 63.7540 as follows: [40 CFR 63.7500(a)(1) and Table 3 of 40 CFR 63, Subpart DDDDD]
      (1) The permittee must conduct the tune-up while burning the type of fuel (or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler or process heater over the 12 months prior to the tune-up. [40 CFR 63.7540(a)(10)]
      (2) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment; [40 CFR 63.7540(a)(10)(i)]
      (3) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available; [40 CFR 63.7540(a)(10)(ii)]
      (4) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown); [40 CFR 63.7540(a)(10)(iii)]
      (5) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available; and [40 CFR 63.7540(a)(10)(iv)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(6) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 CFR 63.7540(a)(10)(v)]

b. At all times, the permittee must operate and maintain any affected source (as defined in 40 CFR 63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7500(a)(3)]

c. The permittee must complete an initial tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi) no later than the compliance date specified in 40 CFR 63.7495, except as specified in 40 CFR 63.7510(j). The permittee must complete the one-time energy assessment specified in Table 3 to 40 CFR 63, Subpart DDDDD no later than the compliance date specified in 40 CFR 63.7495. [40 CFR 63.7510(e)]

d. If the permittee is required to meet an applicable tune-up work practice standard, the permittee must conduct an annual performance tune-up according to 40 CFR 63.7540(a)(10). Each annual tune-up specified in 40 CFR 63.7540(a)(10) shall be no more than 13 months after the previous tune-up. [40 CFR 63.7510(d)]

e. The permittee must complete the subsequent tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi) and the schedule described in 40 CFR 63.7540(a)(13) for units that are not operating at the time of their scheduled tune-up. [40 CFR 63.7515(g)]

f. If the unit is not operating on the required date for a tune-up, the tune-up shall be conducted within 30 calendar days of startup. [40 CFR 63.7540(a)(13)]

g. During a startup period or shutdown period, the permittee of an affected facility subject to 40 CFR 63.75000 shall meet the work practice standards established in 40 CFR 63, Table 3 to Subpart DDDDD, as established in 401 KAR 63:002, Section 2(4)(iii). [401 KAR 59:015, Section 7. (2)(a)]

2. <u>Emission Limitations</u>:

a. The permittee shall not cause emissions of particulate and sulfur dioxide emissions to exceed the following limits: [401 KAR 59:015, Section 4 and Section 5]

Equipment	Particulate Limit (lb/mmBtu)	Sulfur Dioxide Limit (lb/mmBtu)
Holman	0.10	0.80

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:

(1) While burning natural gas, the permittee shall be assumed to be in compliance with the particulate emission standards specified above.

(2) While burning natural gas, the permittee shall be assumed to be in compliance with the sulfur dioxide emission standards specified above.

b. The permittee shall not cause emissions of particulate matter in excess of 20 percent opacity, except: [401 KAR 59:015, Section 4(2)]

(1) A maximum of 40 percent opacity shall be allowed for a maximum of 6 consecutive minutes in any 60 minutes during fire box cleaning or soot blowing; and [401 KAR 59:015, Section 4(2)(b)]

(2) For emissions from an affected facility caused by building a new fire, emissions during the period required to bring the boiler up to operating conditions shall be allowed, if the method used is recommended by the manufacturer and the time does not exceed the manufacturer's recommendations. [401 KAR 59:015, Section 4(2)(c)]

Compliance Demonstration Method:

While burning natural gas, the permittee shall be assumed to be in compliance with the opacity standard specified above.

3. Testing Requirements:

Pursuant to 401 KAR 50:045, Section 1, performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

None

5. Specific Recordkeeping Requirements:

a. Pursuant to 40 CFR 60.48c(g), the permittee shall either:

(1) Record and maintain records of the amount of each fuel combusted during each operating day; or

(2) As an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the permittee of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month; or

(3) As an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the permittee of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60, Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42C to use fuel certification to demonstrate compliance with the SO2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. The permittee shall record the occurrence and duration of any startup, shutdown, or malfunction in the operation of the indirect heat exchanger. [40 CFR 60.7(b), and 401 KAR 59:005, Section 3(2)]

c. The permittee must maintain on-site and submit, if requested by the Administrator, a report containing the information in 40 CFR 63.7540(a)(10)(vi)(A) through (C), as follows: [40 CFR 63.7540(10)(vi)]
   (1) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;
   (2) A description of any corrective actions taken as a part of the tune-up; and
   (3) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

d. The permittee must keep a copy of each notification and report submitted to comply with 40 CFR 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.7555(a)(1)]

e. The permittee must keep records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). [40 CFR 63.7555(a)(2)]

f. The permittee must comply with 40 CFR 63.7560(a) through (c):
   (1) The permittee's records shall be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1);
   (2) As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record;
   (3) The permittee must keep each record on site, or they shall be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee may keep the records off site for the remaining 3 years.

6. <u>Specific Reporting Requirements</u>:

a. The permittee must include with the Notification of Compliance Status a signed certification that either the energy assessment was completed according to Table 3 to 40 CFR 63, Subpart DDDDD, and that the assessment is an accurate depiction of your facility at the time of the assessment, or that the maximum number of on-site technical hours specified in the definition of energy assessment applicable to the facility has been expended. [40 CFR 63.7530(e)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. The permittee must report each instance in which each boiler or process heater did not meet each emission limit and operating limit in Tables 1 through 4 or 11 through 13 to 40 CFR 63, Subpart DDDDD that apply. These instances are deviations from the emission limits or operating limits, respectively, in 40 CFR 63, Subpart DDDDD. These deviations shall be reported according to the requirements in 40 CFR 63.7550. [40 CFR 63.7540(b)]

c. For units that are subject only to a requirement to conduct subsequent annual tune-ups according to 40 CFR 63.7540(a)(10), and not subject to emission limits or 40 CFR 63, Subpart DDDDD Table 4 operating limits, the permittee may submit only an annual compliance report, as applicable, as specified in 40 CFR 63.7550(b)(1) through (4), instead of a semi-annual compliance report for the boiler, as follows: [40 CFR 63.7550(b)]
   (1) If submitting an annual report, the first compliance report shall cover the period beginning on the compliance date that is specified for each boiler or process heater in 40 CFR 63.7495 and ending on December 31 within 1 year after the compliance date that is specified for the source in 40 CFR 63.7495.
   (2) The first annual compliance report shall be postmarked or submitted no later than January 31.
   (3) Each subsequent annual compliance reports shall cover the applicable 1-year periods from January 1 to December 31.
   (4) Each subsequent annual compliance reports shall be postmarked or submitted no later than January 31.

d. A compliance report shall contain the following information depending on how the facility chooses to comply with the limits set in this rule. [40 CFR 63.7550(c)]
   (1) If the facility is subject to the requirements of a tune up the permittee must submit a compliance report with the information in 40 CFR 63.7550(c)(5)(i) through (iii), (xiv) and (xvii), as follows:
      (i) Company and facility name and address.
      (ii) Process unit information, emissions limitations, and operating parameter limitations.
      (iii) Date of report and beginning and ending dates of the reporting period.
      (iv) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(10). Include the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown.
      (v) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

e. The permittee must submit all reports required by Table 9 of this subpart electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (*http://www.epa.gov/ttn/chief/cedri/index.html*), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

40 CFR 63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. [40 CFR 63.7550(h)(3)]

f. Refer to Section F.7.

g. The Division shall be notified of modifications (as defined in 401 KAR 59:001) to this affected facility. This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Cabinet may request additional relevant information subsequent to this notice. [40 CFR 60.7(a)(4), and 401 KAR 59:005, Section 3(1)(d)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

RENTECH BOILERS (Emission Units 0AF, 0AG, and 0AH)

0AF	**RENTECH BOILER #1**
Rated capacity	69.6 mmBtu/hr heat input (HHV)
Construction:	Commenced 2013
	Natural Gas Fired
01	**Rentech #1 – Natural Gas**
Controls:	None
0AG	**RENTECH BOILER #2**
Rated capacity:	69.6 mmBtu/hr heat input (HHV)
Construction:	Commenced 2013
	Natural Gas Fired
01	**Rentech #2 – Natural Gas**
Controls:	None
0AH	**RENTECH BOILER #3**
Rated capacity:	69.6 mmBtu/hr heat input (HHV)
Construction:	Commenced 2013
	Natural Gas Fired
01	**Rentech #3 – Natural Gas**
Controls:	None

APPLICABLE REGULATIONS:

401 KAR 59:005, General provisions.

401 KAR 59:015, New indirect heat exchangers.

401 KAR 60:005, Section 2(2)(d), 40 C.F.R. 60.40c through 60.48c (Subpart Dc), Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

401 KAR 63:002, Section 2(4)(iiii), 40 C.F.R. 63.7480 through 63.7575, Tables 1 through 13 (Subpart DDDDD), National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.

1. **Operating Limitations:**
   a. The permittee must meet each work practice standard in Table 3 to 40 CFR 63, Subpart DDDDD that applies to the boiler. [40 CFR 63.7500(a)(1)]

   b. At all times, the permittee must operate and maintain the affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

be based on information available to the Division that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7500(a)(3)]

c. For new or reconstructed affected sources (as defined in 40 CFR 63.7490), you shall demonstrate initial compliance with the applicable work practice standards in Table 3 to 40 CFR 63, Subpart DDDDD within the applicable annual schedule as specified in 40 CFR 63.7515(d) following the initial compliance date specified in 40 CFR 63.7495(a). Thereafter, the permittee is required to complete the applicable annual tune-up as specified in 40 CFR 63.7515(d). [40 CFR 63.7510(g)]

d. The permittee must conduct an annual performance tune-up according to 40 CFR 63.7540(a)(10). Each annual tune-up specified in 40 CFR 63.7540(a)(10) shall be no more than 13 months after the previous tune-up. For a new or reconstructed affected source (as defined in 40 CFR 63.7490), the first annual tune-up shall be no later than 13 months after April 1, 2013, or the initial startup of the new or reconstructed affected source, whichever is later. [40 CFR 63.7515(d) and Table 3 to 40 CFR 63, Subpart DDDDD]

e. The permittee must complete a subsequent tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (iv) and the schedule described in 40 CFR 63.7540(a)(13) for units that are not operating at the time of their scheduled tune-up. [40 CFR 63.7515(g)]

f. The permittee must conduct a tune-up of the boiler or process heater annually to demonstrate continuous compliance as specified in 40 CFR 63.7540(a)(10)(i) through (v), below. The permittee must conduct the tune-up while burning the type of fuel (or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up. [40 CFR 63.7540(a)(10)]
   (1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;
   (2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
   (3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown);
   (4) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOX requirement to which the unit is subject;

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(5) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and

g. If the unit is not operating on the required date for a tune-up, the tune-up shall be conducted within 30 calendar days of startup. [40 CFR 63.7540(a)(13)]

h. During a startup period or shutdown period, the permittee of an affected facility subject to 40 CFR 63.75000 shall meet the work practice standards established in 40 CFR 63, Table 3 to Subpart DDDDD, as established in 401 KAR 63:002, Section 2(4)(iii). [401 KAR 59:015, Section 7. (2)(a)]

2. <u>Emission Limitations</u>:

a. The permittee shall not cause emissions of particulate and sulfur dioxide emissions to exceed the following limits: [401 KAR 59:015, Section 4(1)(b) and Section 5(1)(b)]

Equipment	Particulate Limit (lb/mmBtu)	Sulfur Dioxide Limit (lb/mmBtu)
Rentech Boiler #1	0.10	0.80
Rentech Boiler #2	0.10	0.80
Rentech Boiler #3	0.10	0.80

Compliance Demonstration Method:
While burning natural gas the permittee shall be assumed to be in compliance with the particulate and sulfur dioxide emission standards specified above. The permittee shall keep annual (calendar year) records of the types of fuels burned.

b. The permittee shall not cause emissions of particulate matter in excess of 20 percent opacity, except: [401 KAR 59:015, Section 4(2)]
(1) A maximum of 40 percent opacity shall be allowed for a maximum of 6 consecutive minutes in any 60 minutes during fire box cleaning or soot blowing; and [401 KAR 59:015, Section 4(2)(b)]
(2) For emissions from an affected facility caused by building a new fire, emissions during the period required to bring the boiler up to operating conditions shall be allowed, if the method used is recommended by the manufacturer and the time does not exceed the manufacturer's recommendations. [401 KAR 59:015, Section 4(2)(c)]

Compliance Demonstration Method:
While burning natural gas the permittee shall be assumed to be in compliance with the opacity standard specified above. The permittee shall keep annual (calendar year) records of the types of fuels burned.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:
Pursuant to 401 KAR 50:045, Section 1, performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:
None

5. Specific Recordkeeping Requirements:

a. Pursuant to 40 CFR 60.48c(g)(1) through (3) and 401 KAR 52:020, Section 10, the permittee shall either:
   (1) Record and maintain records of the amount of each fuel combusted during each operating day; or
   (2) As an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the permittee of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month; or
   (3) As an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the permittee of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60, Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

b. The permittee shall record and retain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the indirect heat exchanger. [40 CFR 60.7(b), and 401 KAR 59:005, Section 3(2)]

c. The permittee must keep the following records: [40 CFR 63.7555(a)(1) and (2)]
   (1) A copy of each notification and report that the permittee submitted to comply with 40 CFR 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).
   (2) Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

d. The following requirements must be met: [40 CFR 63.7560]
   (1) Records shall be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1).
   (2) As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(3) The permittee must keep each record on site, or they shall be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee may keep the records off site for the remaining 3 years.

e. The permittee must maintain on-site and submit, if requested by the Administrator, a report containing the information in 40 CFR 63.7540(a)(10)(vi)(A) through (C), as follows: [40 CFR 63.7540(a)(10)(vi)]
   (1) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;
   (2) A description of any corrective actions taken as a part of the tune-up; and
   (3) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

6. <u>Specific Reporting Requirements</u>:

a. If the permittee switches fuels or makes a physical change to the boiler and the fuel switch or physical change resulted in the applicability of a different subcategory, the permittee must provide notice of the date upon which the permittee switched fuels or made the physical change within 30 days of the switch/change. The notification shall identify: [40 CFR 63.7545(h)]
   (1) The name of the permittee, as defined in 40 CFR 63.7490, the location of the source, the boiler(s) and process heater(s) that have switched fuels, were physically changed, and the date of the notice.
   (2) The currently applicable subcategory under 40 CFR 63, Subpart DDDDD.
   (3) The date upon which the fuel switch or physical change occurred.

b. If the unit is designed to burn natural gas, refinery gas, or other gas 1 fuels that is subject to 40 CFR 63, Subpart DDDDD, and the permittee intends to use a fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart of 40 CFR Part 63, Part 60, 61, or 65, or other gas 1 fuel to fire the affected unit during a period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575, the permittee must submit a notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575. The notification shall include the following information: [40 CFR 63.7545(f)]
   (1) Company name and address.
   (2) Identification of the affected unit.
   (3) Reason the permittee is unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared, or the natural gas supply interruption began.
   (4) Type of alternative fuel that the permittee intends to use.
   (5) Dates when the alternative fuel use is expected to begin and end.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c. The Division shall be notified of modifications (as defined in 401 KAR 59:001) to this affected facility. This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Cabinet may request additional relevant information subsequent to this notice. [40 CFR 60.7(a)(4), and 401 KAR 59:005, Section 3(1)(d)]

d. The permittee must report each instance in which each boiler or process heater did not meet each emission limit and operating limit in Tables 1 through 4 or 11 through 13 to 40 CFR 63, Subpart DDDDD that apply. These instances are deviations from the emission limits or operating limits, respectively, in 40 CFR 63, Subpart DDDDD. These deviations shall be reported according to the requirements in 40 CFR 63.7550. [40 CFR 63.7540(b)]

e. The permittee must submit all reports required by Table 9 of this subpart electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (*http://www.epa.gov/ttn/chief/cedri/index.html*), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. [40 CFR 63.7550(h)(3)].

f. Unless the EPA Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee must submit each report, according to 40 CFR 63.7550(h), by the date in Table 9 to 40 CFR 63, Subpart DDDDD and according to the requirements in 40 CFR 63.7550(b)(1) through (4). For units that are subject only to a requirement to conduct subsequent annual tune-ups according to 40 CFR 63.7540(a)(10), and not subject to emission limits or Table 4 operating limits, the permittee may submit only an annual compliance report, as specified in 40 CFR 63.7550(b)(1) through (4), instead of a semi-annual compliance report. [40 CFR 63.7550(b)]
   (1) If submitting an annual compliance report, the first compliance report shall cover the period beginning on the compliance date that is specified for each boiler or process heater in 40 CFR 63.7495 and ending on December 31 within 1 year after the compliance date that is specified for the source in 40 CFR 63.7495. The first annual compliance report shall be postmarked or submitted no later than January 31.
   (2) The first annual compliance report shall be postmarked or submitted no later than January 31.
   (3) Each subsequent annual compliance reports shall cover the applicable 1 year period from January 1 to December 31. Each subsequent annual compliance report shall be postmarked or submitted no later than January 31.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(4) Each subsequent annual compliance reports shall be postmarked or submitted no later than January 31.

g. A compliance report shall contain the following information depending on how the facility chooses to comply with the limits set in this rule. [40 CFR 63.7550(c)]
   (1) If the facility is subject to the requirements of a tune up the permittee must submit a compliance report with the information in 40 CFR 63.7550(c)(5)(i) through (iii), (xiv) and (xvii), as follows:
      (i) Company and facility name and address.
      (ii) Process unit information, emissions limitations, and operating parameter limitations.
      (iii) Date of report and beginning and ending dates of the reporting period.
      (iv) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(10). Include the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown.
      (v) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

h. Refer to **Section F.7**.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

COOLING TOWERS (Emission Unit CT1)

CT1 NORTH AND SOUTH COOLING TOWERS

Equipment ID	Description	Rated Capacity (gal/min)	Date Commenced
125/5301	North Cooling Tower Cell #1	4,250	2012
125/5302	North Cooling Tower Cell #2	4,250	2012
430/5309	South Cooling Tower Cell #1	7,500	2017
430/5309	South Cooling Tower Cell #2	7,500	2017

01 **Cooling Towers**
Controls: None

APPLICABLE REGULATIONS:
401 KAR 59:010, New process operations.

NON-APPLICABLE REGULATIONS:
401 KAR 63:002, Section 2(4)(j), 40 C.F.R. 63.400 through 63.407, Table 1 (Subpart Q), National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers.

1. **Operating Limitations:**
   None

2. **Emission Limitations:**
   a. Emission of particulate matter from a control device or stack of any affected facility up to a process rate of 1000 lbs/hr shall not exceed 2.34 lbs/hr. For processing rates greater than 1000 lbs/hr up to 60,000 lbs/hr, particulate emissions shall not exceed the emission rate calculated by the following equation: [401 KAR 59:010, Section 3(2)]

$$E = 3.59(P)^{0.62}$$

E = the PM emissions rate (pounds/hour)
P = the process rate (tons/hour)

For processing rates greater than 60,000 lbs/hr, particulate emissions shall not exceed the emission rate calculated by the following equation:

$$E = 17.31(P)^{0.16}$$

E = the PM emissions rate (pounds/hour)
P = the process rate (tons/hour)

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:
The permittee shall be assumed to be in compliance based upon emissions information provided to the Division.

b. No person shall cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)]

Compliance Demonstration Method:
See **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements** below.

3. Testing Requirements:
Pursuant to 401 KAR 50:045, Section 1, performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:
The permittee shall perform a qualitative visual observation during daylight hours of the opacity of emissions at each stack on a monthly basis and maintaining a log of the observations. If visible emissions from the stacks are seen (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:
The permittee shall maintain a log of the qualitative visual observations made as specified in **4. Specific Monitoring Requirements** including the date, time, initials of observer, whether any emissions were observed (yes/no), and any U.S. EPA Reference Method 9 readings taken. If a visual observation was not performed, the reason for not performing it shall also be recorded. [401 KAR 52:020, Section 10]

6. Specific Reporting Requirements:
None

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES (RICE)

(Emission Unit ICE)

ICE STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES

Apparatus Number	Description	Fuel	Construction Date	Brake HP
131/5303	Fire Water Pump Engine (Jockey Pump)	Diesel	1997	296
131/5304	Fire Water Pump Engine (Jockey Pump)	Diesel	1997	296
909/5303	#1 Well Emergency Pump Engine	Diesel	1966	75
909/5310	#3 Well Emergency Pump Engine	Diesel	1992	177

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 2(4)(eeee), 40 C.F.R. 63.6580 through 63.6675, Tables 1a to 8, and Appendix A (Subpart ZZZZ), National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

NON-APPLICABLE REGULATIONS:

401 KAR 60:005, Section 2(2)(dddd), 40 C.F.R. 60.4200 through 60.4219, Tables 1 through 8 (Subpart IIII), Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The engines were constructed prior to July 11, 2005.

401 KAR 60:005, Section 2(2)(eeee), 40 C.F.R. 60.4230 through 60.4248, Tables 1 through 4 (Subpart JJJJ), Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

1. **Operating Limitations:**
   a. The permittee must comply with the emission limitations and other requirements in Table 2c to 40 CFR 63, Subpart ZZZZ as follows: [40 CFR 63.6602]
      (1) Except during periods of startup, the permittee must:
         (i) Change oil and filter every 500 hours of operation or within 1 year + 30 days of the previous change, whichever comes first;
         (ii) Inspect air cleaner every 1,000 hours of operation within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary; and
         (iii)Inspect all hoses and belts every 500 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary.

      (2) During periods of startup the permittee must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63.6625(h)]

   b. The permittee must be in compliance with the emission limitations, operating limitations, and other requirements in 40 CFR 63, Subpart ZZZZ that apply at all times. [40 CFR 63.6605(a)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c. At all times the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]

d. The permittee must operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640(f)(1) through (f)(4). In order for the engine to be considered an emergency stationary RICE under 40 CFR 63, Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (4), is prohibited. If the permittee does not operate the engine according to the requirements in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 63, Subpart ZZZZ and shall meet all requirements for non-emergency engines. [40 CFR 63.6640(f)]
   (1) There is no limit on the use of emergency stationary RICE in emergency situations. [40 CFR 63.6640(f)(1)]
   (2) The permittee may operate the emergency stationary RICE for the purpose specified in 40 CFR 63.6640(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by 40 CFR 63.6640(f)(2). [40 CFR 63.6640(f)(2)]
      (i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. [40 CFR 63.6640(f)(2)(i)]
   (3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in 40 CFR 63.6640(f)(2). The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 63.6640(f)(3)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Methods:

(1) The permittee must demonstrate continuous compliance with the work practice requirements in Table 2c to 40 CFR 63, Subpart ZZZZ as follows: [40 CFR 63.6640(a) and Table 6 to 40 CFR 63, Subpart ZZZZ]
   (i) Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or
   (ii) Develop and follow a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

(2) For **1. Operating Limitations** d., refer to **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements.**

2. Emission Limitations:

None

3. Testing Requirements:

Pursuant to 401 KAR 50:045, Section 1, performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

a. The permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop its own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e)]

b. The permittee of an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions must install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]

c. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2c to 40 CFR 63, Subpart ZZZZ. The oil analysis shall be performed at the same frequency specified for changing the oil in Table 2c to 40 CFR 63, Subpart ZZZZ. The analysis program shall at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the permittee is not required to change the oil. If any of the limits are exceeded, the permittee shall change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the permittee shall change the oil within 2 business days or before commencing operation, whichever is later. The permittee shall keep records of the parameters that are analyzed as part of the program,

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

the results of the analysis, and the oil changes for the engine. The analysis program shall be part of the maintenance plan for the engine. [40 CFR 63.6625(i)]

5. Specific Recordkeeping Requirements:

a. The permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to its own maintenance plan. [40 CFR 63.6655(e)]

b. If the permittee operates a stationary RICE as specified in 40 CFR 63.6655(f)(1) through (2), then the permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. [40 CFR 63.6655(f)]

c. The permittee must comply with the following requirements: [40 CFR 63.6660]
   (1) Records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1). [40 CFR 63.6660(a)]
   (2) As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.6660(b)]
   (3) The permittee must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). [40 CFR 63.6660(c)]

6. Specific Reporting Requirements:

a. The permittee must report each instance in which the applicable requirements in Table 8 to 40 CFR 63, Subpart ZZZZ were not met. [40 CFR 63.6640(e)]

b. See **Section F.5.**

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

R&D PILOT PLANT (Emission Unit RD)

RD	**R&D PILOT PLANT (324 Area) and CATALYST TESTING LAB** Equipment used for research and development purposes, including: Reactors (capacities less than or equal to 100 gallons each) Distillation columns Feed tanks and receivers Steam and/or hot water heated dryers and tumblers Catalyst testing lab
01	**R&D Plant Emissions**
Controls:	None
02	**R&D Vinylation Process**
Controls:	Flare 421/5310

APPLICABLE REGULATIONS:
401 KAR 63:015, Flares

401 KAR 63:020, Potentially hazardous matter or toxic substances

NON-APPLICABLE REGULATIONS:
401 KAR 60:005, Section 2(2)(bbb), 40 C.F.R. 60.480 through 60.489 (Subpart VV), Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006.

401 KAR 60:005, Section 2(2)(ppp), 40 C.F.R. 60.660 through 60.668 (Subpart NNN), Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations.

401 KAR 60:005, Section 2(2)(ttt), 40 C.F.R. 60.700 through 60.708 (Subpart RRR), Standards of Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes.

401 KAR 63:002, Section 2(4)(a), 40 C.F.R. 63.100 through 63.107, Tables 1 through 4 (Subpart F), National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry.

401 KAR 63:002, Section 2(4)(b), 40 C.F.R. 63.110 through 63.153, Tables 1 through 37, and Figure 1 (Subpart G), National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater.

401 KAR 63:002, Section 2(4)(c), 40 C.F.R. 63.160 through 63.183, Tables 1 through 4 (Subpart H), National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

1. **Operating Limitations:**
   None

2. **Emission Limitations:**
   No person shall cause, suffer, or allow the emission into the open air of particulate matter from any flare which is greater than twenty (20) percent opacity for more than three (3) minutes in any one (1) day. [401 KAR 63:015, Section 3]

   Compliance Demonstration Method:
   Compliance with 401 KAR 63:015, Section 3 shall be demonstrated by meeting the conditions specified in **4. Specific Monitoring Requirements**.

3. **Testing Requirements:**
   Pursuant to 401 KAR 50:045, Section 1, performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. **Specific Monitoring Requirements:**
   The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device. [401 KAR 52:020, Section 10]

5. **Specific Recordkeeping Requirements:**
   Refer to **Section F.2 Specific Recordkeeping Requirements**

6. **Specific Reporting Requirements:**
   Refer to **Sections F.7, F.8**, and **F.9**.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS FOR 40 CFR 63, Subpart EEE

STORAGE TANKS AND TRANSFER RACKS:

Storage Tanks:

Equipment Number	Volume (gal)	Contents
210/3218	500	Ethylene glycol
222/3210	1,100	Ethylene glycol
235/3201	1,100	Ethylene glycol
240/3249	250	Ethylene glycol
311/3204	300	Ethylene glycol
332/3289	2,000	Ethylene glycol

Transfer Racks:

Description	Material	Location
Transfer from container to tank 210/3218	Ethylene glycol	At tank
Transfer from container to tank 222/3210	Ethylene glycol	At tank
Transfer from container to tank 235/3201	Ethylene glycol	At tank
Transfer from container to tank 240/3249	Ethylene glycol	At tank
Transfer from railcar to tank 242/3005	Benzene	Track Y
Transfer from truck to tank 242/3104	Maleic anhydride	242 Tanker Pad
Transfer from truck to tank 305/3101	Diethyl sulfate	Adjacent to tank
Transfer from container to tank 311/3204	Ethylene glycol	At tank
Transfer from container to tank 315/3251	Acrylic acid	At tank
Transfer from truck to tank 315/3310	Maleic anhydride	316 Area Pad
Transfer from railcar to tank 333/3001	Methanol	Track E
Transfer from railcar to tank 333/3003	Methanol	Track E
Transfer from container to tank 332/3239	Ethylene glycol	At tank
Transfer from truck to tank 333/3101	Toluene	335 Tanker Pad
Transfer from truck to tank 333/3102	Toluene	335 Tanker Pad
Transfer from truck to tank 333/3103	Toluene	335 Tanker Pad
Transfer from truck to tank 333/3108	Toluene	335 Tanker Pad
Transfer from truck to tank 333/3109	Toluene	335 Tanker Pad

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 2(4)(kkk), 40 C.F.R. 63.2330 through 63.2406, Tables 1 through 12 (Subpart EEEE), National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline).

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

1. **Operating Limitations:**
   Each storage tank, transfer rack, equipment leak component, and transport vehicle in ISP's OLD operation is exempt from the control requirements of 40 CFR 63.2346(a) through (e). Such emission sources are not subject to any other notification, record keeping, or reporting sections in Subpart EEEE, including 40 CFR 63.2350(c), except as indicated in 40 CFR 63.2343(a) through (d). [40 CFR 63.2343]

2. **Emission Limitations:**
   None

3. **Testing Requirements:**
   Pursuant to 401 KAR 50:045, Section 1, performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. **Specific Monitoring Requirements:**
   None

5. **Specific Recordkeeping Requirements:**
   a. For each storage tank subject to 40 CFR 63, Subpart EEEE having a capacity of less than 18.9 cubic meters (5,000 gallons) and for each transfer rack subject to 40 CFR 63, Subpart EEEE that only unloads organic liquids (i.e., no organic liquids are loaded at any of the transfer racks), the permittee must keep documentation that verifies that each storage tank and transfer rack identified in 40 CFR 63.2343(a) is not required to be controlled. The documentation must be kept up-to date (i.e., all such emission sources at a facility are identified in the documentation regardless of when the documentation was last compiled) and must be in a form suitable and readily available for expeditious inspection and review according to 40 CFR 63.10(b)(1), including records stored in electronic form in a separate location. The documentation may consist of identification of the tanks and transfer racks identified in 40 CFR 63.2343(a) on a plant site plan or process and instrumentation diagram (P&ID). [40 CFR 63.2343(a)]

   b. See **6. Specific Reporting Requirements** below.

6. **Specific Reporting Requirements:**
   a. For each storage tank subject to 40 CFR 63, Subpart EEEE having a capacity of 18.9 cubic meters (5,000 gallons) or more that is not subject to control based on the criteria specified in Table 2 of 40 CFR 63, Subpart EEEE, items 1 through 6, the permittee must comply with the requirements specified in 40 CFR 63.2343(b)(1) through (3). [40 CFR 63.2343(b)]

   b. For each transfer rack subject to 40 CFR 63, Subpart EEEE that loads organic liquids but is not subject to control based on the criteria specified in Table 2 of 40 CFR 63, Subpart EEEE, items 7 through 10, the permittee must comply with the requirements specified in 40 CFR 63.2343(c)(1) to (3). [40 CFR 63.2343(c)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c. If one or more of the events identified in 40 CFR 63.2343(d)(1) through (4) occur since the filing of the Notification of Compliance Status or the last Compliance report, the permittee must submit a subsequent Compliance report as specified in 40 CFR 63.2343(b)(3) and (c)(3). [40 CFR 63.2343(d)]
   (1) Any storage tank or transfer rack became subject to control under 40 CFR 63, Subpart EEEE; or
   (2) Any storage tank equal to or greater than 18.9 cubic meters (5,000 gallons) became part of the affected source but is not subject to any of the emission limitations, operating limits, or work practice standards of 40 CFR 63, Subpart EEEE; or
   (3) Any transfer rack (except those racks at which only unloading of organic liquids occurs) became part of the affected source; or
   (4) Any of the information required in 40 CFR 63.2386(c)(1), 40 CFR 63.2386(c)(2), or 40 CFR 63.2386(c)(3) has changed.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS FOR 40 CFR 63, Subpart GGGGG

SITE REMEDIATION:

APPLICABLE REGULATIONS:
401 KAR 63:002, Section 2(4)(llll), 40 C.F.R. 63.7880 through 63.7957, Tables 1 through 3 (Subpart GGGGG), National Emission Standards for Hazardous Air Pollutants: Site Remediation.

1. Operating Limitations:

a. The site remediation activities are not subject to the requirements of 40 CFR 63, Subpart GGGGG, except for the recordkeeping requirements, provided that the permittee meet the requirements specified in 40 CFR 63.7881(c)(1) through (c)(3). [40 CFR 63.7881(c)]
   (1) You determine that the total quantity of the HAP listed in Table 1 to 40 CFR 63, Subpart GGGGG that is contained in the remediation material excavated, extracted, pumped, or otherwise removed during all of the site remediations conducted at your facility is less than 1 megagram (Mg) annually. This exemption applies the 1 Mg limit on a facility-wide, annual basis, and there is no restriction to the number of site remediations that can be conducted during this period. [40 CFR 63.7881(c)(1)]
   (2) See **5. Specific Recordkeeping Requirements b** below.

b. A site remediation that is completed within 30 consecutive calendar days according to the conditions in 40 CFR 63.7884(b)(1) through (3) is not subject to the standards under 40 CFR 63.7884(a). This exemption cannot be used for a site remediation involving the staged or intermittent cleanup of remediation material whereby the remediation activities at the site are started, stopped, and then re-started in a series of intervals, with durations less than 30-days per interval, when the time period from the beginning of the first interval to the end of the last interval exceeds 30 days. [40 CFR 63.7884(b)]
   (1) The 30 consecutive calendar day period for a site remediation that qualifies for this exemption is determined according to actions taken by you as defined in 40 CFR 63.7884(b)(1)(i) through (iii). [40 CFR 63.7884(b)(1)]
      (i) The first day of the 30-day period is defined as the day on which you initiate any action that removes, destroys, degrades, transforms, immobilizes, or otherwise manages the remediation materials. The following activities, when completed before beginning this initial action, are not counted as part of the 30-day period: Activities to characterize the type and extent of the contamination by collecting and analyzing samples; activities to obtain permits from Federal, State, or local authorities to conduct the site remediation; activities to schedule workers and necessary equipment; and activities to arrange for contractor or third party assistance in performing the site remediation. [40 CFR 63.7884(b)(1)(i)]
      (ii) The last day of the 30-day period is defined as the day on which treatment or disposal of all of the remediation materials generated by the cleanup is completed such that the organic constituents in these materials no longer have a reasonable potential for volatilizing and being released to the atmosphere. [40 CFR 63.7884(b)(ii)]
      (iii) If treatment or disposal of the remediation materials is conducted at an off-site facility where the final treatment or disposal of the material cannot, or may not, be

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

completed within the 30-day exemption period, then the shipment of all of the remediation material generated from your cleanup that is transferred to another party, or shipped to another facility, within the 30-day period, must be performed according to the applicable requirements specified in 40 CFR 63.7936. [40 CFR 63.7884(b)(1)(iii)]

(2) For the purpose of complying with 40 CFR 63.7884(b)(1), if you ship or otherwise transfer the remediation material off-site you must include in the applicable shipping documentation, in addition to any notifications and certifications required under 40 CFR 63.7936, a statement that the shipped material was generated by a site remediation activity subject to the conditions of this exemption. The statement must include the date on which you initiated the site remediation activity generating the shipped remediation materials, as specified in 40 CFR 63.7936(b)(1)(i), and the date 30 calendar days following your initiation date. [40 CFR 63.7884(b)(2)]

(3) See **5. Specific Recordkeeping Requirements** below.

2. Emission Limitations:
None

3. Testing Requirements:
Pursuant to 401 KAR 50:045, Section 1, performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:
None

5. Specific Recordkeeping Requirements:

a. The permittee must prepare and maintain at the facility written documentation describing the exempted site remediation and listing the initiation and completion dates for the site remediation. [40 CFR 63.7884(b)(2)]

b. The permittee must prepare and maintain at the facility written documentation to support the determination that the total HAP quantity in the remediation materials for the year is less than 1 Mg. The documentation must include a description of the methodology and data used for determining the total HAP content of the remediation material. [40 CFR 63.7881(c)(2)]

6. Specific Reporting Requirements:
None

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS FOR 40 CFR 63, Subpart FFFF - 1. GENERAL REQUIREMENTS

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

401 KAR 63:002, Section 2(1), 40 C.F.R. 63.1 through 63.16, Table 1 (Subpart A), General Provisions.

Pursuant to 40 CFR 63.2:

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Continuous monitoring system (CMS) is a comprehensive term that may include, but is not limited to, continuous emission monitoring systems, continuous opacity monitoring systems, continuous parameter monitoring systems, or other manual or automatic monitoring that is used for demonstrating compliance with an applicable regulation on a continuous basis as defined by the regulation.

Pursuant to 40 CFR 63.2550(i):

Deviation means any instance in which an affected source subject to 40 CFR 63, Subpart FFFF, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by 40 CFR 63, Subpart FFFF including, but not limited to, any emission limit, operating limit, or work practice standard; or

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in 40 CFR 63, Subpart FFFF and that is included in the operating permit for any affected source required to obtain such a permit.

Excess emissions means emissions greater than those allowed by the emission limit.

Shutdown means the cessation of operation of a continuous operation for any purpose. Shutdown also means the cessation of a batch operation, or any related individual piece of equipment required or used to comply with this subpart, if the steps taken to cease operation differ from those described in a standard batch or nonstandard batch. Shutdown also applies to emptying and degassing storage vessels. Shutdown does not apply to cessation of batch operations at the end of a campaign or between batches within a campaign when the steps taken are routine operations.

Startup means the setting in operation of a continuous operation for any purpose; the first time a new or reconstructed batch operation begins production; for new equipment added,

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

including equipment required or used to comply with this subpart, the first time the equipment is put into operation; or for the introduction of a new product/process, the first time the product or process is run in equipment. For batch operations, startup applies to the first time the equipment is put into operation at the start of a campaign to produce a product that has been produced in the past if the steps taken to begin production differ from those specified in a standard batch or nonstandard batch. Startup does not apply when the equipment is put into operation as part of a batch within a campaign when the steps taken are routine operations.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof that is promulgated pursuant to section 112(h) of the CAA.

1. Operating Limitations:

a. Operation and maintenance requirements

(1) Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards. [40 CFR 63.6(e)(i)(iii)]

b. If you have a Group 2 emission point that becomes a Group 1 emission point after the compliance date for your affected source, you must comply with the Group 1 requirements beginning on the date the switch occurs. An initial compliance demonstration as specified in 40 CFR 63, Subpart FFFF must be conducted within 150 days after the switch occurs. [40 CFR 63.2445(d)]

c. General duty. At all times, you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.2450(u)]

Maintenance Vents

d. Maintenance vents. You may designate a process vent as a maintenance vent if the vent is only used as a result of startup, shutdown, maintenance, or inspection of equipment where equipment is emptied, depressurized, degassed, or placed into service. You must comply with the applicable requirements in 63.2450 (v)(1) through (3) for each maintenance vent. Any vent designated as a maintenance vent is only subject to the maintenance vent provisions in 63.2450(v) and the associated recordkeeping and reporting requirements in 63.2525(p) and 63.2520(e)(14), respectively. You do not need to designate a maintenance

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

vent as a Group 1 or Group 2 process vent nor identify maintenance vents in a Notification of Compliance Status report. [40 CFR 63.2450(v)]

(1) Prior to venting to the atmosphere, remove process liquids from the equipment as much as practical and depressurize the equipment to either: A flare meeting the requirements of 63.2450 (e)(2) or (5), as applicable, or a non-flare control device meeting the requirements in 63.2450 (e)(4) and the requirements specified in 40 CFR 63 Subpart SS Section 63.982(c)(2) until one of the following conditions, as applicable, is met. [40 CFR 63.2450(v)(1)]

(i) The vapor in the equipment served by the maintenance vent has a concentration less than 10 percent of its lower explosive limit (LEL) and has an outlet concentration less than or equal to 20 ppmv hydrogen halide and halogen HAP. [40 CFR 63.2450(v)(1)(i)]

(ii) If there is no ability to measure the concentration of the vapor in the equipment based on the design of the equipment, the pressure in the equipment served by the maintenance vent is reduced to 5 pounds per square inch gauge (psig) or less. Upon opening the maintenance vent, active purging of the equipment cannot be used until the concentration of the vapors in the maintenance vent (or inside the equipment if the maintenance is a hatch or similar type of opening) is less than 10 percent of its LEL. [40 CFR 63.2450(v)(1)(ii)]

(iii) The equipment served by the maintenance vent contains less than 50 pounds of total volatile organic compounds (VOC). [40 CFR 63.2450(v)(1)(iii)]

(iv) If, after applying best practices to isolate and purge equipment served by a maintenance vent, none of the applicable criterion in 40 CFR 63.2450 (v)(1)(i) through (iii) can be met prior to installing or removing a blind flange or similar equipment blind, then the pressure in the equipment served by the maintenance vent must be reduced to 2 psig or less before installing or removing the equipment blind. During installation or removal of the equipment blind, active purging of the equipment may be used provided the equipment pressure at the location where purge gas is introduced remains at 2 psig or less. [40 CFR 63.2450(v)(1)(iv)]

(2) Except for maintenance vents complying with the alternative in 63.2450 (v)(1)(iii), you must determine the concentration of the vapor or, if applicable, equipment pressure using process instrumentation or portable measurement devices and follow procedures for calibration and maintenance according to manufacturer's specifications. [40 CFR 63.2450(v)(2)]

(3) For maintenance vents complying with the alternative in 63.2450 (v)(1)(iii), you must determine mass of VOC in the equipment served by the maintenance vent based on the equipment size and contents after considering any contents drained or purged from the equipment. Equipment size may be determined from equipment design specifications. Equipment contents may be determined using process knowledge. [40 CFR 63.2450(v)(3)]

2. Emission Limitations:

None.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

a. Determine halogenated vent streams. You must determine if an emission stream is a halogenated vent stream, as defined in 40 CFR 63.2550, by calculating the mass emission rate of halogen atoms in accordance with 40 CFR 63.115(d)(2)(v). Alternatively, you may elect to designate the emission stream as halogenated. [40 CFR 63.2450(b)]

b. For each continuous process vent, you must either designate the vent as a Group 1 continuous process vent or determine the total resource effectiveness (TRE) index value as specified in 40 CFR 63.115(d), except as specified in 40 CFR 63.2455(b)(1) through (3). [40 CFR 63.2455(b)]

(1) You are not required to determine the Group status or the TRE index value for any continuous process vent that is combined with Group 1 batch process vents before a control device or recovery device because the requirements of 40 CFR 63.2450(c)(2)(i) apply to the combined stream. [40 CFR 63.2455(b)(1)]

(2) When a TRE index value of 4.0 is referred to in 40 CFR 63.115(d), TRE index values of 5.0 for existing affected sources and 8.0 for new and reconstructed affected sources apply for the purposes of 40 CFR 63, Subpart FFFF. [40 CFR 63.2455(b)(2)]

(3) When 40 CFR 63.115(d) refers to "emission reductions specified in 40 CFR 63.113(a)," the reductions specified in Table 1 to 40 CFR 63, Subpart FFFF apply for the purposes of 40 CFR 63, Subpart FFFF. [40 CFR 63.2455(b)(3)]

c. Batch Process Vents Group status. If a process has batch process vents, as defined in 40 CFR 63.2550, you must determine the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process using the procedures specified in 40 CFR 63.1257(d)(2)(i) and (ii), except as specified in 40 CFR 63.2460(b)(1) through (7). [40 CFR 63.2460(b)]

(1) To calculate emissions caused by the heating of a vessel without a process condenser to a temperature lower than the boiling point, you must use the procedures in 40 CFR 63.1257(d)(2)(i)(C)(3). [40 CFR 63.2460(b)(1)]

(2) To calculate emissions from depressurization of a vessel without a process condenser, you must use the procedures in 40 CFR 63.1257(d)(2)(i)(D)(10). [40 CFR 63.2460(b)(2)]

(3) To calculate emissions from vacuum systems for the purposes of 40 CFR 63, Subpart FFFF, the receiving vessel is part of the vacuum system, and terms used in Equation 33 to 40 CFR part 63, subpart GGG, are defined as specified in this section 63.2460(b)(3). [40 CFR 63.2460(b)(3)]

(4) To calculate uncontrolled emissions when a vessel is equipped with a process condenser, you must use the procedures in 40 CFR 63.1257(d)(3)(i)(B), except as specified in 40 CFR 63.2460(b)(4)(i) through (vii). [40 CFR 63.2460(b)(4)]

(5) You may elect to designate the batch process vents within a process as Group 1 and not calculate uncontrolled emissions under either of the situations in 40 CFR 63.2460(b)(5)(i), (ii), or (iii). [40 CFR 63.2460(b)(5)]

(i) If you comply with the alternative standard specified in 40 CFR 63.2505. [40 CFR 63.2460(b)(5)(i)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(ii) If all Group 1 batch process vents within a process are controlled; you conduct the performance test under hypothetical worst case conditions, as defined in 40 CFR 63.1257(b)(8)(i)(B); and the emission profile is based on capture and control system limitations as specified in 40 CFR 63.1257(b)(8)(ii)(C). [40 CFR 63.2460(b)(5)(ii)]

(iii) If you comply with an emission limit using a flare that meets the requirements specified in 40 CFR 63.987. [40 CFR 63.2460(b)(5)(iii)]

(6) You may change from Group 2 to Group 1 in accordance with either 40 CFR 63.2460(b)(6)(i) or (ii). You must comply with the requirements and submit the performance test report for the demonstration required in 40 CFR 63.1257(b)(8) in accordance with 40 CFR 63.2520(f). [40 CFR 63.2460(b)(6)]

(i) You may switch at any time after operating as Group 2 for at least 1 year so that you can show compliance with the 10,000 pounds per year (lb/yr) threshold for Group 2 batch process vents for at least 365 days before the switch. You may elect to start keeping records of emissions from Group 2 batch process vents before the compliance date. Report a switch based on this provision in your next compliance report in accordance with 40 CFR 63.2520(e)(10)(i). [40 CFR 63.2460(b)(6)(i)]

(ii) If the conditions in 40 CFR 63.2460(b)(6)(i) are not applicable, you must provide a 60-day advance notice in accordance with 40 CFR 63.2520(e)(10)(ii) before switching. [40 CFR 63.2460(b)(6)(ii)]

(7) As an alternative to determining the uncontrolled organic HAP emissions as specified in 40 CFR 63.1257(d)(2)(i) and (ii), you may elect to demonstrate that non-reactive organic HAP are the only HAP used in the process and non-reactive HAP usage in the process is less than 10,000 lb/yr. You must provide data and supporting rationale in your notification of compliance status report explaining why the non-reactive organic HAP usage will be less than 10,000 lb/yr. You must keep records of the non-reactive organic HAP usage as specified in 40 CFR 63.2525(e)(2) and include information in compliance reports as specified in 40 CFR 63.2520(e)(5)(iv).[40 CFR 63.2460(b)(7)]

d. Process condensers. Process condensers, as defined in 40 CFR 63.2550(i), are not considered to be control devices for batch process vents. You must determine whether a condenser is a control device for a batch process vent or a process condenser from which the uncontrolled HAP emissions are evaluated as part of the initial compliance demonstration for each MCPU and report the results with supporting rationale in your notification of compliance status report. [40 CFR 63.2460(c)(1)]

e. If the predominant use of a transfer rack loading arm or storage tank (including storage tanks in series) is associated with a miscellaneous organic chemical manufacturing process, and the loading arm or storage tank is not part of an affected source under a subpart of this part 63, then you must assign the loading arm or storage tank to the MCPU for that miscellaneous organic chemical manufacturing process. If the predominant use cannot be determined, then you may assign the loading arm or storage tank to any MCPU that shares it and is subject to 40 CFR 63, Subpart FFFF. If the use varies from year to year, then you must base the determination on the utilization that occurred during the year preceding November 10, 2003 or, if the loading arm or storage tank was not in operation during that

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

year, you must base the use on the expected use for the first 5-year period after startup. You must include the determination in the notification of compliance status report specified in 40 CFR 63.2520(d). You must redetermine the primary use at least once every 5 years, or any time you implement emissions averaging or pollution prevention after the compliance date. [40 CFR 63.2435(d)]

f. The Administrator may require an owner or operator to conduct performance tests and compliance assessments at the regulated source at any time when the action is authorized by section 114 of the Act. [40 CFR 63.997(c)(2)]

4. Specific Monitoring Requirements:
None

5. Specific Recordkeeping Requirements:

a. Records of each operating scenario as specified in 40 CFR 63.2525(b)(1) through (8). [40 CFR 63.2525(b)]
   (1) A description of the process and the type of process equipment used. [40 CFR 63.2525(b)(1)]
   (2) An identification of related process vents, including their associated emissions episodes if not complying with the alternative standard in 40 CFR 63.2505; wastewater point of determination (POD); storage tanks; and transfer racks. [40 CFR 63.2525(b)(2)]
   (3) The applicable control requirements of 40 CFR 63, Subpart FFFF, including the level of required control, and for vents, the level of control for each vent. [40 CFR 63.2525(b)(3)]
   (4) The control device or treatment process used, as applicable, including a description of operating and/or testing conditions for any associated control device. [40 CFR 63.2525(b)(4)]
   (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). [40 CFR 63.2525(b)(5)]
   (6) The applicable monitoring requirements of 40 CFR 63, Subpart FFFF and any parametric level that assures compliance for all emissions routed to the control device or treatment process. [40 CFR 63.2525(b)(6)]
   (7) Calculations and engineering analyses required to demonstrate compliance. [40 CFR 63.2525(b)(7)]
   (8) For reporting purposes, a change to any of these elements not previously reported, except for 40 CFR 63.2525(b)(5), constitutes a new operating scenario. [40 CFR 63.2525(b)(8)]

b. 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. [40 CFR 63.2525(c)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c. The information specified in 40 CFR 63.2525(d)(1) and (2) for Group 1 batch process vents in compliance with a percent reduction emission limit in Table 2 to 40 CFR 63, Subpart FFFF if some of the vents are controlled to less the percent reduction requirement. [40 CFR 63.2525(d)]
   (1) Records of whether each batch operated was considered a standard batch. [40 CFR 63.2525(d)(1)]
   (2) The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch. [40 CFR 63.2525(d)(2)]

d. The information specified in 40 CFR 63.2525(e)(2), (3), or (4), 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 proves vents less than 1,000 lb/yr. No records are required for situations described in 40 CFR 63.2525(e)(1). [40 CFR 63.2525(e)]
   (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 40 CFR 63.2525 (e)(1)(i), (ii), or (iii). [40 CFR 63.2525(e)(1)]
      (i) The MCPU does not process, use, or generate HAP. [40 CFR 63.2525(e)(1)(i)]
      (ii) You control the Group 2 batch process vents using a flare that meets the requirements of 40 CFR 63.987 or 40 CFR 63.2450(e)(5), as applicable. [40 CFR 63.2525(e)(1)(ii)]
      (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. [40 CFR 63.2525(e)(1)(iii)]

e. 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 40 CFR 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 40 CFR 63.2525(e)(4). After 1 year, you may revert to recording only usage if the usage during the year is less than 10,000 lb. [40 CFR 63.2525(e)(2)]

f. 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

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

batch, and you must begin recordkeeping as specified in 40 CFR 63.2525(e)(4). 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. [40 CFR 63.2525(e)(3)]

g. If you meet none of the conditions specified in 40 CFR 63.2525(e)(1) through (3), you must keep records of the information specified in 40 CFR 63.2525(e)(4)(i) through (iv). [40 CFR 63.2525(e)(4)]
   (1) 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. [40 CFR 63.2525(e)(4)(i)]
   (2) A record of whether each batch operated was considered a standard batch. [40 CFR 63.2525(e)(4)(ii)]
   (3) The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch. [40 CFR 63.2525(e)(4)(iii)]
   (4) 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. [40 CFR 63.2525(e)(4)(iv)]

h. For historical compliance purposes, a copy of the Startup, Shutdown and Malfunction plan must be retained and available on-site for five years after August 12, 2023. [40 CFR 63.2520(e)(4)]

i. General recordkeeping requirements. The owner or operator of an affected source subject to the provisions of this part shall maintain files of all information (including all reports and notifications) required by this part recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche. [40 CFR 63.10(b)(1)]

j. The owner or operator of an affected source subject to the provisions of 40 CFR part 63 shall maintain relevant records for such source of — [40 CFR 63.10(b)(2)]
   (1) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9. [63.10(b)(2)(xiv)]

k. Recordkeeping requirement for applicability determinations. If an owner or operator determines that his or her existing or new stationary source is in the source category regulated by a standard established pursuant to section 112 of the Act, but that source is not subject to the relevant standard (or other requirement established under this part) because of enforceable limitations on the source's potential to emit, or the source otherwise

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

qualifies for an exclusion, the owner or operator must keep a record of the applicability determination. The applicability determination must be kept on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source subject to the relevant standard (or other requirement established under this part), whichever comes first if the determination is made prior to January 19, 2021. The applicability determination must be kept until the source changes its operations to become an affected source subject to the relevant standard (or other requirement established under this part) if the determination was made on or after January 19, 2021. The record of the applicability determination must be signed by the person making the determination and include an emissions analysis (or other information) that demonstrates the owner or operator's conclusion that the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the Administrator to make an applicability finding for the source with regard to the relevant standard or other requirement. If applicable, the analysis must be performed in accordance with requirements established in relevant subparts of this part for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with EPA guidance materials published to assist sources in making applicability determinations under section 112 of the Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.1(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a title V permit. [40 CFR 63.10(b)(3)]

6. <u>Specific Reporting Requirements</u>:

a. After a State has been delegated the authority to implement and enforce notification requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit notifications to the delegated State authority (which may be the same as the permitting authority). In addition, if the delegated (permitting) authority is the State, the owner or operator shall send a copy of each notification submitted to the State to the appropriate Regional Office of the EPA, as specified in 40 CFR 63.9(a)(4)(i). The Regional Office may waive this requirement for any notifications at its discretion. [40 CFR 63.9(a)(4)(ii)]

b. <u>Notification of compliance status report.</u> You must submit a notification of compliance status report according to the schedule in 40 CFR 63.2520(d)(1), and the notification of compliance status report must contain the information specified in 40 CFR 63.2520(d)(2) through (6). [40 CFR 63.2520(d)]

(1) You must submit the notification of compliance status report no later than 150 days after the applicable compliance date specified in 40 CFR 63.2445. [40 CFR 63.2520(d)(1)]

(2) The notification of compliance status report must include the information in 40 CFR 63.2520(d)(2)(i) through (ix). [40 CFR 63.2520(d)(2)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(i) The results of any applicability determinations, emission calculations, or analyses used to identify and quantify HAP usage or HAP emissions from the affected source. [40 CFR 63.2520(d)(2)(i)]

(ii) The results of emissions profiles, performance tests, engineering analyses, design evaluations, flare compliance assessments, inspections and repairs, and calculations used to demonstrate initial compliance according to 40 CFR 63.2455 through 63.2485. For performance tests, results must include descriptions of sampling and analysis procedures and quality assurance procedures. If the performance test report is submitted electronically through the EPA's CEDRI in accordance with 40 CFR 63.2520(f), the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was conducted may be submitted in the notification of compliance status report in lieu of the performance test results. The performance test results must be submitted to CEDRI by the date the notification of compliance status report is submitted. [40 CFR 63.2520(d)(2)(ii)]

(iii) Descriptions of monitoring devices, monitoring frequencies, and the operating limits established during the initial compliance demonstrations, including data and calculations to support the levels you establish. [40 CFR 63.2520(d)(2)(iii)]

(iv) All operating scenarios. [40 CFR 63.2520(d)(2)(iv)]

(v) Descriptions of worst-case operating and/or testing conditions for control devices. [40 CFR 63.2520(d)(2)(v)]

(vi) Identification of parts of the affected source subject to overlapping requirements described in 40 CFR 63.2535 and the authority under which you will comply. [40 CFR 63.2520(d)(2)(vi)]

(vii) The information specified in 40 CFR 63.1039(a)(1) through (3) for each process subject to the work practice standards for equipment leaks in Table 6 to 40 CFR 63, Subpart FFFF. [40 CFR 63.2520(d)(2)(vii)]

(viii) Identify storage tanks for which you are complying with the vapor balancing alternative in 40 CFR 63.2470(e). [40 CFR 63.2520(d)(2)(viii)]

(ix) Records as specified in 40 CFR 63.2535(l)(1) through (3) of process units used to create a PUG and calculations of the initial primary product of the PUG. [40 CFR 63.2520(d)(2)(ix)]

c. For any equipment, emission stream, or wastewater stream subject to the provisions of both 40 CFR 63, Subpart FFFF and another rule, you may elect to comply only with the provisions as specified in 40 CFR 63.2535(a) through (l). You also must identify the subject equipment, emission stream, or wastewater stream, and the provisions with which you will comply, in your notification of compliance status report required by 40 CFR 63.2520(d). [40 CFR 63.2535]

d. Section 63.997(c)(1) does not apply. For the purposes of this subpart, results of all initial compliance demonstrations must be included in the notification of compliance status report, which is due 150 days after the compliance date, as specified in 40 CFR 63.2520(d)(1). If the initial compliance demonstration includes a performance test and the results are submitted electronically via CEDRI in accordance with40 CFR 63.2520(f), the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

conducted may be submitted in the notification of compliance status report in lieu of the performance test results. The performance test results must be submitted to CEDRI by the date the notification of compliance status report is submitted. [40 CFR 63.2450(g)(5)]

e. Reporting. [40 CFR 63.2450(m)]
   (1) When 40 CFR 63.2455 through 63.2490 reference other subparts in this part 63 that use the term "periodic report," it means "compliance report" for the purposes of 40 CFR 63, Subpart FFFF. The compliance report must include the information specified in 40 CFR 63.2520(e), as well as the information specified in referenced subparts.
   (2) When there are conflicts between 40 CFR 63, Subpart FFFF and referenced subparts for the due dates of reports required by 40 CFR 63, Subpart FFFF, reports must be submitted according to the due dates presented in 40 CFR 63, Subpart FFFF.
   (3) Excused excursions, as defined in 40 CFR 63, Subparts G and SS, are not allowed.

f. Compliance Report Schedule. [40 CFR 63.2520(b)]
   (1) The first compliance report must cover the period beginning on May 10, 2008, and ending on December 31, 2008. [40 CFR 63.2520(b)(1)]
   (2) The first compliance report must be postmarked or delivered no later than February 28, 2009. [40 CFR 63.2520(b)(2)]
   (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. [40 CFR 63.2520(b)(3)]
   (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. [40 CFR 63.2520(b)(4)]
   (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 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 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 40 CFR 63.2520(b)(1) through (4). [40 CFR 63.2520(b)(5)]

g. Compliance Report. The compliance report must contain the information specified in 40 CFR 63.2520(e)(1) through (17). On and after August 12, 2023 or once the reporting template for this subpart has been available on the CEDRI website for 1 year, whichever date is later, you must submit all subsequent reports following the procedure specified in 40 CFR 63.9(k), except any medium submitted through mail must be sent to the attention of the Miscellaneous Organic Chemical Manufacturing Sector Lead. You must use the appropriate electronic report template on the CEDRI website (https://www.epa.gov/electronic-reporting-air-emissions/cedri) for this subpart. The date report templates become available will be listed on the CEDRI website. Unless the Administrator or delegated state agency or other authority has approved a different schedule for submission of reports under 40 CFR 63.9(i) and 40 CFR 63.10(a) of subpart

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

A, the report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted. [40 CFR 63.2520(e)]

(1) Company name and address. [40 CFR 63.2520(e)91)]

(2) Statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report. If your report is submitted via CEDRI, the certifier's electronic signature during the submission process replaces the requirement in 40 CFR 63.2520(e)(2). [40 CFR 63.2520(e)(2)]

(3) Date of report and beginning and ending dates of the reporting period. You are no longer required to provide the date of report when the report is submitted via CEDRI. [40 CFR 63.2520(e)(3)]

(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. On and after August 12, 2023, 40 CFR 63.2520(e)(4) no longer applies; however, for historical compliance purposes, a copy of the plan must be retained and available on-site for five years after August 12, 2023. [40 CFR 63.2520(e)(4)]

(5) The compliance report must contain the information on deviations, as defined in 40 CFR 63.2550, according to 40 CFR 63.2520(e)(5)(i), (ii), (iii), and (iv). [40 CFR 63.2520(e)(5)]

(i) If there are no deviations from any emission limit, operating limit or work practice standard specified in 40 CFR 63, Subpart FFFF, include a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period. [40 CFR 63.2520(e)(5)(i)]

(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 40 CFR 63, Subpart FFFF, you must include the information in 40 CFR 63.2520(e)(5)(ii)(A) through (C). This includes periods of SSM. [40 CFR 63.2520(e)(5)(ii)]

(A) The total operating time in hours of the affected source during the reporting period. [40 CFR 63.2520(e)(5)(ii)(A)]

(B) Except as specified in 40 CFR 63.2520(e)(5)(ii)(D), information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. [40 CFR 63.2520(e)(5)(ii)(B)]

(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. [40 CFR 63.2520(e)(5)(ii)(C)]

(D) Beginning no later than the compliance dates specified in 40 CFR 63.2445(g), report information for each deviation to meet an applicable standard. For each instance, report the start date, start time, and duration in hours of each deviation. For each deviation, the report must include a list of the affected sources or equipment, an estimate of the quantity in pounds of each regulated pollutant emitted over any emission limit, a description of the method used to

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

estimate the emissions, the cause of the deviation (including unknown cause, if applicable), as applicable, and the corrective action taken. [40 CFR 63.2520(e)(5)(ii)(D)]

(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 40 CFR 63, Subpart FFFF, you must include the information in 40 CFR 63.2520(e)(5)(iii)(A) through (L). This includes periods of SSM. [40 CFR 63.2520(e)(5)(iii)]

(A) The start date, start time, and duration in hours 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, and a description of the corrective actions taken

(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) The total duration in hours of all deviations for each CMS during the reporting period, the total operating time in hours of the affected source 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) Except as specified in 40 CFR 63.2520(e)(5)(iii)(N), 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) The total duration in hours of CMS downtime for each CMS 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) The monitoring equipment manufacturer(s) and model number(s) and the pollutant or parameter monitored.

(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.

(M) Beginning no later than the compliance dates specified in 40 CFR 63.2445(g), 40 CFR 63.2520(e)(5)(iii)(C) no longer applies. Instead, report the number of deviations to meet an applicable standard. For each instance, report the start date, start time and duration in hours of each deviation. For each deviation, the report must include a list of the affected sources or equipment, an estimate of the quantity in pounds of each regulated pollutant emitted over any emission limit, a description of the method used to estimate the emissions, and the cause of the deviation (including unknown cause, if applicable), as applicable, and the corrective action taken.

(N) Beginning no later than the compliance dates specified in 40 CFR 63.2445(g), 40 CFR 63.2520(e)(5)(iii)(E) no longer applies. Instead, report a breakdown of the total duration in hours of the deviations during the reporting period into

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

those that are due control equipment problems, process problems, other known causes, and other unknown causes.

(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 40 CFR 63.2525(e) that exceeds an applicable HAP usage or emissions threshold. [40 CFR 63.2520(e)(5)(iv)]

(6) If you use a CEMS, and there were no periods during which it was out-of-control as specified in 40 CFR 63.8(c)(7), include a statement that there were no periods during which the CEMS was out-of-control during the reporting period. [40 CFR 63.2520(e)(6)]

(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. [40 CFR 63.2520(e)(7)]

(8) For records of process units added to a PUG you must report the description and rationale specified in 40 CFR 63.2525(i)(4). You must report your primary product redeterminations specified in 40 CFR 63.2525(i)(5). [40 CFR 63.2520(e)(8)]

(9) Except as specified in 40 CFR 63.2450(e)(4), 63.2480(f), and 63.2485(p) and (q) and 63.2520 (t), 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. [40 CFR 63.2520(e)(9)]

(10) Notification of process change. Except as specified in 40 CFR 63.2520(e)(10)(ii), 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. [40 CFR 63.2520(e)(10)]

(i) The notification must include all of the information in 40 CFR 63.2520(e)(10)(i)(A) through (C). [40 CFR 63.2520(e)(10)(i)]

(A) A description of the process change. [40 CFR 63.2520(e)(10)(i)(A)]

(B) Revisions to any of the information reported in the original notification of compliance status report under 40 CFR 63.2520(d). [40 CFR 63.2520(e)(10)(i)(B)]

(C) Information required by the notification of compliance status report under 40 CFR 63.2520(d) for changes involving the addition of processes or equipment at the affected source. [40 CFR 63.2520(e)(10)(i)(C)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(ii) You must submit a report 60 days before the scheduled implementation date of any of the changes identified in 40 CFR 63.2520(e)(10)(ii)(A), (B), or (C). [40 CFR 63.2520(e)(10)(ii)]

(A) Any change to the information contained in the precompliance report. [40 CFR 63.2520(e)(10)(ii)(A)]

(B) A change in the status of a control device from small to large. [40 CFR 63.2520(e)(10)(ii)(B)]

(C) A change from Group 2 to Group 1 for any emission point except for batch process vents that meet the conditions specified in 40 CFR 63.2460(b)(6)(i). [40 CFR 63.2520(e)(10)(ii)(C)]

h. Records of monitored parameters outside of range. The owner or operator shall record the occurrences and the cause of periods when the monitored parameters are outside of the parameter ranges documented in the Notification of Compliance Status report. This information shall also be reported in the Periodic Report. [40 CFR 63.998(d)(5)]

i. For pressure relief devices subject to the pressure release management work practice standards in 40 CFR 63.2480(e)(3), the permittee must also submit the information listed in 63.2520(d)(4)(i) and (ii) in a supplement to the Notification of Compliance Status within 150 days after the first applicable compliance date for pressure relief device monitoring. [40 CFR 63.2520(d)(4)]

(1) A description of the monitoring system to be implemented, including the relief devices and process parameters to be monitored, and a description of the alarms or other methods by which operators will be notified of a pressure release. [40 CFR 63.2520(d)(4)(i)]

(2) A description of the prevention measures to be implemented for each affected pressure relief device. [40 CFR 63.2520(d)(4)(ii)]

j. For any maintenance vent release exceeding the applicable limits in 40 CFR 63.2450(v)(1), the compliance report must include the information specified in 40 CFR 63.2450 (e)(14)(i) through (iv). For the purposes of this reporting requirement, if you comply with 40 CFR 63.2450(v)(1)(iv) then you must report each venting event conducted under those provisions and include an explanation for each event as to why utilization of this alternative was required. [40 CFR 63.2520(e)(14)]

(1) Identification of the maintenance vent and the equipment served by the maintenance vent. [40 CFR 63.2520(e)(14)(i)]

(2) The date and time the maintenance vent was opened to the atmosphere. [40 CFR 63.2520(e)(14)(ii)]

(3) The lower explosive limit in percent, vessel pressure in psig, or mass in pounds of VOC in the equipment, as applicable, at the start of atmospheric venting. If the 5 psig vessel pressure option in 40 CFR 63.2450(v)(1)(ii) was used and active purging was initiated while the concentration of the vapor was 10 percent or greater of its LEL, also include the concentration of the vapors at the time active purging was initiated. [40 CFR 63.2520(e)(14)(iii)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(4) An estimate of the mass in pounds of organic HAP released during the entire atmospheric venting event. [40 CFR 63.2520(e)(14)(iv)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS FOR 40 CFR 63, Subpart FFFF - 2. EQUIPMENT LEAK GENERAL REQUIREMENTS

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.1019 through 63.1039, Table 1 (Subpart UU), National Emission Standards for Equipment Leaks - Control Level 2 Standards, as required by Table 6 of 40 CFR 63, Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

401 KAR 63:002, Section 2(1), 40 C.F.R. 63.1 through 63.16, Table 1 (Subpart A), General Provisions.

1. **Operating Limitations:**

   Leak repair schedule. The owner or operator shall repair each leak detected as soon as practical, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 63.1025(d). A first attempt at repair as defined in 40 CFR 63, Subpart UU shall be made no later than 5 calendar days after the leak is detected. First attempt at repair for valves includes, but is not limited to, tightening the bonnet bolts, and/or replacing the bonnet bolts, and/or tightening the packing gland nuts, and/or injecting lubricant into the lubricated packing. [40 CFR 63.1024(a)]

   First attempt at repair, for the purposes of 40 CFR 63, Subpart UU, means to take action for the purpose of stopping or reducing leakage of organic material to the atmosphere, followed by monitoring as specified in 40 CFR 63.1023(b) and (c) of 40 CFR 63, Subpart UU in to verify whether the leak is repaired, unless the owner or operator determines by other means that the leak is not repaired. [63.1020 Definitions]

   Repaired, for the purposes of 40 CFR 63, Subpart UU, means that equipment is adjusted, or otherwise altered, to eliminate a leak as defined in the applicable sections of 40 CFR 63, Subpart UU and unless otherwise specified in applicable provisions of 40 CFR 63, Subpart UU, is monitored as specified in 40 CFR 63.1023(b) and (c) to verify that emissions from the equipment are below the applicable leak definition. [63.1020 Definitions]

2. **Emission Limitations:**

   None

3. **Testing Requirements:**

   Pursuant to 401 KAR 50:045, Section 1, performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. **Specific Monitoring Requirements:**

   a. Instrument monitoring methods. Instrument monitoring, as required under 40 CFR63, Subpart UU, shall comply with the requirements specified in 40 CFR 63.1023(b)(1) through (b)(6). [40 CFR 63.1023(b)]

      (1) Monitoring method. Monitoring shall comply with Method 21 of 40 CFR part 60, appendix A, except as otherwise provided in this section. [40 CFR 63.1023(b)(1)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(2) Detection instrument performance criteria. (i) Except as provided for in 40 CFR 63.1023(b)(2)(ii), the detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in section 3.1.2, paragraph (a) of Method 21 shall be for the representative composition of the process fluid not each individual VOC in the stream. For process streams that contain nitrogen, air, water or other inerts that are not HAP or VOC, the representative stream response factor shall be determined on an inert-free basis. The response factor may be determined at any concentration for which monitoring for leaks will be conducted. [40 CFR 63.1023(b)(2)]

(i) If there is no instrument commercially available that will meet the performance criteria specified in 40 CFR 63.1023(b)(2)(i), the instrument readings may be adjusted by multiplying by the representative response factor of the process fluid, calculated on an inert-free basis as described in 40 CFR 63.1023(b)(2)(i).

(3) Detection instrument calibration procedure. The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A. [40 CFR 63.1023(b)(3)]

(4) Detection instrument calibration gas. Calibration gases shall be zero air (less than 10 parts per million of hydrocarbon in air); and the gases specified in 40 CFR 63.1023(b)(4)(i) except as provided in 40 CFR 63.1023(b)(4)(ii). [40 CFR 63.1023(b)(4)]

(i) Mixtures of methane in air at a concentration no more than 2,000 parts per million greater than the leak definition concentration of the equipment monitored. If the monitoring instrument's design allows for multiple calibration scales, then the lower scale shall be calibrated with a calibration gas that is no higher than 2,000 parts per million above the concentration specified as a leak, and the highest scale shall be calibrated with a calibration gas that is approximately equal to 10,000 parts per million. If only one scale on an instrument will be used during monitoring, the owner or operator need not calibrate the scales that will not be used during that day's monitoring.

(ii) (ii) A calibration gas other than methane in air may be used if the instrument does not respond to methane or if the instrument does not meet the performance criteria specified in 40 CFR 63.1023(b)(2)(i). In such cases, the calibration gas may be a mixture of one or more of the compounds to be measured in air.

(5) Monitoring performance. Monitoring shall be performed when the equipment is in regulated material service or is in use with any other detectable material. [40 CFR 63.1023(b)(5)]

(6) Monitoring data. Monitoring data obtained prior to the regulated source becoming subject to the referencing subpart that do not meet the criteria specified in 40 CFR 63.1023(b)(1) through (b)(5) may still be used to qualify initially for less frequent monitoring under the provisions in 40 CFR 63.1025(a)(2), (b)(3) or (b)(4) for valves or 40 CFR 63.1027(b)(3) for connectors provided the departures from the criteria or from the specified monitoring frequency of 40 CFR 63.1025(b)(3) or (b)(4) or 40 CFR 63.1027(b)(3) are minor and do not significantly affect the quality of the data. Examples of minor departures are monitoring at a slightly different frequency (such as every 6 weeks instead of monthly or quarterly), following the performance criteria of section 3.1.2, paragraph (a) of Method 21 of Appendix A of 40 CFR part 60 instead of

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

40 CFR 63.1023(b)(2), or monitoring using a different leak definition if the data would indicate the presence or absence of a leak at the concentration specified in 40 CFR 63, Subpart UU. Failure to use a calibrated instrument is not considered a minor departure. [40 CFR 63.1023(b)(6)]

b. Instrument monitoring using background adjustments. The owner or operator may elect to adjust or not to adjust the instrument readings for background. If an owner or operator elects not to adjust instrument readings for background, the owner or operator shall monitor the equipment according to the procedures specified in 40 CFR 63.1023(b)(1) through (b)(5). In such cases, all instrument readings shall be compared directly to the applicable leak definition for the monitored equipment to determine whether there is a leak or to determine compliance with 40 CFR 63.2480(b)(1) (pressure relief devices) or 40 CFR 63.1031(f) (alternative compressor standard). If an owner or operator elects to adjust instrument readings for background, the owner or operator shall monitor the equipment according to the procedures specified in 40 CFR 63.1023(c)(1) through (c)(4). [40 CFR 63.1023(c)]
   (1) The requirements of 40 CFR 63.1023(b)(1) through (b)(5) shall apply. [40 CFR 63.1023(c)(1)]
   (2) The background level shall be determined, using the procedures in Method 21 of 40 CFR part 60, appendix A. [40 CFR 63.1023(c)(2)]
   (3) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21 of 40 CFR part 60, appendix A. [40 CFR 63.1023(c)(3)]
   (4) The arithmetic difference between the maximum concentration indicated by the instrument and the background level shall be compared to the applicable leak definition for the monitored equipment to determine whether there is a leak or to determine compliance with 40 CFR 63.2480(e)(1) (pressure relief devices) or 40 CFR 63.1031(f) (alternative compressor standard). [40 CFR 63.1023(c)(4)]

c. Sensory monitoring methods. Sensory monitoring consists of visual, audible, olfactory, or any other detection method used to determine a potential leak to the atmosphere. [40 CFR 63.1023(d)]

5. Specific Recordkeeping Requirements:

a. General equipment identification. Equipment subject to 40 CFR63, Subpart UU shall be identified. Identification of the equipment does not require physical tagging of the equipment. For example, the equipment may be identified on a plant site plan, in log entries, by designation of process unit or affected facility boundaries by some form of weatherproof identification, or by other appropriate methods. [40 CFR 63.1022(a)]

b. General equipment leak records. [40 CFR 63.1038(b)]
   (1) As specified in 40 CFR 63.1022(a) and (b), the owner or operator shall keep general and specific equipment identification if the equipment is not physically tagged and the owner or operator is electing to identify the equipment subject to 40 CFR63, Subpart

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

UU through written documentation such as a log or other designation. [40 CFR 63.1038(b)(1)]

c. Equipment in service less than 300 hours per calendar year. The identity, either by list, location (area or group), or other method, of equipment in regulated material service less than 300 hours per calendar year within a process unit or affected facilities subject to the provisions of 40 CFR 63, Subpart UU shall be recorded. [40 CFR 63.1022(b)(5)]

d. Leaking equipment identification and records. [40 CFR 63.1023(e)]
   (1) When each leak is detected pursuant to the monitoring specified in 40 CFR 63.1023(a), a weatherproof and readily visible identification, shall be attached to the leaking equipment. [40 CFR 63.1023(e)(1)]
   (2) When each leak is detected, the information specified in 40 CFR 63.1024(f) shall be recorded and kept pursuant to the referencing subpart, except for the information for connectors complying with the 8 year monitoring period allowed under 40 CFR 63.1027(b)(3)(iii) shall be kept 5 years beyond the date of its last use. [40 CFR 63.1023(e)(2)]

e. Leak identification removal. [40 CFR 63.1024(c)]
   (1) *Valves in gas/vapor and light liquid service*. The leak identification on a valve in gas/vapor or light liquid service may be removed after it has been monitored as specified in 40 CFR 63.1025(d)(2), and no leak has been detected during that monitoring. [40 CFR 63.1024(c)(1)]
   (2) *Other equipment*. The identification that has been placed, pursuant to 40 CFR 63.1023(e)(1), on equipment determined to have a leak, except for a valve in gas/vapor or light liquid service may be removed after it is repaired. [40 CFR 63.1024(c)(2)]

f. Delay of repair. The owner or operator shall maintain a record of the facts that explain any delay of repairs and, where appropriate, why the repair was technically infeasible without a process unit shutdown. [40 CFR 63.1024(d)]

g. Leak repair records. For each leak detected, the information specified in 40 CFR 63. 1024(f)(1) through (f)(5) shall be recorded and maintained pursuant to the referencing subpart. [40 CFR 63.1024(f)]
   (1) The date of first attempt to repair the leak. [40 CFR 63.1024(f)(1)]
   (2) The date of successful repair of the leak. [40 CFR 63.1024(f)(2)]
   (3) Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A at the time the leak is successfully repaired or determined to be nonrepairable. [40 CFR 63.1024(f)(3)]
   (4) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak as specified in 40 CFR 63.1024(f)(4)(i) and (f)(4)(ii). [40 CFR 63.1024(f)(4)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(i) The owner or operator may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be part of a separate document that is maintained at the plant site. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure. [40 CFR 63.1024(f)(4)(i)]

(ii) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion. [40 CFR 63.1024(f)(4)(ii)]

(5) Dates of process unit or affected facility shutdowns that occur while the equipment is unrepaired. [40 CFR 63.1024(f)(5)]

6. Specific Reporting Requirements:

a. Initial Compliance Status Report. Each owner or operator shall submit an Initial Compliance Status Report according to the procedures in the referencing subpart. The notification shall include the information listed in 40 CFR 63.1039(a)(1), as applicable. [40 CFR 63.1039(a)]

(1) The notification shall provide the information listed in 40 CFR 63.1039(a)(1)(i) through (a)(1)(iv) for each process unit or affected facility subject to the requirements of 40 CFR63, Subpart UU. [40 CFR 63.1039(a)(1)]

(i) Process unit or affected facility identification. [40 CFR 63.1039(a)(1)(i)]

(ii) Number of each equipment type (e.g., valves, pumps) excluding equipment in vacuum service. [40 CFR 63.1039(a)(1)(ii)]

(iii) Method of compliance with the standard (e.g., "monthly leak detection and repair" or "equipped with dual mechanical seals"). [40 CFR 63.1039(a)(1)(iii)]

(iv) Planned schedule for requirements in 40 CFR 63.1025 and 63.1026. [40 CFR 63.1039(a)(1)(iv)]

b. Reporting. [40 CFR 63.2450(m)]

(1) When 40 CFR 63.2455 through 63.2490 reference other subparts in this part 63 that use the term "periodic report," it means "compliance report" for the purposes of 40 CFR 63, Subpart FFFF. The compliance report must include the information specified in 40 CFR 63.2520(e), as well as the information specified in referenced subparts. [40 CFR 63.2450(m)(1)]

(2) When there are conflicts between 40 CFR 63, Subpart FFFF and referenced subparts for the due dates of reports required by 40 CFR 63, Subpart FFFF, reports must be submitted according to the due dates presented in 40 CFR 63, Subpart FFFF. [40 CFR 63.2450(m)(2)]

(3) Excused excursions, as defined in subparts G and SS of this part 63, are not allowed. [40 CFR 63.2450(m)(3)]

c. Periodic Reports. The owner or operator shall report the information specified in 40 CFR 63.1039(b)(1) through (b)(8), as applicable, in the Periodic Report specified in the referencing subpart. [40 CFR 63.1039(b)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(1) For the equipment specified in 40 CFR 63.1039(b)(1)(i) through (b)(1)(v), report in a summary format by equipment type, the number of components for which leaks were detected and for valves, pumps and connectors show the percent leakers, and the total number of components monitored. Also include the number of leaking components that were not repaired as required by 40 CFR 63.1024, and for valves and connectors, identify the number of components that are determined by 40 CFR 63.1025(c)(3) to be nonrepairable. [40 CFR 63.1039(b)(1)]
   (i) Valves in gas and vapor service and in light liquid service pursuant to 40 CFR 63.1025(b) and (c). [40 CFR 63.1039(b)(1)(i)]
   (ii) Pumps in light liquid service pursuant to 40 CFR 63.1026(b) and (c). [40 CFR 63.1039(b)(1)(ii)]
   (iii) Agitators in gas and vapor service and in light liquid service pursuant to 40 CFR 63.1028(c). [40 CFR 63.1039(b)(1)(iii)]
   (iv) Compressors pursuant to 40 CFR 63.1031(d). [40 CFR 63.1039(b)(1)(iv)]

(2) Where any delay of repair is utilized pursuant to 40 CFR 63.1024(d), report that delay of repair has occurred and report the number of instances of delay of repair. [40 CFR 63.1039(b)(2)]

(3) If applicable, report the valve subgrouping information specified in 40 CFR 63.1025(b)(4)(iv). [40 CFR 63.1039(b)(3)]

(4) For pressure relief devices in gas and vapor service pursuant to 40 CFR 63.2520(e)(15)(i) and (ii) and for compressors pursuant to 40 CFR 63.1031(f) that are to be operated at a leak detection instrument reading of less than 500 parts per million, report the results of all monitoring to show compliance conducted within the semiannual reporting period. [40 CFR 63.1039(b)(4)]

(5) Report, if applicable, the initiation of a monthly monitoring program for valves pursuant to 40 CFR 63.1025(b)(3)(i). [40 CFR 63.1039(b)(5)]

(6) Report, if applicable, the initiation of a quality improvement program for pumps pursuant to 40 CFR 63.1035. [40 CFR 63.1039(b)(6)]

(7) Report the information listed in 40 CFR 63.1039(a) for the Initial Compliance Status Report for process units or affected facilities with later compliance dates. Report any revisions to items reported in an earlier Initial Compliance Status Report if the method of compliance has changed since the last report. [40 CFR 63.1039(b)(8)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS FOR 40 CFR 63, Subpart FFFF - 3. VALVES IN GAS / VAPOR AND LIGHT LIQUID ORGANIC HAP SERVICE

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

401 KAR 63:002, Section 2(1), 40 C.F.R. 63.1 through 63.16, Table 1 (Subpart A), General Provisions.

1. **Operating Limitations:**
   a. Leak repair. If a leak is determined pursuant to 40 CFR 63.1025(b), (e)(1), or (e)(2), then the leak shall be repaired using the procedures in 40 CFR 63.1024, as applicable. [40 CFR 63.1025(d)(1)]

   b. Delay of repair. Delay of repair is allowed for any of the conditions specified in 40 CFR 63.1024(d)(1) through (d)(5). The owner or operator shall maintain a record of the facts that explain any delay of repairs and, where appropriate, why the repair was technically infeasible without a process unit shutdown. [40 CFR 63.1024(d)]
      (1) Delay of repair of equipment for which leaks have been detected is allowed if repair within 15 days after a leak is detected is technically infeasible without a process unit or affected facility shutdown. Repair of this equipment shall occur as soon as practical, but no later than the end of the next process unit or affected facility shutdown, except as provided in 40 CFR 63.1024(d)(5). [40 CFR 63.1024(d)(1)]
      (2) Delay of repair of equipment for which leaks have been detected is allowed for equipment that is isolated from the process and that does not remain in regulated material service. [40 CFR 63.1024(d)(2)]
      (3) Delay of repair for valves is also allowed if the provisions of 40 CFR 63.1024(d)(3)(i) and (d)(3)(ii) are met. [40 CFR 63.1024(d)(3)]
         (i) The owner or operator determines that emissions of purged material resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair, and [40 CFR 63.1024(d)(3)(i)]
         (ii) When repair procedures are effected, the purged material is collected and destroyed, collected and routed to a fuel gas system or process, or recovered in a control device complying with either 40 CFR 63.1034 or 40 CFR 63.1021(b). [40 CFR 63.1024(d)(3)(ii)]
      (4) Delay of repair beyond a process unit or affected facility shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit or affected facility shutdown, and valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the second process unit or affected facility shutdown will not be allowed unless the third process unit or affected facility shutdown occurs sooner than 6 months after the first process unit or affected facility shutdown. [40 CFR 63.1024(d)(5)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations:
None

3. Testing Requirements:
Pursuant to 401 KAR 50:045, Section 1, performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

a. Leak detection. Unless otherwise specified in 40 CFR 63.1021(b) or (e), or the referencing subpart, the owner or operator shall monitor all valves at the intervals specified in 40 CFR 63.1025(b)(3) and/or (b)(4) and shall comply with all other provisions. [40 CFR 63.1025(b)]

(1) Monitoring method. The valves shall be monitored to detect leaks by the method specified in 40 CFR 63.1023(b) and, as applicable, 40 CFR 63.1023(c). [40 CFR 63.1025(b)(1)]

(2) Instrument reading that defines a leak. The instrument reading that defines a leak is 500 parts per million or greater. [40 CFR 63.1025(b)(2)]

(3) Monitoring frequency. The owner or operator shall monitor valves for leaks at the intervals specified in 40 CFR 63.1025(b)(3)(i) through (b)(3)(v) and shall keep the record specified in 40 CFR 63.1025(b)(3)(vi). [40 CFR 63.1025(b)(3)]

(i) If at least the greater of 2 valves or 2 percent of the valves in a process unit leak, as calculated according to 40 CFR 63.1025(c), the owner or operator shall monitor each valve once per month. [40 CFR 63.1025(b)(3)(i)]

(ii) At process units with less than the greater of 2 leaking valves or 2 percent leaking valves, the owner or operator shall monitor each valve once each quarter, except as provided in 40 CFR 63.1025(b)(3)(iii) through (b)(3)(v). Monitoring data generated before the regulated source became subject to the referencing subpart and meeting the criteria of either 40 CFR 63.1023(b)(1) through (b)(5), or 40 CFR 63.1023(b)(6), may be used to qualify initially for less frequent monitoring under 40 CFR 63.1025(b)(3)(iii) through (b)(3)(v). [40 CFR 63.1025(b)(3)(ii)]

(iii) At process units with less than 1 percent leaking valves, the owner or operator may elect to monitor each valve once every two quarters. [40 CFR 63.1025(b)(3)(iii)]

(iv) At process units with less than 0.5 percent leaking valves, the owner or operator may elect to monitor each valve once every four quarters. [40 CFR 63.1025(b)(3)(iv)]

(v) At process units with less than 0.25 percent leaking valves, the owner or operator may elect to monitor each valve once every 2 years. [40 CFR 63.1025(b)(3)(v)]

b. Valve subgrouping. For a process unit or a group of process units to which 40 CFR63, Subpart UU applies, an owner or operator may choose to subdivide the valves in the applicable process unit or group of process units and apply the provisions of 40 CFR 63.1025(b)(3) to each subgroup. If the owner or operator elects to subdivide the valves in the applicable process unit or group of process units, then the provisions of 40 CFR 63.1025(b)(4)(i) through (b)(4)(viii) apply. [40 CFR 63.1025(b)(4)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c. Percent leaking valves calculation. [40 CFR 63.1025(c)]
   (1) Calculation basis and procedures [40 CFR 63.1025(c)(1)]
      (i) The owner or operator shall decide no later than the compliance date of this part or upon revision of an operating permit whether to calculate percent leaking valves on a process unit or group of process units basis. Once the owner or operator has decided, all subsequent percentage calculations shall be made on the same basis and this shall be the basis used for comparison with the subgrouping criteria specified in 40 CFR 63.1025(b)(4)(i). [40 CFR 63.1025(c)(1)(i)]
      (ii) The percent leaking valves for each monitoring period for each process unit or valve subgroup, as provided in 40 CFR 63.1025(b)(4), shall be calculated using the following equation: [40 CFR 63.1025(c)(1)(ii)]

      $$\%V_L = \frac{V_L}{V_T} \times 100$$

      where:
      $\%V_L$ = Percent leaking valves.
      V_L = Number of valves found leaking, excluding nonrepairable valves, as provided in 40 CFR 63.1025(c)(3), and including those valves found leaking pursuant to 40 CFR 63.1025(d)(2)(iii)(A) and (d)(2)(iii)(B).
      VT= The sum of the total number of valves monitored.
   (2) Calculation for monitoring frequency. When determining monitoring frequency for each process unit or valve subgroup subject to monthly, quarterly, or semiannual monitoring frequencies, the percent leaking valves shall be the arithmetic average of the percent leaking valves from the last two monitoring periods. When determining monitoring frequency for each process unit or valve subgroup subject to annual or biennial (once every 2 years) monitoring frequencies, the percent leaking valves shall be the arithmetic average of the percent leaking valves from the last three monitoring periods. [40 CFR 63.1025(c)(2)]
   (3) Nonrepairable valves. [40 CFR 63.1025(c)(3)]
      (i) Nonrepairable valves shall be included in the calculation of percent leaking valves the first time the valve is identified as leaking and nonrepairable and as required to comply with 40 CFR 63.1025(c)(3)(ii). Otherwise, a number of nonrepairable valves (identified and included in the percent leaking valves calculation in a previous period) up to a maximum of 1 percent of the total number of valves in regulated material service at a process unit or affected facility may be excluded from calculation of percent leaking valves for subsequent monitoring periods. [40 CFR 63.1025(c)(3)(i)]
      (ii) If the number of nonrepairable valves exceeds 1 percent of the total number of valves in regulated material service at a process unit or affected facility, the number of nonrepairable valves exceeding 1 percent of the total number of valves in regulated material service shall be included in the calculation of percent leaking valves. [40 CFR 63.1025(c)(3)(ii)]

d. Leak repair. After a leak has been repaired, the valve shall be monitored at least once within the first 3 months after its repair. The monitoring required by this paragraph is in addition to the monitoring required to satisfy the definition of repaired and first attempt at repair. [40 CFR 63.1025(d)(2)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(i) The monitoring shall be conducted as specified in 40 CFR 63.1023(b) and (c), as appropriate, to determine whether the valve has resumed leaking. [40 CFR 63.1025(d)(2)(i)]

(ii) Periodic monitoring required by 40 CFR 63.1025(b) may be used to satisfy the requirements of this paragraph, if the timing of the monitoring period coincides with the time specified in this paragraph. Alternatively, other monitoring may be performed to satisfy the requirements of this paragraph, regardless of whether the timing of the monitoring period for periodic monitoring coincides with the time specified in this paragraph. [40 CFR 63.1025(d)(2)(ii)]

(iii) If a leak is detected by monitoring that is conducted pursuant to 40 CFR 63.1025(d)(2), the owner or operator shall follow the provisions of 40 CFR 63.1025(d)(2)(iii)(A) and (d)(2)(iii)(B), to determine whether that valve must be counted as a leaking valve for purposes of 40 CFR 63.1025(c)(1)(ii). [40 CFR 63.1025(d)(2)(iii)]

(A) If the owner or operator elected to use periodic monitoring required by 40 CFR 63.1025(b) to satisfy the requirements of 40 CFR 63.1025(d)(2), then the valve shall be counted as a leaking valve. [40 CFR 63.1025(d)(2)(iii)(A)]

(B) If the owner or operator elected to use other monitoring, prior to the periodic monitoring required by 40 CFR 63.1025(b), to satisfy the requirements of 40 CFR 63.1025(d)(2), then the valve shall be counted as a leaking valve unless it is repaired and shown by periodic monitoring not to be leaking. [40 CFR 63.1025(d)(2)(iii)(B)]

e. Special provisions for valves. Unsafe-to-monitor valves. Any valve that is designated, as described in 40 CFR 63.1022(c)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 63.1025(b) and (d)(2) and the owner or operator shall monitor the valve according to the written plan specified in 40 CFR 63.1022(c)(4). [40 CFR 63.1025(e)(1)]

f. Special provisions for valves. *Difficult-to-monitor valves*. Any valve that is designated, as described in 40 CFR 63.1022(c)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 63.1025(b) and the owner or operator shall monitor the valve according to the written plan specified in 40 CFR 63.1022(c)(4). [40 CFR 63.1025(e)(2)]

g. Special provisions for valves. *Fewer than 250 valves*. Any equipment located at a plant site with fewer than 250 valves in regulated material service is exempt from the requirements for monthly monitoring specified in 40 CFR 63.1025(b)(3)(i). Instead, the owner or operator shall monitor each valve in regulated material service for leaks once each quarter, as provided in 40 CFR 63.1025(e)(1) and (e)(2). [40 CFR 63.1025(e)(3)}

5. Specific Recordkeeping Requirements:

a. The owner or operator shall keep a record of the monitoring schedule for each process unit. [40 CFR 63.1025(b)(3)(vi)]

b. Special equipment designations*: Equipment that is unsafe or difficult-to-monitor* [40 CFR 63.1022(c)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(1) Designation and criteria for unsafe-to-monitor. Valves meeting the provisions of 40 CFR 63.1025(e)(1) may be designated unsafe-to-monitor if the owner or operator determines that monitoring personnel would be exposed to an immediate danger as a consequence of complying with the monitoring requirements of 40 CFR63, Subpart UU. Examples of unsafe-to-monitor equipment include, but is not limited to, equipment under extreme pressure or heat. [40 CFR 63.1022(c)(1)]

(2) Designation and criteria for difficult-to-monitor. Valves meeting the provisions of 40 CFR 63.1025(e)(2) may be designated difficult-to-monitor if the provisions of 40 CFR 63.1022(c)(2)(i) apply [40 CFR 63.1022(c)(2)]

(i) Valves. [40 CFR 63.1022(c)(2)(i)]

(A) The owner or operator of the valve determines that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters (7 feet) above a support surface or it is not accessible in a safe manner when it is in regulated material service; and [40 CFR 63.1022(c)(2)(i)(A)]

(B) The process unit or affected facility within which the valve is located is an existing source, or the owner or operator designates less than 3 percent of the total number of valves in a new source as difficult-to-monitor. [40 CFR 63.1022(c)(2)(i)(B)]

(3) Identification of unsafe or difficult-to-monitor equipment. The owner or operator shall record the identity of equipment designated as unsafe-to-monitor according to the provisions of 40 CFR 63.1022(c)(1) and the planned schedule for monitoring this equipment. The owner or operator shall record the identity of equipment designated as difficult-to-monitor according to the provisions of 40 CFR 63.1022(c)(2), the planned schedule for monitoring this equipment, and an explanation why the equipment is unsafe or difficult-to-monitor. This record must be kept at the plant and be available for review by an inspector. [40 CFR 63.1022(c)(3)]

(4) Written plan requirements. [40 CFR 63.1022(c)(4)]

(i) The owner or operator of equipment designated as unsafe-to-monitor according to the provisions of 40 CFR 63.1022(c)(1) shall have a written plan that requires monitoring of the equipment as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 63.1024 if a leak is detected. [40 CFR 63.1022(c)(4)(i)]

(ii) The owner or operator of equipment designated as difficult-to-monitor according to the provisions of 40 CFR 63.1022(c)(2) shall have a written plan that requires monitoring of the equipment at least once per calendar year and repair of the equipment according to the procedures in 40 CFR 63.1024 if a leak is detected. [40 CFR 63.1022(c)(4)(ii)]

6. Specific Reporting Requirements:

None

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS FOR 40 CFR 63, Subpart FFFF - 4. PUMPS IN LIGHT LIQUID ORGANIC HAP SERVICE

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.1019 through 63.1039, Table 1 (Subpart UU), National Emission Standards for Equipment Leaks - Control Level 2 Standards, as required by Table 6 of 40 CFR 63, Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

401 KAR 63:002, Section 2(1), 40 C.F.R. 63.1 through 63.16, Table 1 (Subpart A), General Provisions.

1. Operating Limitations:

a. Leak repair. If a leak is detected pursuant to 40 CFR 63.1026(b), then the leak shall be repaired using the procedures in 40 CFR 63.1024, as applicable, unless otherwise specified in 40 CFR 63.1026(b)(5) for leaks identified by visual indications of liquids dripping. [40 CFR 63.1026(d)]

b. Delay of repair. Delay of repair is allowed for any of the conditions specified in 40 CFR 63.1024(d)(1) through (d)(5). The owner or operator shall maintain a record of the facts that explain any delay of repairs and, where appropriate, why the repair was technically infeasible without a process unit shutdown. [40 CFR 63.1024(d)]

(1) Delay of repair of equipment for which leaks have been detected is allowed if repair within 15 days after a leak is detected is technically infeasible without a process unit or affected facility shutdown. Repair of this equipment shall occur as soon as practical, but no later than the end of the next process unit or affected facility shutdown, except as provided in 40 CFR 63.1024(d)(5). [40 CFR 63.1024(d)(1)]

(2) Delay of repair of equipment for which leaks have been detected is allowed for equipment that is isolated from the process and that does not remain in regulated material service. [40 CFR 63.1024(d)(2)]

(3) Delay of repair for pumps is also allowed if the provisions of 40 CFR 63.1024(d)(4)(i) and (d)(4)(ii) are met. [40 CFR 63.1024(d)(4)]

(i) Repair requires replacing the existing seal design with a new system that the owner or operator has determined under the provisions of 40 CFR 63.1035(d) will provide better performance or one of the specifications of 40 CFR 63.1024(d)(4)(i)(A) through (d)(4)(i)(C) are met. [40 CFR 63.1024(d)(4)(i)]

(A) A dual mechanical seal system that meets the requirements of 40 CFR 63.1026(e)(1) will be installed; [40 CFR 63.1024(d)(4)(i)(A)]

(B) A pump that meets the requirements of 40 CFR 63.1026(e)(2) will be installed; or [40 CFR 63.1024(d)(4)(i)(B)]

(C) A system that routes emissions to a process or a fuel gas system or a closed vent system and control device that meets the requirements of 40 CFR 63.1026(e)(3) will be installed; and [40 CFR 63.1024(d)(4)(i)(B)]

(ii) Repair is completed as soon as practical, but not later than 6 months after the leak was detected. [40 CFR 63.1024(d)(4)(ii)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c. Quality Improvement Program for Pumps [40 CFR 63.1035]
   (1) Criteria. If, on a 6-month rolling average, at least the greater of either 10 percent of the pumps in a process unit or affected facility (or plant site) or three pumps in a process unit or affected facility (or plant site) leak, the owner or operator shall comply with the requirements specified in 40 CFR 63.1035(a)(1) and (a)(2). [40 CFR 63.1035(a)]
      (i) Pumps that are in food and medical service or in polymerizing monomer service shall comply with all requirements except for those specified in 40 CFR 63.1035(d)(8). [40 CFR 63.1035(a)(1)]
      (ii) Pumps that are not in food and medical or polymerizing monomer service shall comply with all of the requirements. [40 CFR 63.1035(a)(2)]
   (2) Exiting the QIP. The owner or operator shall comply with the requirements until the number of leaking pumps is less than the greater of either 10 percent of the pumps or three pumps, calculated as a 6-month rolling average, in the process unit or affected facility (or plant site). Once the performance level is achieved, the owner or operator shall comply with the requirements in 40 CFR 63.1026. [40 CFR 63.1035(b)]
   (3) Resumption of QIP. If, in a subsequent monitoring period, the process unit or affected facility (or plant site) has greater than either 10 percent of the pumps leaking or three pumps leaking (calculated as a 6-month rolling average), the owner or operator shall resume the quality improvement program starting at performance trials. [40 CFR 63.1035(c)]
   (4) QIP requirements. The quality improvement program shall meet the requirements specified in 40 CFR 63.1035(d)(1) through (d)(8). [40 CFR 63.1035(d)]
   (5) QIP recordkeeping. In addition to the records required by 40 CFR 63.1035(d)(2), the owner or operator shall maintain records for the period of the quality improvement program for the process unit or affected facility as specified in 40 CFR 63.1035(e)(1) through (e)(6). [40 CFR 63.1035(e)]

2. Emission Limitations:
None

3. Testing Requirements:
Pursuant to 401 KAR 50:045, Section 1, performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:
a. Leak detection. Unless otherwise specified in 40 CFR 63.1021(b), 40 CFR 63.1036, 40 CFR 63.1037, or 40 CFR 63.1026(e), the owner or operator shall monitor each pump to detect leaks and shall comply with all other provisions. [40 CFR 63.1026(b)]
   (1) Monitoring method and frequency. The pumps shall be monitored monthly to detect leaks by the method specified in 40 CFR 63.1023(b) and, as applicable, 40 CFR 63.1023(c). [40 CFR 63.1026(b)(1)]
   (2) Instrument reading that defines a leak. The instrument reading that defines a leak is specified in 40 CFR 63.1026(b)(2)(i) through (b)(2)(iii). [40 CFR 63.1026(b)(2)]
      (i) 5,000 parts per million or greater for pumps handling polymerizing monomers; [40 CFR 63.1026(b)(2)(i)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(ii) 2,000 parts per million or greater for pumps in food/medical service; and [40 CFR 63.1026(b)(2)(ii)]

(iii)1,000 parts per million or greater for all other pumps. [40 CFR 63.1026(b)(2)(iii)]

[Pursuant to 63.2480 (b) (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 40 CFR 63.1026(b)(2)(i) through (iii).

(3) Visual inspection. Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. The owner or operator shall document that the inspection was conducted and the date of the inspection. If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the owner or operator shall follow the procedure specified in either 40 CFR 63.1026(b)(4)(i) or (b)(4)(ii). [40 CFR 63.1026(b)(4)]

Liquids dripping means any visible leakage from the seal including dripping, spraying, misting, clouding, and ice formation. Indications of liquids dripping include puddling or new stains that are indicative of an existing evaporated drip. [40 CFR 63.1020 Definitions]

(i) The owner or operator shall monitor the pump as specified in 40 CFR 63.1023(b) and, as applicable, 40 CFR 63.1023(c). If the instrument reading indicates a leak as specified in 40 CFR 63.1026(b)(2), a leak is detected and it shall be repaired using the procedures in 40 CFR 63.1024, except as specified in 40 CFR 63.1026(b)(3); or [40 CFR 63.1026(b)(4)(i)]

(ii) The owner or operator shall eliminate the visual indications of liquids dripping. [40 CFR 63.1026(b)(4)(ii)]

b. Percent leaking pumps calculation [40 CFR 63.1026(c)]

(1) The owner or operator shall decide no later than the compliance date of this part or upon revision of an operating permit whether to calculate percent leaking pumps on a process unit basis or group of process unit's basis. Once the owner or operator has decided, all subsequent percentage calculations shall be made on the same basis. [40 CFR 63.1026(c)(1)]

(2) If, when calculated on a 6-month rolling average, at least the greater of either 10 percent of the pumps in a process unit or three pumps in a process unit leak, the owner or operator shall implement a quality improvement program for pumps that complies with the requirements of 40 CFR 63.1035. [40 CFR 63.1026(c)(2)]

(3) The number of pumps at a process unit or affected facility shall be the sum of all the pumps in regulated material service, except that pumps found leaking in a continuous process unit or affected facility within 1 month after start-up of the pump shall not count in the percent leaking pumps calculation for that one monitoring period only. [40 CFR 63.1026(c)(3)]

(4) Percent leaking pumps shall be determined by the following equation: [40 CFR 63.1026(c)(4)]

$$\%P_L = \frac{(P_L - P_S)}{(P_T - P_S)} \times 100$$

where:

$\%P_L$ = Percent leaking pumps

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

P_L = Number of pumps found leaking as determined through monthly monitoring as required in 40 CFR 63.1026(b)(1). Do not include results from inspection of unsafe-to-monitor pumps pursuant to 40 CFR 63.1026(e)(6).

P_S = Number of pumps leaking within 1 month of start-up during the current monitoring period.

P_T = Total pumps in regulated material service, including those meeting the criteria in 40 CFR 63.1026(e)(1), (e)(2), (e)(3), and (e)(6).

c. Special provisions for pumps. *Dual mechanical seal pumps*. Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 63.1026(b), provided the requirements specified in 40 CFR 63.1026(e)(1)(i) through (e)(1)(viii) are met. [40 CFR 63.1026(e)(1)]

(1) The owner or operator determines, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both. The owner or operator shall keep records at the plant of the design criteria and an explanation of the design criteria; and any changes to these criteria and the reasons for the changes. This record must be available for review by an inspector. [40 CFR 63.1026(e)(1)(i)]

(2) Each dual mechanical seal system shall meet the requirements specified in 40 CFR 63.1026(e)(1)(ii)(A), (e)(1)(ii)(B), or (e)(1)(ii)(C). [40 CFR 63.1026(e)(1)(ii)]

(i) Each dual mechanical seal system is operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or [40 CFR 63.1026(e)(1)(ii)(A)]

(ii) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of either 40 CFR 63.1034 or 40 CFR 63.1021(b) of this part; or [40 CFR 63.1026(e)(1)(ii)(B)]

(iii) Equipped with a closed-loop system that purges the barrier fluid into a process stream. [40 CFR 63.1026(e)(1)(ii)(C)]

(3) The barrier fluid is not in light liquid service. [40 CFR 63.1026(e)(1)(iii)]

(4) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both. [40 CFR 63.1026(e)(1)(iv]

(5) Each pump is checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. The owner or operator shall document that the inspection was conducted and the date of the inspection. If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the owner or operator shall follow the procedure specified in 40 CFR 63.1026(e)(1)(v)(A) or (e)(1)(v)(B) prior to the next required inspection. [40 CFR 63.1026(e)(1)(v)]

(i) The owner or operator shall monitor the pump as specified in 40 CFR 63.1023(b) and, as applicable, 40 CFR 63.1023 (c), to determine if there is a leak of regulated material in the barrier fluid. If an instrument reading of 1,000 parts per million or greater is measured, a leak is detected and it shall be repaired using the procedures in 40 CFR 63.1024; or [40 CFR 63.1026(e)(1)(v)(A)]

(ii) The owner or operator shall eliminate the visual indications of liquids dripping. [40 CFR 63.1026(e)(1)(v)(B)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(6) If indications of liquids dripping from the pump seal exceed the criteria established in 40 CFR 63.1026(e)(1)(i), or if based on the criteria established in 40 CFR 63.1026(e)(1)(i) the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected. [40 CFR 63.1026(e)(1)(vi)]
(7) Each sensor as described in 40 CFR 63.1026(e)(1)(iv) is observed daily or is equipped with an alarm unless the pump is located within the boundary of an unmanned plant site. [40 CFR 63.1026(e)(1)(vii)]
(8) When a leak is detected pursuant to 40 CFR 63.1026(e)(1)(vi), it shall be repaired as specified in 40 CFR 63.1024. [40 CFR 63.1026(e)(1)(viii)]

d. Special provisions for pumps. *No external shaft*. Any pump that is designed with no externally actuated shaft penetrating the pump housing is exempt from the requirements of 40 CFR 63.1026(b). [40 CFR 63.1026(e)(2)]

e. Special provisions for pumps. *90 percent exemption*. If more than 90 percent of the pumps at a process unit or affected facility meet the criteria in either 40 CFR 63.1026(e)(1) or (e)(2), the process unit or affected facility is exempt from the percent leaking calculation in 40 CFR 63.1026(c). [40 CFR 63.1026(e)(5)]

f. Special provisions for pumps. *Unsafe-to-monitor pumps.* Any pump that is designated, as described in 40 CFR 63.1022(c)(1), as an unsafe-to-monitor pump is exempt from the requirements of 40 CFR 63.1026(b), the monitoring and inspection requirements of 40 CFR 63.1026(e)(1)(v) through (viii), and the owner or operator shall monitor and inspect the pump according to the written plan specified in 40 CFR 63.1022(c)(4). [40 CFR 63.1026(e)(6)]

5. Specific Recordkeeping Requirements:

a. Designation and criteria for unsafe-to-monitor. Pumps meeting the provisions of 40 CFR 63.1026(e)(6) may be designated unsafe-to-monitor if the owner or operator determines that monitoring personnel would be exposed to an immediate danger as a consequence of complying with the monitoring requirements of 40 CFR63, Subpart UU. Examples of unsafe-to-monitor equipment include, but is not limited to, equipment under extreme pressure or heat. [40 CFR 63.1022(c)(1)]

b. Identification of unsafe or difficult to-monitor equipment. The owner or operator shall record the identity of equipment designated as unsafe-to-monitor according to the provisions of 40 CFR 63.1022(c)(1) and the planned schedule for monitoring this equipment. The owner or operator shall record identity of equipment designated as difficult-to-monitor according to 40 CFR 63.1022(c)(2), the planned schedule for monitoring this equipment and an explanation why the equipment is unsafe to-monitor. This record must be kept at the plant and be available for review by an inspector. [40 CFR 63.1022(c)(3)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c. Written plan requirements. [40 CFR 63.1022(c)(4)]

(1) The owner or operator of equipment designated as unsafe-to-monitor according to the provisions of 40 CFR 63.1022(c)(1) shall have a written plan that requires monitoring of the equipment as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 63.1024 if a leak is detected. [40 CFR 63.1022(c)(4)(i)]

6. Specific Reporting Requirements:

None

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS FOR 40 CFR 63, Subpart FFFF - 5. AGITATORS IN GAS / VAPOR AND LIGHT LIQUID ORGANIC HAP SERVICE

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

401 KAR 63:002, Section 2(1), 40 C.F.R. 63.1 through 63.16, Table 1 (Subpart A), General Provisions.

1. **Operating Limitations:**
   a. Leak repair. If a leak is detected, then the leak shall be repaired using the procedures in 40 CFR 63.1024. [40 CFR 63.1028(d)]

   b. Delay of repair. Delay of repair is allowed for any of the conditions specified in 40 CFR 63.1024(d)(1) through (d)(5). The owner or operator shall maintain a record of the facts that explain any delay of repairs and, where appropriate, why the repair was technically infeasible without a process unit shutdown. [40 CFR 63.1024(d)]
      (1) Delay of repair of equipment for which leaks have been detected is allowed if repair within 15 days after a leak is detected is technically infeasible without a process unit or affected facility shutdown. Repair of this equipment shall occur as soon as practical, but no later than the end of the next process unit or affected facility shutdown, except as provided in 40 CFR 63.1024(d)(5). [40 CFR 63.1024(d)(1)]
      (2) Delay of repair of equipment for which leaks have been detected is allowed for equipment that is isolated from the process and that does not remain in regulated material service. [40 CFR 63.1024(d)(2)]
      (3) Delay of repair for agitators is also allowed if the provisions of 40 CFR 63.1024(d)(3)(i) and (d)(3)(ii) are met. [40 CFR 63.1024(d)(3)]
         (i) The owner or operator determines that emissions of purged material resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair, and [40 CFR 63.1024(d)(3)(i)]
         (ii) When repair procedures are effected, the purged material is collected and destroyed, collected and routed to a fuel gas system or process, or recovered in a control device complying with either 40 CFR 63.1034 or 40 CFR 63.1021(b). [40 CFR 63.1024(d)(3)(ii)]

2. **Emission Limitations:**
   None

3. **Testing Requirements:**
   Pursuant to 401 KAR 50:045, Section 1, performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

a. Leak detection [40 CFR 63.1028(c)]

(1) Monitoring method. Each agitator seal shall be monitored monthly to detect leaks by the methods specified in 40 CFR 63.1023(b) and, as applicable, 40 CFR 63.1023(c), except as provided in 40 CFR 63.1021(b), 40 CFR 63.1036, 40 CFR 63.1037, or 40 CFR 63.1028(e). [40 CFR 63.1028(c)(1)]

(2) Instrument reading that defines a leak. If an instrument reading equivalent of 10,000 parts per million or greater is measured, a leak is detected. [40 CFR 63.1028(c)(2)]

(3) Visual inspection. [40 CFR 63.1028(c)(3)]

(i) Each agitator seal shall be checked by visual inspection each calendar week for indications of liquids dripping from the agitator seal. The owner or operator shall document that the inspection was conducted and the date of the inspection. [40 CFR 63.1028(c)(3)(i)]

(ii) If there are indications of liquids dripping from the agitator seal, the owner or operator shall follow the procedures specified in 40 CFR 63.1028(c)(3)(ii)(A) or (c)(3)(ii)(B) prior to the next required inspection. [40 CFR 63.1028(c)(3)(ii)]

(A) The owner or operator shall monitor the agitator seal as specified in 40 CFR 63.1023(b) and, as applicable, 40 CFR 63.1023(c), to determine if there is a leak of regulated material. If an instrument reading of 10,000 parts per million or greater is measured, a leak is detected, and it shall be repaired according to 40 CFR 63.1028(d); or [40 CFR 63.1028(c)(3)(ii)(A)]

(B) The owner or operator shall eliminate the indications of liquids dripping from the agitator seal. [40 CFR 63.1028(c)(3)(ii)(B)]

Liquids dripping means any visible leakage from the seal including dripping, spraying, misting, clouding, and ice formation. Indications of liquids dripping include puddling or new stains that are indicative of an existing evaporated drip. [40 CFR 63.1020 Definitions]

b. Special provisions for agitators. *Dual mechanical seal*. Each agitator equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 63.1028(c), provided the requirements specified in 40 CFR 63.1028(e)(1)(i) through (e)(1)(vi) are met. [40 CFR 63.1028(e)(1)]

(1) Each dual mechanical seal system shall meet the applicable requirements specified in 40 CFR 63.1028(e)(1)(i)(A), (e)(1)(i)(B), or (e)(1)(i)(C). [40 CFR 63.1028(e)(1)(i)]

(i) Operated with the barrier fluid at a pressure that is at all times greater than the agitator stuffing box pressure; or [40 CFR 63.1028(e)(1)(i)(A)]

(ii) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that meets the requirements of either 40 CFR 63.1034 or 40 CFR 63.1021(b); or [40 CFR 63.1028(e)(1)(i)(B)]

(iii) Equipped with a closed-loop system that purges the barrier fluid into a process stream. [40 CFR 63.1028(e)(1)(i)(C)]

(2) The barrier fluid is not in light liquid service. [40 CFR 63.1028(e)(1)(ii)]

(3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both. [40 CFR 63.1028(e)(1)(iii)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(4) Each agitator seal is checked by visual inspection each calendar week for indications of liquids dripping from the agitator seal. If there are indications of liquids dripping from the agitator seal at the time of the weekly inspection, the owner or operator shall follow the procedure specified in 40 CFR 63.1028(e)(1)(iv)(A) or (e)(1)(iv)(B) prior to the next required inspection. [40 CFR 63.1028(e)(1)(iv)]
   (i) The owner or operator shall monitor the agitator seal as specified in 40 CFR 63.1023(b) and, as applicable, 40 CFR 63.1023(c), to determine the presence of regulated material in the barrier fluid. If an instrument reading equivalent to or greater than 10,000 ppm is measured, a leak is detected and it shall be repaired using the procedures in 40 CFR 63.1024, or [40 CFR 63.1028(e)(1)(iv)(A)]
   (ii) The owner or operator shall eliminate the visual indications of liquids dripping. [40 CFR 63.1028(e)(1)(iv)(B)]

(5) Each sensor as described in 40 CFR 63.1028(e)(1)(iii) is observed daily or is equipped with an alarm unless the agitator seal is located within the boundary of an unmanned plant site. [40 CFR 63.1028(e)(1)(v)]

(6) The owner or operator of each dual mechanical seal system shall meet the requirements specified in 40 CFR 63.1028(e)(1)(vi)(A) and (e)(1)(vi)(B). [40 CFR 63.1028(e)(1)(vi)]
   (i) The owner or operator shall determine, based on design considerations and operating experience, criteria that indicates failure of the seal system, the barrier fluid system, or both and applicable to the presence and frequency of drips. If indications of liquids dripping from the agitator seal exceed the criteria, or if, based on the criteria the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected and shall be repaired pursuant to 40 CFR 63.1024, as applicable. [40 CFR 63.1028(e)(1)(vi)(A)]
   (ii) The owner or operator shall keep records of the design criteria and an explanation of the design criteria; and any changes to these criteria and the reasons for the changes. [40 CFR 63.1028(e)(1)(vi)(B)]

c. Special provisions for agitators. *No external shaft*. Any agitator that is designed with no externally actuated shaft penetrating the agitator housing is exempt from 40 CFR 63.1028(c). [40 CFR 63.1028(e)(2)]

d. Special provisions for agitators. *Difficult-to-monitor agitator seals*. Any agitator seal that is designated, as described in 40 CFR 63.1022(c)(2), as a difficult-to-monitor agitator seal is exempt from the requirements of 40 CFR 63.1028(c) and the owner or operator shall monitor the agitator seal according to the written plan specified in 40 CFR 63.1022(c)(4). [40 CFR 63.1028(e)(5)]

e. Special provisions for agitators. *Equipment obstructions*. Any agitator seal that is obstructed by equipment or piping that prevents access to the agitator by a monitor probe is exempt from the monitoring requirements of 40 CFR 63.1028(c). [40 CFR 63.1028(e)(6)]

f. Unsafe-to-monitor agitator seals. Any agitator seal that is designated, as described in 40 CFR 63.1022(c)(1), as an unsafe-to-monitor agitator seal is exempt from the requirements

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

of 40 CFR 63.1028(c) and the owner or operator of the agitator seal monitors the agitator seal according to the written plan specified in 40 CFR 63.1022(c)(4). [40 CFR 63.1028(e)(7)]

5. Specific Recordkeeping Requirements:

a. Special equipment designations*: Equipment that is unsafe or difficult-to-monitor*. [40 CFR 63.1022(c)]

(1) Designation and criteria for unsafe-to-monitor. Agitators meeting the provisions of 40 CFR 63.1028(e)(7) may be designated unsafe-to-monitor if the owner or operator determines that monitoring personnel would be exposed to an immediate danger as a consequence of complying with the monitoring requirements of 40 CFR63, Subpart UU. Examples of unsafe-to-monitor equipment include, but is not limited to, equipment under extreme pressure or heat. [40 CFR 63.1022(c)(1)]

(2) Designation and criteria for difficult-to-monitor. Agitators meeting the provisions of 40 CFR 63.1028(e)(5) may be designated difficult-to-monitor if the provisions of 40 CFR 63.1022(c)(2)(ii) apply. [40 CFR 63.1022(c)(2)]

(i) Agitators. The owner or operator determines that the agitator cannot be monitored without elevating the monitoring personnel more than 2 meters (7 feet) above a support surface or it is not accessible in a safe manner when it is in regulated material service. [40 CFR 63.1022(c)(2)(ii)]

(3) Identification of unsafe or difficult-to-monitor equipment. The owner or operator shall record the identity of equipment designated as unsafe-to-monitor according to the provisions of 40 CFR 63.1022(c)(1) and the planned schedule for monitoring this equipment. The owner or operator shall record the identity of equipment designated as difficult-to-monitor according to the provisions of 40 CFR 63.1022(c)(2), the planned schedule for monitoring this equipment, and an explanation why the equipment is unsafe or difficult-to-monitor. This record must be kept at the plant and be available for review by an inspector. [40 CFR 63.1022(c)(3)]

(4) Written plan requirements. [40 CFR 63.1022(c)(4)]

(i) The owner or operator of equipment designated as unsafe-to-monitor according to the provisions of 40 CFR 63.1022(c)(1) shall have a written plan that requires monitoring of the equipment as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 63.1024 if a leak is detected. [40 CFR 63.1022(c)(4)(i)]

(ii) The owner or operator of equipment designated as difficult-to-monitor according to the provisions of 40 CFR 63.1022(c)(2) shall have a written plan that requires monitoring of the equipment at least once per calendar year and repair of the equipment according to the procedures in 40 CFR 63.1024 if a leak is detected. [40 CFR 63.1022(c)(4)(ii)]

6. Specific Reporting Requirements:

None

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS FOR 40 CFR 63, Subpart FFFF - 6. PUMPS, VALVES, AND AGITATORS IN HEAVY LIQUID ORGANIC HAP SERVICE; PRESSURE RELIEF DEVICES IN LIQUID ORGANIC HAP SERVICE; CONNECTORS IN GAS / VAPOR, LIGHT LIQUID, AND HEAVY LIQUID ORGANIC HAP SERVICE; INSTRUMENTATION SYSTEMS IN ORGANIC HAP SERVICE

Pursuant to 40 CFR 63.2480(b)(4), for connectors in gas/vapor and light liquid service at an existing source, the permittee elects to comply with the requirements in 40 CFR 63.1029 for connectors in heavy liquid service, including all record keeping and reporting requirements, rather than comply with the requirements of 40 CFR 63.1027.

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.1019 through 63.1039, Table 1 (Subpart UU), National Emission Standards for Equipment Leaks - Control Level 2 Standards, as required by Table 6 of 40 CFR 63, Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

401 KAR 63:002, Section 2(1), 40 C.F.R. 63.1 through 63.16, Table 1 (Subpart A), General Provisions.

1. **Operating Limitations:**
   a. Delay of repair. Delay of repair is allowed for any of the conditions specified in 40 CFR 63.1024(d)(1) through (d)(5). The owner or operator shall maintain a record of the facts that explain any delay of repairs and, where appropriate, why the repair was technically infeasible without a process unit shutdown. [40 CFR 63.1024(d)]
      (1) Delay of repair of equipment for which leaks have been detected is allowed if repair within 15 days after a leak is detected is technically infeasible without a process unit or affected facility shutdown. Repair of this equipment shall occur as soon as practical, but no later than the end of the next process unit or affected facility shutdown, except as provided in 40 CFR 63.1024(d)(5). [40 CFR 63.1024(d)(1)]
      (2) Delay of repair of equipment for which leaks have been detected is allowed for equipment that is isolated from the process and that does not remain in regulated material service. [40 CFR 63.1024(d)(2)]
      (3) Delay of repair for valves, connectors, and agitators is also allowed if the provisions of 40 CFR 63.1024(d)(3)(i) and (d)(3)(ii) are met. [40 CFR 63.1024(d)(3)]
         (i) The owner or operator determines that emissions of purged material resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair, and [40 CFR 63.1024(d)(3)((i)]
         (ii) When repair procedures are effected, the purged material is collected and destroyed, collected and routed to a fuel gas system or process, or recovered in a control device complying with either 40 CFR 63.1034 or 40 CFR 63.1021(b) of this part. [40 CFR 63.1024(d)(3)(ii)]
      (4) Delay of repair for pumps is also allowed if the provisions of 40 CFR 63.1024(d)(4)(i) and (d)(4)(ii) are met. [40 CFR 63.1024(d)(4)]
         (i) Repair requires replacing the existing seal design with a new system that the owner or operator has determined under the provisions of 40 CFR 63.1035(d) will provide

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

better performance or one of the specifications of 40 CFR 63.1024(d)(4)(i)(A) through (d)(4)(i)(C) are met. [40 CFR 63.1024(d)(4)(i)]

(A) A dual mechanical seal system that meets the requirements of 40 CFR 63.1026(e)(1) will be installed; [40 CFR 63.1024(d)(4)(i)(A)]

(B) A pump that meets the requirements of 40 CFR 63.1026(e)(2) will be installed; or [40 CFR 63.1024(d)(4)(i)(B)]

(C) A system that routes emissions to a process or a fuel gas system or a closed vent system and control device that meets the requirements of 40 CFR 63.1026(e)(3) will be installed; and [40 CFR 63.1024(d)(4)(i)(C)]

(ii) Repair is completed as soon as practical, but not later than 6 months after the leak was detected. [40 CFR 63.1024(d)(4)(ii)]

(5) Delay of repair beyond a process unit or affected facility shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit or affected facility shutdown, and valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the second process unit or affected facility shutdown will not be allowed unless the third process unit or affected facility shutdown occurs sooner than 6 months after the first process unit or affected facility shutdown. [40 CFR 63.1024(d)(5)]

b. Unsafe-to-repair—connectors. Any connector that is designated, as described in 40 CFR 63.1022(d), as an unsafe-to-repair connector is exempt from the requirements of 40 CFR 63.1024(a). [40 CFR 63.1024(e)]

c. Quality Improvement Program for Pumps. [40 CFR 63.1035]

(1) Criteria. If, on a 6-month rolling average, at least the greater of either 10 percent of the pumps in a process unit or affected facility (or plant site) or three pumps in a process unit or affected facility (or plant site) leak, the owner or operator shall comply with the requirements specified in 40 CFR 63.1035(a)(1) and (a)(2). [40 CFR 63.1035(a)]

(i) Pumps that are in food and medical service or in polymerizing monomer service shall comply with all requirements except for those specified in 40 CFR 63.1035(d)(8). [40 CFR 63.1035(a)(1)]

(ii) Pumps that are not in food and medical or polymerizing monomer service shall comply with all of the requirements. [40 CFR 63.1035(a)(2)]

(2) Exiting the QIP. The owner or operator shall comply with the requirements until the number of leaking pumps is less than the greater of either 10 percent of the pumps or three pumps, calculated as a 6-month rolling average, in the process unit or affected facility (or plant site). Once the performance level is achieved, the owner or operator shall comply with the requirements in 40 CFR 63.1026. [40 CFR 63.1035(b)]

(3) Resumption of QIP. If, in a subsequent monitoring period, the process unit or affected facility (or plant site) has greater than either 10 percent of the pumps leaking or three pumps leaking (calculated as a 6-month rolling average), the owner or operator shall resume the quality improvement program starting at performance trials. [40 CFR 63.1035(c)]

(4) QIP requirements. The quality improvement program shall meet the requirements specified in 40 CFR 63.1035(d)(1) through (d)(8). [40 CFR 63.1035(d)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(5) QIP recordkeeping. In addition to the records required by 40 CFR 63.1035(d)(2), the owner or operator shall maintain records for the period of the quality improvement program for the process unit or affected facility as specified in 40 CFR 63.1035(e)(1) through (e)(6). [40 CFR 63.1035(e)]

2. Emission Limitations:
None

3. Testing Requirements:
Pursuant to 401 KAR 50:045, Section 1, performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

a. Leak detection. [40 CFR 63.1029(b)]

(1) Monitoring method. Unless otherwise specified in 40 CFR 63.1021(b), 40 CFR 63.1036, or 40 CFR 63.1037, the owner or operator shall comply with 40 CFR 63.1029(b)(1) and (b)(2). Pumps, valves, connectors, and agitators in heavy liquid service; pressure relief devices in light liquid or heavy liquid service; and instrumentation systems shall be monitored within 5 calendar days by the method specified in 40 CFR 63.1023(b) and, as applicable, 40 CFR 63.1023(c), if evidence of a potential leak to the atmosphere is found by visual, audible, olfactory, or any other detection method, unless the potential leak is repaired as required in 40 CFR 63.1029(c). [40 CFR 63.1029(b)(1)]

[Pursuant to 40 CFR 63.2480(b)(4), for connectors in gas/vapor and light liquid service at an existing source, the permittee elects to comply with the requirements in 40 CFR 63.1029 for connectors in heavy liquid service, including all record keeping and reporting requirements, rather than comply with the requirements of 40 CFR 63.1027.]

(2) Instrument reading that defines a leak. If an instrument reading of 10,000 parts per million or greater for agitators, 5,000 parts per million or greater for pumps handling polymerizing monomers, 2,000 parts per million or greater for pumps in food and medical service, or 2,000 parts per million or greater for all other pumps (including pumps in food/medical service), or 500 parts per million or greater for valves, connectors, instrumentation systems, and pressure relief devices is measured pursuant to 40 CFR 63.1029(b)(1), a leak is detected and shall be repaired pursuant to 40 CFR 63.1024, as applicable. [40 CFR 63.1029(b)(2)]

Instrumentation system means a group of equipment components used to condition and convey a sample of the process fluid to analyzers and instruments for the purpose of determining process operating conditions (e.g., composition, pressure, flow, etc.). Valves and connectors are the predominant type of equipment used in instrumentation systems; however, other types of equipment may also be included in these systems. Only valves nominally 1.27 centimeters (0.5 inches) and smaller, and connectors nominally 1.91 centimeters (0.75 inches) and smaller in diameter are considered instrumentation systems for the purposes of 40 CFR63, Subpart UU. Valves greater than nominally 1.27 centimeters (0.5 inches) and connectors greater

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

than nominally 1.91 centimeters (0.75 inches) associated with instrumentation systems are not considered part of instrumentation systems and must be monitored individually. [40 CFR 63.1020 Definitions]

b. *Leak repair*. For equipment identified in 40 CFR 63.1029(b) that is not monitored by the method specified in 40 CFR 63.1023(b) and, as applicable, 40 CFR 63.1023(c), repaired shall mean that the visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated; that no bubbles are observed at potential leak sites during a leak check using soap solution; or that the system will hold a test pressure. [40 CFR 63.1029(c)]

5. Specific Recordkeeping Requirements:

a. The permittee is not required to develop an initial list of identification numbers for connectors as would otherwise be required under 63.1022(b)(1). [40 CFR 63.2480(b)(3)]

b. Instrumentation systems. Identify instrumentation systems subject to the provisions of 40 CFR 63.1029. Individual components in an instrumentation system need not be identified. [40 CFR 63.1022(b)(4)]

c. Special equipment designations: *Equipment that is unsafe-to-repair*. [40 CFR 63.1022(d)]
   (1) Designation and criteria. Connectors subject to the provisions of 40 CFR 63.1024(e) may be designated unsafe-to-repair if the owner or operator determines that repair personnel would be exposed to an immediate danger as a consequence of complying with the repair requirements of 40 CFR63, Subpart UU, and if the connector will be repaired before the end of the next process unit or affected facility shutdown as specified in 40 CFR 63.1024(e)(2). [40 CFR 63.1022(d)(1)]
   (2) Identification of equipment. The identity of connectors designated as unsafe-to-repair and an explanation why the connector is unsafe-to-repair shall be recorded. [40 CFR 63.1022(d)(2)]

d. Special equipment designations: *Equipment in heavy liquid service*. The owner or operator of equipment in heavy liquid service shall comply with the requirements of either 40 CFR 63.1022(f)(1) or (f)(2), as provided in 40 CFR 63.1022(f)(3). [40 CFR 63.1022(f)]
   (1) Retain information, data, and analyses used to determine that a piece of equipment is in heavy liquid service. [40 CFR 63.1022(f)(1)]
   (2) When requested by the Division, demonstrate that the piece of equipment or process is in heavy liquid service. [40 CFR 63.1022(f)(2)]
   (3) A determination or demonstration that a piece of equipment or process is in heavy liquid service shall include an analysis or demonstration that the process fluids do not meet the definition of "in light liquid service." Examples of information that could document this include, but are not limited to, records of chemicals purchased for the process, analyses of process stream composition, engineering calculations, or process knowledge. [40 CFR 63.1022(f)(3)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:
None

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS FOR 40 CFR 63, Subpart FFFF - 7. PRESSURE RELIEF DEVICES IN GAS / VAPOR ORGANIC HAP SERVICE

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

401 KAR 63:002, Section 2(1), 40 C.F.R. 63.1 through 63.16, Table 1 (Subpart A), General Provisions.

1. **Operating Limitations:**
   a. Delay of repair. Delay of repair is allowed for any of the conditions specified in 40 CFR 63.1024(d)(1) through (d)(5). The owner or operator shall maintain a record of the facts that explain any delay of repairs and, where appropriate, why the repair was technically infeasible without a process unit shutdown. [40 CFR 63.1024(d)]
      (1) Delay of repair of equipment for which leaks have been detected is allowed if repair within 15 days after a leak is detected is technically infeasible without a process unit or affected facility shutdown. Repair of this equipment shall occur as soon as practical, but no later than the end of the next process unit or affected facility shutdown, except as provided in 40 CFR 63.1024(d)(5). [40 CFR 63.1024(d)(1)]
      (2) Delay of repair of equipment for which leaks have been detected is allowed for equipment that is isolated from the process and that does not remain in regulated material service. [40 CFR 63.1024(d)(2)]
      (3) Delay of repair for valves, connectors, and agitators is also allowed if the provisions of 40 CFR 63.1024(d)(3)(i) and (d)(3)(ii) are met. [40 CFR 63.1024(d)(3)]
         (i) The owner or operator determines that emissions of purged material resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair, and [40 CFR 63.1024(d)(3)(i)]
         (ii) When repair procedures are effected, the purged material is collected and destroyed, collected and routed to a fuel gas system or process, or recovered in a control device complying with either 40 CFR 63.1034 or 40 CFR 63.1021(b) of this part. [40 CFR 63.1024(d)(3)(ii)]
      (4) Delay of repair beyond a process unit or affected facility shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit or affected facility shutdown, and valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the second process unit or affected facility shutdown will not be allowed unless the third process unit or affected facility shutdown occurs sooner than 6 months after the first process unit or affected facility shutdown. [40 CFR 63.1024(d)(4)]

   b. Beginning no later than the compliance dates specified in 40 CFR 63.2445(g), except as specified in 40 CFR 63.2445(e)(4), the permittee must comply with the requirements specified in 40 CFR 63.2445(e)(1) and (2) for pressure relief devices, such as relief valves

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

or rupture disks, in organic HAP gas or vapor service instead of the pressure relief device requirements of 40 CFR 63.1030 of subpart UU, 40 CFR 63.165 of subpart H, or 40 CFR 65.111. Except as specified in 40 CFR 63.2445(e)(4) and (5), the permittee must also comply with the requirements specified in 40 CFR 63.2445(e)(3), (6), (7), and (8) for all pressure relief devices in organic HAP service. [40 CFR 63.1024(d)(5)]

Pressure relief device means a valve, rupture disk, or similar device used only to release an unplanned, nonroutine discharge of gas from process equipment in order to avoid safety hazards or equipment damage. A pressure relief device discharge can result from an operator error, a malfunction such as a power failure or equipment failure, or other unexpected cause. Such devices include conventional, spring-actuated relief valves, balanced bellows relief valves, pilot-operated relief valves, rupture disks, and breaking, buckling, or shearing pin devices. Devices that are actuated either by a pressure of less than or equal to 2.5 pounds per square inch gauge or by a vacuum are not pressure relief devices.

Pressure release means the emission of materials resulting from the system pressure being greater than the set pressure of the pressure relief device. This release can be one release or a series of releases over a short time period.

Force majeure event means a release of HAP, either directly to the atmosphere from a pressure relief device or discharged via a flare, that is demonstrated to the satisfaction of the Administrator to result from an event beyond the owner or operator's control, such as natural disasters; acts of war or terrorism; loss of a utility external to the MCPU (*e.g.*, external power curtailment), excluding power curtailment due to an interruptible service agreement; and fire or explosion originating at a near or adjoining facility outside of the miscellaneous organic chemical manufacturing process unit that impacts the miscellaneous organic chemical manufacturing process unit's ability to operate.

(1) Operating requirements. Except during a pressure release, operate each pressure relief device in organic HAP gas or vapor service with an instrument reading of less than 500 ppm above background as measured by the method in 40 CFR 63.1023(b) of subpart UU, 40 CFR 63.180(c) of subpart H, or 40 CFR 65.104(b). [40 CFR 63.2480(e)(1)]

(2) Pressure release requirements. For pressure relief devices in organic HAP gas or vapor service, you must comply with the applicable requirements 40 CFR 63.2480(e)(2)(i) through (iii) following a pressure release. [40 CFR 63.2480(e)(2)]

(i) If the pressure relief device does not consist of or include a rupture disk, conduct instrument monitoring, as specified in 40 CFR 63.1023(b) of subpart UU, 40 CFR 63.180(c) of subpart H, or 40 CFR 65.104(b), no later than 5 calendar days after the pressure relief device returns to organic HAP gas or vapor service following a pressure release to verify that the pressure relief device is operating with an instrument reading of less than 500 ppm. [40 CFR 63.2480(e)(2)(i)]

(ii) If the pressure relief device includes a rupture disk, either comply with the requirements in 40 CFR 63.2480(e)(2)(i) (and do not replace the rupture disk) or

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

install a replacement disk as soon as practicable after a pressure release, but no later than 5 calendar days after the pressure release. [40 CFR 63.2480(e)(2)(ii)]

(iii) If the pressure relief device consists only of a rupture disk, install a replacement disk as soon as practicable after a pressure release, but no later than 5 calendar days after the pressure release. You must not initiate startup of the equipment served by the rupture disk until the rupture disc is replaced. [40 CFR 63.2480(e)(2)(iii)]

(3) Pressure release management. Except as specified in 40 CFR 63.2480(e)(4) and (5), the permittee must comply with the requirements specified in 40 CFR 63.2480(e)(3)(i) through (v) for all pressure relief devices in organic HAP service. [40 CFR 63.2480(e)(3)]

(i) You must equip each affected pressure relief device with a device(s) or use a monitoring system that is capable of: [40 CFR 63.2480(e)(3)(i)]

(A) Identifying the pressure release;

(B) Recording the time and duration of each pressure release; and

(C) Notifying operators immediately that a pressure release is occurring. The device or monitoring system must be either specific to the pressure relief device itself or must be associated with the process system or piping, sufficient to indicate a pressure release to the atmosphere. Examples of these types of devices and systems include, but are not limited to, a rupture disk indicator, magnetic sensor, motion detector on the pressure relief valve stem, flow monitor, or pressure monitor.

(ii) You must apply at least three redundant prevention measures to each affected pressure relief device and document these measures. Examples of prevention measures include: [40 CFR 63.2480(e)(3)(ii)]

(A) Flow, temperature, liquid level and pressure indicators with deadman switches, monitors, or automatic actuators. Independent, non-duplicative systems within this category count as separate redundant prevention measures.

(B) Documented routine inspection and maintenance programs and/or operator training (maintenance programs and operator training may count as only one redundant prevention measure).

(C) Inherently safer designs or safety instrumentation systems.

(D) Deluge systems.

(E) Staged relief system where the initial pressure relief device (with lower set release pressure) discharges to a flare or other closed vent system and control device.

(iii) If any affected pressure relief device releases to atmosphere as a result of a pressure release event, you must perform root cause analysis and corrective action analysis according to the requirement in 40 CFR 63.2480(e)(6) and implement corrective actions according to the requirements in 40 CFR 63.2480(e)(7). You must also calculate the quantity of organic HAP released during each pressure release event and report this quantity as required in 40 CFR 63.2520(e)(15). Calculations may be based on data from the pressure relief device monitoring alone or in combination

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

with process parameter monitoring data and process knowledge. [40 CFR 63.2480(e)(3)(iii)]

(iv) You must determine the total number of release events that occurred during the calendar year for each affected pressure relief device separately. Prior to June 3, 2024, you must also determine the total number of release events for each pressure relief device for which the root cause analysis concluded that the root cause was a force majeure event, as defined in 40 CFR 63.2550. [40 CFR 63.2480(e)(3)(iv)]

(v) Except for pressure relief devices described in 40 CFR 63.2480(e)(4) and (5), the following release events from an affected pressure relief device are a deviation of the pressure release management work practice standards. [40 CFR 63.2480(e)(3)(v)]

(A) Any release event for which the root cause of the event was determined to be operator error or poor maintenance.

(B) Prior to June 3, 2024, a second release event not including force majeure events from a single pressure relief device in a 3 calendar year period for the same root cause for the same equipment. On and after June 3, 2024, a second release event from a single pressure relief device in a 3 calendar year period for the same root cause for the same equipment.

(C) Prior to June 3, 2024, a third release event not including force majeure events from a single pressure relief device in a 3 calendar year period for any reason. On and after June 3, 2024, a third release event from a single pressure relief device in a 3 calendar year period for any reason.

(4) Pressure relief devices routed to a control device, process, fuel gas system, or drain system. [40 CFR 63.2480(e)(4)]

(i) If all releases and potential leaks from a pressure relief device are routed through a closed vent system to a control device, back into the process, to the fuel gas system, or to a drain system, then you are not required to comply with 40 CFR 63.2480(e)(1), (2), or (3). [40 CFR 63.2480(e)(4)(i)]

(ii) Before the compliance dates specified in 40 CFR 63.2445(g), both the closed vent system and control device (if applicable) referenced in 40 CFR 63.2480(e)(4)(i) must meet the applicable requirements specified in 40 CFR 63.982(b) and (c)(2) of subpart SS. Beginning no later than the compliance dates specified in 40 CFR 63.2445(g), both the closed vent system and control device (if applicable) referenced in 40 CFR 63.2480(e)(4)(i) must meet the applicable requirements specified in 40 CFR 63.982(c)(2), 40 CFR 63.983, and 40 CFR 63.2450(e)(4) through (6). [40 CFR 63.2480(e)(4)(ii)]

(iii) The drain system (if applicable) referenced in 40 CFR 63.2480(e)(4)(i) must meet the applicable requirements specified in 40 CFR 63.2485(e). [40 CFR 63.2480(e)(4)(iii)]

(5) Pressure relief devices exempted from pressure release management requirements. The following types of pressure relief devices are not subject to the pressure release management requirements in 40 CFR 63.2480(e)(3). [40 CFR 63.2480(e)(5)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(i) Pressure relief devices in heavy liquid service, as defined in 40 CFR 63.1020 of subpart UU or 40 CFR 65.103(f). [40 CFR 63.2480(e)(5)(i)]
(ii) Thermal expansion relief valves. [40 CFR 63.2480(e)(5)(ii)]
(iii) Pressure relief devices on mobile equipment. [40 CFR 63.2480(e)(5)(iii)]
(iv) Pilot-operated pressure relief devices where the primary release valve is routed through a closed vent system to a control device or back into the process, to the fuel gas system, or to a drain system. [40 CFR 63.2480(e)(5)(iv)]
(v) Balanced bellows pressure relief devices where the primary release valve is routed through a closed vent system to a control device or back into the process, to the fuel gas system, or to a drain system. [40 CFR 63.2480(e)(5)(v)]

(6) Root cause analysis and corrective action analysis. A root cause analysis and corrective action analysis must be completed as soon as possible, but no later than 45 days after a release event. Special circumstances affecting the number of root cause analyses and/or corrective action analyses are provided in 40 CFR 63.2480(e)(6)(i) through (iii). [40 CFR 63.2480(e)(6)]
(i) You may conduct a single root cause analysis and corrective action analysis for a single emergency event that causes two or more pressure relief devices installed on the same equipment to release. [40 CFR 63.2480(e)(6)(i)]
(ii) Prior to June 3, 2024, you may conduct a single root cause analysis and corrective action analysis for a single emergency event that causes two or more pressure relief devices to release, regardless of the equipment served, if the root cause is reasonably expected to be a force majeure event, as defined in 40 CFR 63.2550. [40 CFR 63.2480(e)(6)(ii)]
(iii) Except as provided in 40 CFR 63.2480(e)(6)(i) and (ii), if more than one pressure relief device has a release during the same time period, an initial root cause analysis must be conducted separately for each pressure relief device that had a release. If the initial root cause analysis indicates that the release events have the same root cause(s), the initially separate root cause analyses may be recorded as a single root cause analysis and a single corrective action analysis may be conducted. [40 CFR 63.2480(e)(6)(iii)]

(7) Corrective action implementation. You must conduct a root cause analysis and corrective action analysis as specified in 40 CFR 63.2480(e)(3)(iii) and (e)(6), and you must implement the corrective action(s) identified in the corrective action analysis in accordance with the applicable requirements in 40 CFR 63.2480(e)(7)(i) through (iii). [40 CFR 63.2480(e)(7)]
(i) All corrective action(s) must be implemented within 45 days of the event for which the root cause and corrective action analyses were required or as soon thereafter as practicable. If you conclude that no corrective action should be implemented, you must record and explain the basis for that conclusion no later than 45 days following the event. [40 CFR 63.2480(e)(7)(i)]
(ii) For corrective actions that cannot be fully implemented within 45 days following the event for which the root cause and corrective action analyses were required, you

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

must develop an implementation schedule to complete the corrective action(s) as soon as practicable. [40 CFR 63.2480(e)(7)(ii)]

(iii) No later than 45 days following the event for which a root cause and corrective action analyses were required, you must record the corrective action(s) completed to date, and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates. [40 CFR 63.2480(e)(7)(iii)]

(8) Flowing pilot-operated pressure relief devices. For affected sources that commenced construction or reconstruction on or before December 17, 2019, you are prohibited from installing a flowing pilot-operated pressure relief device or replacing any pressure relief device with a flowing pilot-operated pressure relief device after August 12, 2023. For affected sources that commenced construction or reconstruction after December 17, 2019, you are prohibited from installing and operating flowing pilot-operated pressure relief devices. For purpose of compliance with 40 CFR 63.2480(e)(8), a flowing pilot-operated pressure relief device means the type of pilot-operated pressure relief device where the pilot discharge vent continuously releases emissions to the atmosphere when the pressure relief device is actuated. [40 CFR 63.2480(e)(8)]

2. Emission Limitations:
None

3. Testing Requirements:
Pursuant to 401 KAR 50:045, Section 1, performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

a. See 1. Operating Limitations b.(2.)(i). [40 CFR 63.2480(e)(2)(i)]

b. See 1. Operating Limitations b.(3.)(i). [40 CFR 63.2480(e)(3)(i)]

5. Specific Recordkeeping Requirements:

a. Pressure relief devices. Identify the pressure relief devices equipped with rupture disks, under the provisions of 40 CFR 63.2480(e)(2)(ii). [40 CFR 63.1022(b)(3)]

b. For each pressure relief device subject to the pressure release management work practice standards in 40 CFR 63.2480(e), you must keep the records specified in 63.2525(q)(1) through (3). [40 CFR 63.2525(q)]

(1) Records of the prevention measures implemented as required in 40 CFR 63.2480(e)(3)(ii). [40 CFR 63.2525(q)(1)]

(2) Records of the number of releases during each calendar year and, prior to June 3, 2024, the number of those releases for which the root cause was determined to be a force majeure event. Keep these records for the current calendar year and the past 5 calendar years. [40 CFR 63.2525(q)(2)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(3) For each release to the atmosphere, you must keep the records specified in 40 CFR 63.2525(q)(3)(i) through (iv). [40 CFR 63.2525(q)(3)]

(i) The start and end time and date of each pressure release to the atmosphere. [40 CFR 63.2525(q)(3)(i)]

(ii) Records of any data, assumptions, and calculations used to estimate of the mass quantity of each organic HAP released during the event. [40 CFR 63.2525(q)(3)(ii)]

(iii) Records of the root cause analysis and corrective action analysis conducted as required in 40 CFR 63.2480(e)(3)(iii), including an identification of the affected facility, a statement noting whether the event resulted from the same root cause(s) identified in a previous analysis and either a description of the recommended corrective action(s) or an explanation of why corrective action is not necessary under 40 CFR 63.2480(e)(7)(i). [40 CFR 63.2525(q)(3)(iii)]

(iv) For any corrective action analysis for which implementation of corrective actions are required in 40 CFR 63.2480(e)(7), a description of the corrective action(s) completed within the first 45 days following the discharge and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates. [40 CFR 63.2525(q)(3)(iv)]

6. <u>Specific Reporting Requirements</u>:

a. <u>Compliance report</u>. The compliance report must contain the information specified in 40 CFR 63.2520(e)(1) through (17). On and after August 12, 2023 or once the reporting template for this subpart has been available on the CEDRI website for 1 year, whichever date is later, you must submit all subsequent reports following the procedure specified in 40 CFR 63.9(k), except any medium submitted through mail must be sent to the attention of the Miscellaneous Organic Chemical Manufacturing Sector Lead. You must use the appropriate electronic report template on the CEDRI website (https://www.epa.gov/electronic-reporting-air-emissions/cedri) for this subpart. The date report templates become available will be listed on the CEDRI website. Unless the Administrator or delegated state agency or other authority has approved a different schedule for submission of reports under 40 CFR 63.9(i) and 40 CFR 63.10(a) of subpart A, the report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted. [40 CFR 63.2520(e)]

(1) Compliance reports for pressure relief devices subject to the requirements 40 CFR 63.2480(e) must include the information specified in 40 CFR 63.2520(e)(15)(i) through (iii). [40 CFR 63.2520(e)(15)]

(i) For pressure relief devices in organic HAP gas or vapor service, pursuant to 40 CFR 63.2480(e)(1), report the instrument readings and dates for all readings of 500 ppmv or greater. [40 CFR 63.2520(e)(15)(i)]

(ii) For pressure relief devices in organic HAP gas or vapor service subject to 40 CFR 63.2480(e)(2), report the instrument readings and dates of instrument monitoring conducted. [40 CFR 63.2520(e)(15)(ii)]

(iii) For pressure relief devices in organic HAP service subject to 40 CFR 63.2480(e)(3), report each pressure release to the atmosphere, including the start date, start time, and duration in minutes of the pressure release and an estimate of the mass quantity in pounds of each organic HAP released; the results of any root

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

cause analysis and corrective action analysis completed during the reporting period, including the corrective actions implemented during the reporting period; and, if applicable, the implementation schedule for planned corrective actions to be implemented subsequent to the reporting period. [40 CFR 63.2520(e)(15)(iii)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS FOR 40 CFR 63, Subpart FFFF - 8. COMPRESSORS IN ORGANIC HAP SERVICE

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.1019 through 63.1039, Table 1 (Subpart UU), National Emission Standards for Equipment Leaks - Control Level 2 Standards, as required by Table 6 of 40 CFR 63, Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

401 KAR 63:002, Section 2(1), 40 C.F.R. 63.1 through 63.16, Table 1 (Subpart A), General Provisions.

1. Operating Limitations:

a. Seal system standard. Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to the atmosphere, except as provided in 40 CFR 63.1021(b), 63.1036, 63.1037, and 40 CFR 63.1031(e) and (f). Each compressor seal system shall meet the applicable requirements specified in 40 CFR 63.1031(b)(1), (b)(2), or (b)(3). [40 CFR 63.1031(b)]

(1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure at all times; or [40 CFR 63.1031(b)(1)]

(2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that meets the requirements of either 40 CFR 63.1034 or 40 CFR 63.1021(b); or [40 CFR 63.1031(b)(2)]

(3) Equipped with a closed-loop system that purges the barrier fluid directly into a process stream. [40 CFR 63.1031(b)(3)]

b. Alternative compressor standard. [40 CFR 63.1031(f)]

(1) Any compressor that is designated, as described in 40 CFR 63.1022(e), as operating with an instrument reading of less than 500 parts per million above background shall operate at all times with an instrument reading of less than 500 parts per million. A compressor so designated is exempt from the requirements of 40 CFR 63.1031(b) through (d) if the compressor is demonstrated, initially upon designation, annually, and at other times requested by the Division to be operating with an instrument reading of less than 500 parts per million above background, as measured by the method specified in 40 CFR 63.1023(b) and, as applicable, 40 CFR 63.1023(c). [40 CFR 63.1031(f)(1)]

(2) The owner or operator shall record the dates and results of each compliance test including the background level measured and the maximum instrument reading measured during each compliance test. [40 CFR 63.1031(f)(2)]

c. Delay of repair. Delay of repair is allowed for any of the conditions specified in 40 CFR 63.1024(d)(1) through (d)(5). The owner or operator shall maintain a record of the facts that explain any delay of repairs and, where appropriate, why the repair was technically infeasible without a process unit shutdown. [40 CFR 63.1024(d)]

(1) Delay of repair of equipment for which leaks have been detected is allowed if repair within 15 days after a leak is detected is technically infeasible without a process unit

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

or affected facility shutdown. Repair of this equipment shall occur as soon as practical, but no later than the end of the next process unit or affected facility shutdown, except as provided in 40 CFR 63.1024(d)(5). [40 CFR 63.1024(d)(1)]

(2) Delay of repair of equipment for which leaks have been detected is allowed for equipment that is isolated from the process and that does not remain in regulated material service. [40 CFR 63.1024(d)(2)]

2. Emission Limitations:
None

3. Testing Requirements:
Pursuant to 401 KAR 50:045, Section 1, performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

a. Barrier fluid system. The barrier fluid shall not be in light liquid service. Each barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both. Each sensor shall be observed daily or shall be equipped with an alarm unless the compressor is located within the boundary of an unmanned plant site. [40 CFR 63.1031(c)]

b. Failure criterion and leak detection. The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion, a leak is detected and shall be repaired pursuant to 40 CFR 63.1024, as applicable. [40 CFR 63.1031(d)(1)]

5. Specific Recordkeeping Requirements:

a. The owner or operator shall keep records of the design criteria and an explanation of the design criteria; and any changes to these criteria and the reasons for the changes. [40 CFR 63.1031(d)(2)]

b. Special equipment designations: Compressors operating with an instrument reading of less than 500 parts per million above background. Identify the compressors that the owner or operator elects to designate as operating with an instrument reading of less than 500 parts per million above background, under the provisions of 40 CFR 63.1031(f). [40 CFR 63.1022(e)]

6. Specific Reporting Requirements:
None

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS FOR 40 CFR 63, Subpart FFFF - 9. SAMPLING CONNECTION SYSTEMS IN ORGANIC HAP SERVICE

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

401 KAR 63:002, Section 2(1), 40 C.F.R. 63.1 through 63.16, Table 1 (Subpart A), General Provisions.

1. Operating Limitations:

a. Equipment requirement. Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed vent system, except as provided in 40 CFR 63.1021(b), 63.1036, 63.1037, or 40 CFR 63.1032(d). Gases displaced during filling of the sample container are not required to be collected or captured. [40 CFR 63.1032(b)]

Sampling connection system means an assembly of equipment within a process unit or affected facility used during periods of representative operation to take samples of the process fluid. Equipment used to take nonroutine grab samples is not considered a sampling connection system. [63.1020 Definitions]

Closed-loop system means an enclosed system that returns process fluid to the process and is not vented directly to the atmosphere. [63.1020 Definitions]

Closed-purge system means a system or combination of systems and portable containers to capture purged liquids. Containers must be covered or closed when not being filled or emptied. [63.1020 Definitions]

b. Equipment design and operation. Each closed-purge, closed-loop, or closed vent system as required in 40 CFR 63.1032(b) shall meet the applicable requirements specified in 40 CFR 63.1032(c)(1) through (c)(5). [40 CFR 63.1032(c)]

(1) The system shall return the purged process fluid directly to a process line or to a fuel gas system that meets the requirements of either 40 CFR 63.1034 or 40 CFR 63.1021(b); or [40 CFR 63.1032(c)(1)]

(2) Be designed and operated to capture and transport all the purged process fluid to a control device that meets the requirements of either 40 CFR 63.1034 or 40 CFR 63.1021(b); or [40 CFR 63.1032(c)(3)]

(3) Collect, store, and transport the purged process fluid to a system or facility identified in 40 CFR 63.1032(c)(4)(i), (c)(4)(ii), or (c)(4)(iii). [40 CFR 63.1032(c)(4)]

(i) A waste management unit as defined in 40 CFR 63.111 or subpart G, if the waste management unit is subject to and operating in compliance with the provisions of 40 CFR part 63, subpart G, applicable to group 1 wastewater streams. If the purged process fluid does not contain any regulated material listed in Table 9 of 40 CFR part 63, subpart G, the waste management unit need not be subject to, and operated in compliance with the requirements of 40 CFR part 63, subpart G, applicable to group 1 wastewater steams provided the facility has a National Pollution Discharge

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Elimination System (NPDES) permit or sends the wastewater to an NPDES-permitted facility. [40 CFR 63.1032(c)(4)(i)]

(ii) A treatment, storage, or disposal facility subject to regulation under 40 CFR parts 262, 264, 265, or 266; or [40 CFR 63.1032(c)(4)(ii)]

(iii) A facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR part 261. [40 CFR 63.1032(c)(4)(iii)]

(4) Containers that are part of a closed purge system must be covered or closed when not being filled or emptied. [40 CFR 63.1032(c)(5)]

c. In-situ sampling systems. In-situ sampling systems and sampling systems without purges are exempt from the requirements of 40 CFR 63.1032(b) and (c). [40 CFR 63.1032(d)]

2. Emission Limitations:
None

3. Testing Requirements:
Pursuant to 401 KAR 50:045, Section 1, performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:
None

5. Specific Recordkeeping Requirements:
None

6. Specific Reporting Requirements:
None

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS FOR 40 CFR 63, Subpart FFFF - 10. OPEN ENDED VALVES OR LINES IN ORGANIC HAP SERVICE

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.1019 through 63.1039, Table 1 (Subpart UU), National Emission Standards for Equipment Leaks - Control Level 2 Standards, as required by Table 6 of 40 CFR 63, Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

401 KAR 63:002, Section 2(1), 40 C.F.R. 63.1 through 63.16, Table 1 (Subpart A), General Provisions.

1. **Operating Limitations:**
   a. Equipment and operational requirements. [40 CFR 63.1033(b)]
      (1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 63.1021(b), 63.1036, 63.1037, and 40 CFR 63.1033(c) and (d). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance. The operational provisions of 40 CFR 63.1033(b)(2) and (b)(3) also apply. [40 CFR 63.1033(b)(1)]
      (2) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 63.1033(b)(2)]
      (3) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with 40 CFR 63.1033(b)(1) at all other times. [40 CFR 63.1033(b)(3)]

   b. Emergency shutdown exemption. Open-ended valves or lines in an emergency shutdown system that are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR 63.1033(b). [40 CFR 63.1033(c)]

   c. Polymerizing materials exemption. Open-ended valves or lines containing materials that would autocatalytically polymerize or, would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR 63.1033(b) are exempt from the requirements of 40 CFR 63.1033(b). [40 CFR 63.1033(d)]

2. **Emission Limitations:**
   None

3. **Testing Requirements:**
   Pursuant to 401 KAR 50:045, Section 1, performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. **Specific Monitoring Requirements:**
   None

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. **Specific Recordkeeping Requirements:**
None

6. **Specific Reporting Requirements:**
None

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS FOR 40 CFR 63, Subpart FFFF - 11. PROCESS WASTEWATER GENERAL REQUIREMENTS

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

Pursuant to 40 CFR 63, Subpart FFFF, Section 63.2485(a) and Table 7 of Subpart FFFF, the permittee shall comply with the following requirements:

For each	Comply with
Process wastewater stream	The requirements in 40 CFR 63.132 through 63.148 and the requirements referenced therein, except as specified in 63.2485

Pursuant to 40 CFR 63.2485(b): *Wastewater HAP*. Where 40 CFR 63.105 and 40 CFR 63.132 through 63.148 refer to compounds in table 9 of subpart G of this part 63, the compounds in tables 8 and 9 to 40 CFR 63, Subpart FFFF apply for the purposes of this subpart FFFF.

Pursuant to 40 CFR 63.2550(i):

Wastewater means water that is discarded from an MCPU or control device through a POD and that contains either: an annual average concentration of compounds in tables 8 and 9 to Subpart FFFF of at least 5 ppmw and has an annual average flowrate of 0.02 liters per minute or greater; or an annual average concentration of compounds in tables 8 and 9 to Subpart FFFF of at least 10,000 ppmw at any flowrate. Wastewater means process wastewater or maintenance wastewater. The following are not considered wastewater for the purposes of 40 CFR 63, Subpart FFFF:

1) Stormwater from segregated sewers;
2) Water from fire-fighting and deluge systems, including testing of such systems;
3) Spills;
4) Water from safety showers;
5) Samples of a size not greater than reasonably necessary for the method of analysis that is used;
6) Equipment leaks;
7) Wastewater drips from procedures such as disconnecting hoses after cleaning lines; and
8) Noncontact cooling water.

Pursuant to 40 CFR 63.101(b):

Process wastewater means wastewater which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product. Examples are product tank drawdown or feed tank drawdown; water formed during a chemical reaction or used as a reactant; water used to wash impurities from organic products or reactants; water used to cool or quench organic vapor streams through direct contact; and condensed steam from jet ejector systems pulling vacuum on vessels containing organics.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Pursuant to 40 CFR 63.2485(c):

Group 1 wastewater. For the purposes of 40 CFR 63, Subpart FFFF, a process wastewater stream is Group 1 for compounds in tables 8 and 9 to 40 CFR 63, Subpart FFFF if any of the conditions specified in 40 CFR 63.2485(c)(1) through (3) are met.

(1) The total annual average concentration of compounds in table 8 to 40 CFR 63, Subpart FFFF is greater than or equal to 10,000 ppmw at any flowrate, and the total annual load of compounds in table 8 to 40 CFR 63, Subpart FFFF is greater than or equal to 200 lb/yr.

(2) The total annual average concentration of compounds in table 8 to 40 CFR 63, Subpart FFFF is greater than or equal to 1,000 ppmw, and the annual average flowrate is greater than or equal to 1 l/min.

(3) The combined total annual average concentration of compounds in tables 8 and 9 to 40 CFR 63, Subpart FFFF is greater than or equal to 30,000 ppmw, and the combined total annual load of compounds in tables 8 and 9 to 40 CFR 63, Subpart FFFF is greater than or equal to 1 tpy.

Pursuant to 40 CFR 63.101(b):

Residual means any liquid or solid material containing Table 8 or 9 compounds that is removed from a wastewater stream by a waste management unit or treatment process that does not destroy organics (nondestructive unit). Examples of residuals from nondestructive wastewater management units are: the organic layer and bottom residue removed by a decanter or organic-water separator and the overheads from a steam stripper or air stripper. Examples of materials which are not residuals are: silt; mud; leaves; bottoms from a steam stripper or air stripper; and sludges, ash, or other materials removed from wastewater being treated by destructive devices such as biological treatment units and incinerators.

1. <u>Operating Limitations</u>:

a. You must be in compliance with the emission limits and work practice standards in table 7 to 40 CFR 63, Subpart FFFF at all times. [40 CFR 63.2450(a)]

(1) Process wastewater stream shall comply with 40 CFR 63.132 through 63.148 and the requirements references therein, except as specified in 40 CFR 63.2485. [Item 1 of table 7 to 40 CFR 63, Subpart FFFF]

(2) Maintenance wastewater stream shall comply with 40 CFR 63.105 and the requirements references therein, except as specified in 40 CFR 63.2485. [Item 2 of table 7 to 40 CFR 63, Subpart FFFF]

(3) Liquid streams in an open system within an MCPU shall comply with 40 CFR 63.149 and the requirements references therein, except as specified in 40 CFR 63.2485. [Item 3 of table 7 to 40 CFR 63, Subpart FFFF]

b. <u>Requirements for Group 1 wastewater streams</u>. For wastewater streams that are Group 1 for Table 8 or 9 compounds, comply with 40 CFR 63.132(a)(2)(i) through (a)(2)(iv). [40 CFR 63.132(a)(2)]

(1) Comply with the applicable requirements for wastewater tanks, surface impoundments, containers, individual drain systems, and oil/water separators as specified in 40 CFR 63.133 through 40 CFR 63.137, except as provided in 40 CFR 63.132(a)(2)(i)(A) and (a)(2)(i)(B) and 40 CFR 63.138(a)(3). [40 CFR 63.132(a)(2)(i)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(i) Except as specified in 40 CFR 63.132(a)(2)(i)(C), the waste management units may be equipped with pressure relief devices that vent directly to the atmosphere provided the pressure relief device is not used for planned or routine venting of emissions. [40 CFR 63.132(a)(2)(i)(A)]

(ii) Except as specified in 40 CFR 63.132(a)(2)(i)(C), the pressure relief device remains in a closed position at all times except when it is necessary for the pressure relief device to open for the purpose of preventing physical damage or permanent deformation of the waste management unit in accordance with good engineering and safety practices. [40 CFR 63.132(a)(2)(i)(B)]

(2) Comply with the applicable requirements for control of Table 9 compounds as specified in 40 CFR 63.138. Alternatively, the owner or operator may elect to comply with the treatment provisions specified in 40 CFR 63.132(g). [40 CFR 63.132(a)(2)(ii)]

c. Owners or operators of sources subject to 40 CFR63, Subpart G shall not discard liquid or solid organic materials with a concentration of greater than 30,000 ppmw of total partially soluble HAP (PSHAP) and soluble HAP (SHAP) or greater than 10,000 ppmw of PSHAP (as determined by analysis of the stream composition, engineering calculations, or process knowledge, according to the provisions of 40 CFR 63.144(b)) from a chemical manufacturing process unit to water or wastewater, unless the receiving stream is managed and treated as a Group 1 wastewater stream. This prohibition does not apply to materials from the activities listed in 40 CFR 63.132(f)(1) through (f)(4). [40 CFR 63.132(f)]

(1) Equipment leaks; [40 CFR 63.132(f)(1)]

(2) Activities included in maintenance; [40 CFR 63.132(f)(2)]

(3) Spills; or [40 CFR 63.132(f)(3)]

(4) Samples of a size not greater than reasonably necessary for the method of analysis that is used. [40 CFR 63.132(f)(4)]

d. <u>Off-site treatment or on-site treatment not owned or operated by the source.</u> The owner or operator may elect to transfer a Group1 wastewater stream or residual removed from a Group 1 wastewater stream to an on-site treatment operation not owned or operated by the owner or operator of the source generating the wastewater stream or residual, or to an off-site treatment operation. [40 CFR 63.132(g)]

(1) The owner or operator transferring the wastewater stream or residual shall: [40 CFR 63.132(g)(1)]

(i) Comply with the provisions specified in 40 CFR 63.133 through 63.137 for each waste management unit that receives or manages a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream prior to shipment or transport. [40 CFR 63.132(g)(1)(i)]

(ii) Include a notice with the shipment or transport of each Group 1 wastewater stream or residual removed from a Group 1 wastewater stream. The notice shall state that the wastewater stream or residual contains organic hazardous air pollutants that are to be treated in accordance with the provisions of 40 CFR63, Subpart G. When the transport is continuous or ongoing (for example, discharge to a publicly-owned

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

treatment works), the notice shall be submitted to the treatment operator initially and whenever there is a change in the required treatment. [40 CFR 63.132(g)(1)(ii)]

(2) The owner or operator may not transfer the wastewater stream or residual unless the transferee has submitted to the EPA a written certification that the transferee will manage and treat any Group 1 wastewater stream or residual removed from a Group 1 wastewater stream received from a source subject to the requirements of 40 CFR63, Subpart G in accordance with the requirements of either 40 CFR 63.133 through 63.147, or 40 CFR 63.102(b) of subpart F, or subpart D of this part if alternative emission limitations have been granted the transferor in accordance with those provisions. The certifying entity may revoke the written certification by sending a written statement to the EPA and the owner or operator giving at least 90 days notice that the certifying entity is rescinding acceptance of responsibility for compliance with the regulatory provisions listed in this paragraph. Upon expiration of the notice period, the owner or operator may not transfer the wastewater stream or residual to the treatment operation. [40 CFR 63.132(g)(2)]

(3) By providing this written certification to the EPA, the certifying entity accepts responsibility for compliance with the regulatory provisions listed in paragraph (g)(2) of this section with respect to any shipment of wastewater or residual covered by the written certification. Failure to abide by any of those provisions with respect to such shipments may result in enforcement action by the EPA against the certifying entity in accordance with the enforcement provisions applicable to violations of these provisions by owners or operators of sources. [40 CFR 63.132(g)(3)]

(4) Written certifications and revocation statements, to the EPA from the transferees of wastewater or residuals shall be signed by the responsible official of the certifying entity, provide the name and address of the certifying entity, and be sent to the appropriate EPA Regional Office at the addresses listed in 40 CFR 63.13. Such written certifications are not transferable by the treater. [40 CFR 63.132(g)(4)]

e. Offsite management and treatment option [40 CFR 63.2485(i)]

(1) If you ship wastewater to an offsite treatment facility that meets the requirements of 40 CFR 63.138(h), you may elect to document in your notification of compliance status report that the wastewater will be treated as hazardous waste at a facility that meets the requirements of 40 CFR 63.138(h) as an alternative to having the offsite facility submit the certification specified in 40 CFR 63.132(g)(2). [40 CFR 63.2485(i)(1)]

(2) As an alternative to the management and treatment options specified in 40 CFR 63.132(g)(2), any affected wastewater stream (or residual removed from an affected wastewater stream) with a total annual average concentration of compounds in Table 8 to 40 CFR 63, Subpart FFFF less than 50 ppmw may be transferred offsite in accordance with 40 CFR 63.2485(i)(2)(i) and (ii). [40 CFR 63.2485(i)(2)]

(i) The transferee (or you) must demonstrate that less than 5 percent of the HAP in Table 9 to 40 CFR 63, Subpart FFFF is emitted from the waste management units up to the activated sludge unit. [40 CFR 63.2485(i)(2)(i)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(ii) The transferee must treat the wastewater stream or residual in a biological treatment unit in accordance with the requirement in 40 CFR 63.2485(i)2)(iii) and the requirements in 40 CFR 63.138 and 63.145 and the requirements referenced therein. [40 CFR 63.2485(i)(2)(ii)]

(iii)Beginning no later than the compliance dates specified in 40 CFR 63.2445(g), the requirement of 40 CFR 63.145(a)(3) no longer applies. Instead, the transferee must comply with the conditions specified in 40 CFR 63.2450(g)(6). [40 CFR 63.2485(i)(2)(iii)]

2. Emission Limitations:
None

3. Testing Requirements:

a. Determine wastewater streams to be controlled for Table 8 and 9 compounds. Determine whether each wastewater stream requires control for Table 8 or 9 compounds by complying with the requirements in either 40 CFR 63.132(a)(1)(i) or (a)(1)(ii). [40 CFR 63.132(a)(1)]
   (1) Comply with 40 CFR 63.132(c), determining whether the wastewater stream is Group 1 or Group 2 for Table 8 and 9 compounds; or [40 CFR 63.132(a)(1)(i)]
   (2) Comply with 40 CFR 63.132(e), designating the wastewater stream as a Group 1 wastewater stream. [40 CFR 63.132(a)(1)(ii)]

b. How to determine Group 1 or Group 2 status for Table 8 and 9 compounds in 40 CFR 63, Subpart FFFF. This paragraph provides instructions for determining whether a wastewater stream is Group 1 or Group 2 for Table 8 and 9 compounds. Total annual average concentration shall be determined according to the procedures specified in 40 CFR 63.144(b). Annual average flow rate shall be determined according to the procedures specified in 40 CFR 63.144(c). [40 CFR 63.132(c)]
   Group 1 wastewater. Section 63.132(c)(1) (i) and (ii) do not apply. For the purposes Subpart FFFF, a process wastewater stream is Group 1 for compounds in tables 8 and 9 Subpart FFFF if any of the conditions specified in 40 CFR 63.2485(c)(1) through (3) are met. [40 CFR 63.2485(c)]
   (1) The total annual average concentration of compounds in table 8 to 40 CFR 63, Subpart FFFF is greater than or equal to 10,000 ppmw at any flowrate, and the total annual load of compounds in table 8 to 40 CFR 63, Subpart FFFF is greater than or equal to 200 lb/yr. [40 CFR 63.2485(c)(1)]
   (2) The total annual average concentration of compounds in table 8 to 40 CFR 63, Subpart FFFF is greater than or equal to 1,000 ppmw, and the annual average flowrate is greater than or equal to 1 l/min. [40 CFR 63.2485(c)(2)]
   (3) The combined total annual average concentration of compounds in tables 8 and 9 to 40 CFR 63, Subpart FFFF is greater than or equal to 30,000 ppmw, and the combined total annual load of compounds in tables 8 and 9 to 40 CFR 63, Subpart FFFF is greater than or equal to 1 tpy. [40 CFR 63.2485(c)(3)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(4) A wastewater stream is a Group 2 wastewater stream for Table 8 and 9 compounds if it is not a Group 1 wastewater stream for Table 8 and 9 compounds by the criteria in 40 CFR 63.2485(c). [40 CFR 63.132(c)(2)]

(5) The owner or operator of a Group 2 wastewater shall re-determine group status for each Group 2 stream, as necessary, to determine whether the stream is Group 1 or Group 2 whenever process changes are made that could reasonably be expected to change the stream to a Group 1 stream. Examples of process changes include, but are not limited to, changes in production capacity, production rate, feedstock type, or whenever there is a replacement, removal, or addition of recovery or control equipment. For purposes of this paragraph, process changes do not include: process upsets; unintentional, temporary process changes; and changes that are within the range on which the original determination was based. [40 CFR 63.132(c)(3)]

c. How to designate a Group 1 wastewater stream. The owner or operator may elect to designate a wastewater stream a Group 1 wastewater stream in order to comply with 40 CFR 63.132(a)(1) or (b)(1). To designate a wastewater stream or a mixture of wastewater streams a Group 1 wastewater stream, the procedures specified in 40 CFR 63.132(e)(1) and (e)(2) and 40 CFR 63.144(a)(2) of 40 CFR 63 Subpart G shall be followed. [40 CFR 63.132(e)]

(1) From the point of determination for each wastewater stream that is included in the Group 1 designation to the location where the owner or operator elects to designate such wastewater stream(s) as a Group 1 wastewater stream, the owner or operator shall comply with all applicable emission suppression requirements specified in 40 CFR 63.133 through 63.137. [40 CFR 63.132(e)(1)]

(2) From the location where the owner or operator designates a wastewater stream or mixture of wastewater streams to be a Group 1 wastewater stream, such Group 1 wastewater stream shall be managed in accordance with all applicable emission suppression requirements specified in 40 CFR 63.133 through 63.137 and with the treatment requirements in 40 CFR 63.138 of this part. [40 CFR 63.132(e)(2)]

Designate as Group 1. An owner or operator may designate as a Group 1 wastewater stream a single wastewater stream or a mixture of wastewater streams. The owner or operator is not required to determine the concentration or flow rate for each designated Group 1 wastewater stream for the purposes. [40 CFR 63.144(a)(2)]

4. Specific Monitoring Requirements:

None

5. Specific Recordkeeping Requirements:

a. The owner or operator transferring a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream in accordance with 40 CFR 63.132(g) shall keep a record of the notice sent to the treatment operator stating that the wastewater stream or residual contains organic hazardous air pollutants which are required to be managed and treated in accordance with the provisions of 40 CFR 63, Subpart G. [40 CFR 63.147(a)]

b. Requirements for Group 2 wastewater streams. For Group 2 wastewater streams, the owner or operator shall keep in a readily accessible location the records specified in 40 CFR 63.147(b)(8)(i) through (iv). [40 CFR 63.147(b)(8)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(1) Process unit identification and description of the process unit. [40 CFR 63.147(b)(8)(i)]
(2) Stream identification code. [40 CFR 63.147(b)(8)(ii)]
(3) For existing sources, concentration of table 8 and 9 compound(s) in parts per million, by weight. Include document of the methodology used to determine concentration. [40 CFR 63.147(b)(8)(iii)]
(4) Flow rate in liter per minute. [40 CFR 63.147(b)(8)(iv)]

c. If the owner or operator uses process knowledge to determine the annual average concentration of a wastewater stream as specified in 40 CFR 63.144(b)(3) of 40 CFR 63 and/or uses process knowledge to determine the annual average flow rate as specified in 40 CFR 63.144(c)(1), and determines that the wastewater stream is not a Group 1 wastewater stream, the owner or operator shall keep in a readily accessible location the documentation of how process knowledge was used to determine the annual average concentration and/or the annual average flow rate of the wastewater stream. [40 CFR 63.147(f)]

6. <u>Specific Reporting Requirements</u>:

a. The owner or operator shall submit the information specified in 40 CFR 63.146(b)(1) through (b)(9) as part of the Notification of Compliance Status. [40 CFR 63.146(b)]
(1) Requirements for Group 2 wastewater streams. For Group 2 wastewater streams, the owner or operator shall include the information specified in 40 CFR 63.146(b)(1)(i) through (iv) in the Notification of Compliance Status Report. This information may be submitted in any form. Table 15 of 40 CFR 63, Subpart G is an example. [40 CFR 63.146(b)(1)]
(i) Process unit identification and description of the process unit. [40 CFR 63.146(b)(1)(i)]
(ii) Stream identification code. [40 CFR 63.146(b)(1)(ii)]
(iii) For existing sources, concentration of table 9 compound(s) in parts per million, by weight. For new sources, concentration of table 8 and/or table 9 compound(s) in parts per million, by weight. Include documentation of the methodology used to determine concentration. [40 CFR 63.146(b)(1)(iii)]
(iv) Flow rate in liter per minute. [40 CFR 63.146(b)(1)(iv)]
(2) For each new and existing source, the owner or operator shall submit the information specified in table 15 of 40 CFR 63, Subpart G for Table 8 and/or Table 9 compounds. [40 CFR 63.146(b)(2)]
(3) For each treatment process identified in table 15 of 40 CFR 63, Subpart G that receives, manages, or treats a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream, the owner or operator shall submit the information specified in table 17 of 40 CFR63, Subpart G. [40 CFR 63.146(b)(4)]
(4) For each waste management unit identified in table 15 of 40 CFR 63, Subpart G that receives or manages a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream, the owner or operator shall submit the information specified in table 18 of 40 CFR 63, Subpart G. [40 CFR 63.146(b)(5)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(5) For each residual removed from a Group 1 wastewater stream, the owner or operator shall report the information specified in table 19 of 40 CFR 63, Subpart G. [40 CFR 63.146(b)(6)]
(6) For each treatment process used to comply with 40 CFR 63.138(f), the owner or operator shall submit the information specified in 40 CFR 63.146(b)(8)(i). [40 CFR 63.146(b)(8)]
  (i) For Items 1 and 2 in table 12 of 40 CFR63, Subpart G, the owner or operator shall submit the information specified in 40 CFR 63.146(b)(8)(i)(A) and (b)(8)(i)(B). [40 CFR 63.146(b)(8)(i)]
    (A) The information on parameter ranges specified in 40 CFR 63.152(b)(2) for the parameters approved by the Division, unless the parameter range has already been established in the operating permit. [40 CFR 63.146(b)(8)(i)(A)]
    (B) Results of the initial measurements of the parameters approved by the Division and any applicable supporting calculations. [40 CFR 63.146(b)(8)(i)(B)]
(7) For each waste management unit or treatment process used to comply with 40 CFR 63.138(f), the owner or operator shall submit the information specified in 40 CFR 63.146(b)(9)(ii). [40 CFR 63.146(b)(9)]
  (i) Results of the performance test specified in 40 CFR 63.138(j)(2). Performance test results shall include operating ranges of key process and control parameters during the performance test; the value of each parameter being monitored in accordance with 40 CFR 63.143; and applicable supporting calculations. [40 CFR 63.146(b)(9)(ii)]
    (A) Offsite management and treatment option. (1) If you ship wastewater to an offsite treatment facility that meets the requirements of 40 CFR 63.138(h), you may elect to document in your notification of compliance status report that the wastewater will be treated as hazardous waste at a facility that meets the requirements of 40 CFR 63.138(h) as an alternative to having the offsite facility submit the certification specified in 40 CFR 63.132(g)(2). [40 CFR 63.2485 (i)]

b. Reporting. [40 CFR 63.2450(m)]
(1) When 40 CFR 63.2455 through 63.2490 reference other subparts in this part 63 that use the term "periodic report," it means "compliance report" for the purposes of 40 CFR 63, Subpart FFFF. The compliance report must include the information specified in 40 CFR 63.2520(e), as well as the information specified in referenced subparts. [40 CFR 63.2450(m)(1)]
(2) When there are conflicts between 40 CFR 63, Subpart FFFF and referenced subparts for the due dates of reports required by 40 CFR 63, Subpart FFFF, reports must be submitted according to the due dates presented in 40 CFR 63, Subpart FFFF. [40 CFR 63.2450(m)(2)]
(3) Excused excursions, as defined in 40 CFR 63, subparts G and SS, are not allowed. [40 CFR 63.2450(m)(3)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS FOR 40 CFR 63, Subpart FFFF - 12. WASTEWATER COLLECTION SYSTEM

Description
Individual drain systems, junction boxes, and sewers receiving or managing a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream.

Pursuant to 40 CFR 63.101(b):

Individual drain system means the stationary system used to convey wastewater streams or residuals to a waste management unit or to discharge or disposal. The term includes hard-piping, all process drains and junction boxes, together with their associated sewer lines and other junction boxes, manholes, sumps, and lift stations, conveying wastewater streams or residuals. A segregated stormwater sewer system, which is a drain and collection system designed and operated for the sole purpose of collecting rainfall runoff at a facility, and which is segregated from all other individual drain systems, is excluded from this definition.

Junction box means a manhole or access point to a wastewater sewer line or a lift station.

Sewer line means a lateral, trunk line, branch line, or other conduit including, but not limited to, grates, trenches, etc., used to convey wastewater streams or residuals to a downstream waste management unit.

Water seal controls means a seal pot, p-leg trap, or other type of trap filled with water (e.g, flooded sewers that maintain water levels adequate to prevent air flow through the system) that creates a water barrier between the sewer line and the atmosphere. The water level of the seal must be maintained in the vertical leg of a drain in order to be considered a water seal.

APPLICABLE REGULATIONS:
401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.1019 through 63.1039, Table 1 (Subpart UU), National Emission Standards for Equipment Leaks - Control Level 2 Standards, as required by Table 6 of 40 CFR 63, Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

1. **Operating Limitations:**
   a. For each individual drain system that receives or manages a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream, the owner or operator shall comply with the requirements of 40 CFR 63.136(b), (c), and (d) or with (e), (f), and (g). [40 CFR 63.136(a)]
   Permittee has chosen to comply with 63.136 (e), (f), and (g).

   b. Each drain shall be equipped with water seal controls or a tightly fitting cap or plug. The owner or operator shall comply with 40 CFR 63.136(e)(1)(i) and (e)(1)(ii). [40 CFR 63.136(e)(1)]
      (1) For each drain equipped with a water seal, the owner or operator shall ensure that the water seal is maintained. For example, a flow-monitoring device indicating positive flow from a main to a branch water line supplying a trap or water being continuously

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

dripped into the trap by a hose could be used to verify flow of water to the trap. Visual observation is also an acceptable alternative. [40 CFR 63.136(e)(1)(i)]

(2) If a water seal is used on a drain receiving a Group 1 wastewater, the owner or operator shall either extend the pipe discharging the wastewater below the liquid surface in the water seal of the receiving drain, or install a flexible shield (or other enclosure which restricts wind motion across the open area between the pipe and the drain) that encloses the space between the pipe discharging the wastewater to the drain receiving the wastewater. (Water seals which are used on hubs receiving Group 2 wastewater for the purpose of eliminating cross ventilation to drains carrying Group 1 wastewater are not required to have a flexible cap or extended subsurface discharging pipe.) [40 CFR 63.136(e)(1)(ii)]

c. Each junction box shall be equipped with a tightly fitting solid cover (i.e., no visible gaps, cracks, or holes) which shall be kept in place at all times except during inspection and maintenance. If the junction box is vented, the owner or operator shall comply with the requirements in 40 CFR 63.136(e)(2)(ii)(A) and (B). [40 CFR 63.136(e)(2)]

(1) If the junction box is filled and emptied by gravity flow (i.e., there is no pump) or is operated with no more than slight fluctuations in the liquid level, the owner or operator may vent the junction box to the atmosphere provided that the junction box complies with the requirements in 40 CFR 63.136(e)(2)(ii)(A) and (e)(2)(ii)(B). [40 CFR 63.136(e)(2)(ii)]

(i) The vent pipe shall be at least 90 centimeters in length and no greater than 10.2 centimeters in nominal inside diameter. [40 CFR 63.136(e)(2)(ii)(A)]

(ii) Water seals shall be installed and maintained at the wastewater entrance(s) to or exit from the junction box restricting ventilation in the individual drain system and between components in the individual drain system. The owner or operator shall demonstrate (e.g., by visual inspection or smoke test) upon request by the Division that the junction box water seal is properly designed and restricts ventilation. [40 CFR 63.136(e)(2)(ii)(B)]

d. Each sewer line shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visible gaps or cracks in joints, seals, or other emission interfaces. [40 CFR 63.136(e)(3)]

(1) Individual drain systems. The provisions of 40 CFR 63.136(e)(3) apply except as specified in 40 CFR 63.136(e)(1). [40 CFR 63.2485(e)]

(i) A sewer line connected to drains that are in compliance with 40 CFR 63.136(e)(1) may be vented to the atmosphere, provided that the sewer line entrance to the first downstream junction box is water sealed, and the sewer line vent pipe is designed as specified in 40 CFR 63.136(e)(2)(ii)(A). [40 CFR 63.2485(e)(1)]

2. Emission Limitations:

None

3. Testing Requirements:

Pursuant to 401 KAR 50:045, Section 1, performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

a. For each individual drain system that receives, manages, or treats a Group 1 wastewater stream, a residual removed from a Group 1 wastewater stream, a recycled Group 1 wastewater stream, or a recycled residual removed from a Group 1 wastewater stream, the owner or operator shall comply with the inspection requirements specified in table 11 to Subpart G. [40 CFR 63.143(a)]

b. Equipment used to comply with 40 CFR 63.136(e)(1), (e)(2), or (e)(3) shall be inspected as follows: Each drain using a tightly fitting cap or plug shall be visually inspected initially, and semi-annually thereafter, to ensure caps or plugs are in place and that there are no gaps, cracks, or other holes in the cap or plug. [40 CFR 63.136(f)(1)]
   (1) For individual drain systems complying with 63.136(e)(2) and 63.136(f)(1), the permittee shall visually inspect all drains using tightly-fitted caps or plugs initially, and semi-annually thereafter, to ensure caps and plugs are in place and properly installed. [Table 11 of 40 CFR 63, Subpart G]

c. For individual drain systems complying with 40 CFR 63.136(e)(1), the permittee shall visually verify initially, and semi-annually thereafter, that sufficient water is present to properly maintain integrity of water seals. [Table 11 to 40 CFR 63, Subpart G]

d. Each junction box shall be visually inspected initially, and semi-annually thereafter, to ensure that there are no gaps, cracks, or other holes in the cover. [40 CFR 63.136(f)(2)]
   (1) For individual drain systems complying with 63.136(f)(2), the permittee shall inspect initially, and semi-annually thereafter, all junction boxes to ensure covers are in place and have no visible gaps, cracks, or holes. Inspection shall be visual or by smoke test. [Table 11 to 40 CFR 63, Subpart G]

e. The unburied portion of each sewer line shall be visually inspected initially, and semi-annually thereafter, for indication of cracks or gaps that could result in air emissions. [40 CFR 63.136(f)(3)]
   (1) For individual drain systems complying with 63.136(f)(3), the permittee shall visually inspect initially, and semi-annually thereafter, the unburied portion of all sewer lines for cracks and gaps. [Table 11 to 40 CFR 63, Subpart G]

f. Except as provided in 40 CFR 63.140 of 40 CFR63, Subpart G, when a gap, hole, or crack is identified in a joint or cover, first efforts at repair shall be made no later than 5 calendar days after identification, and repair shall be completed within 15 calendar days after identification. [40 CFR 63.136(g)]

g. Delay of repair of equipment for which a control equipment failure or a gap, crack, tear, or hole has been identified, is allowed if the repair is technically infeasible without a shutdown, as defined in 40 CFR 63.101 of subpart F of this part, or if the owner or operator determines that emissions of purged material from immediate repair would be greater than the emissions likely to result from delay of repair. Repair of this equipment shall occur by the end of the next shutdown. [40 CFR 63.140(a)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

h. Delay of repair of equipment for which a control equipment failure or a gap, crack, tear, or hole has been identified, is allowed if the equipment is emptied or is no longer used to treat or manage Group 1 wastewater streams or residuals removed from Group 1 wastewater streams. [40 CFR 63.140(b)]

i. Delay of repair of equipment for which a control equipment failure or a gap, crack, tear, or hole has been identified is also allowed if additional time is necessary due to the unavailability of parts beyond the control of the owner or operator. Repair shall be completed as soon as practical. The owner or operator who uses this provision shall comply with the requirements of 40 CFR 63.147(b)(7) to document the reasons that the delay of repair was necessary. [40 CFR 63.140(c)]

5. Specific Recordkeeping Requirements:

a. A record that each waste management unit inspection required by 40 CFR 63.136 of 40 CFR63, Subpart G was performed. [40 CFR 63.147(b)(1)]

b. Documentation of a decision to use a delay of repair due to unavailability of parts, as specified in 40 CFR 63.140(c), shall include a description of the failure, the reason additional time was necessary (including a statement of why replacement parts were not kept on site and when the manufacturer promised delivery), and the date when repair was completed. [40 CFR 63.147(b)(7)]

6. Specific Reporting Requirements:

For each waste management unit that receives, manages, or treats a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream, the owner or operator shall submit as part of the next Periodic Report required by 40 CFR 63.152(c) the results of each inspection required by 40 CFR 63.143(a) in which a control equipment failure was identified. Control equipment failure is defined for each waste management unit in 40 CFR 63.136. Each Periodic Report shall include the date of the inspection, identification of each waste management unit in which a control equipment failure was detected, description of the failure, and description of the nature of and date the repair was made. [40 CFR 63.146(c)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS FOR 40 CFR 63, Subpart FFFF - 13. WASTEWATER TANKS

Equipment ID	Description	Capacity (gal)	Capacity (m^3)	Max TVP of Table 8 and 9 HAP (kPa)	Control Requirements
241/3201	Wastewater surge tank	25,000	95	< 13.1	63.133(a)(1)
928/3202	NLS-105 tank	15,000	57	NA (for capacity less than 75 m^3)	63.133(a)(1)
928/3203	Diversion tank	170,000	644	< 5.2	63.133(a)(1)
928/3205	Transfer tank	30,000	114	< 13.1	63.133(a)(1)
432/3001	Equalization tank	1.25 MM	4,732	< 5.2	63.133(a)(1)
432/3002	Equalization tank	1.25 MM	4,732	< 5.2	63.133(a)(1)
432/3003	Selector tank	70,000	265	< 5.2	63.133(a)(1)
313/3004	Storage tank	300,000	1,136	<5.2	63.133(a)(1)

Pursuant to 40 CFR 63.2485 (b): *Wastewater HAP*. Where 40 CFR 63.105 and 40 CFR 63.132 through 63.148 refer to compounds in table 9 of subpart G of this part 63, the compounds in tables 8 and 9 to 40 CFR 63, Subpart FFFF apply for the purposes of this subpart FFFF.

Pursuant to 40 CFR 63.101(b):

Wastewater tank means a stationary waste management unit that is designed to contain an accumulation of wastewater or residuals and is constructed primarily of non-earthen materials (e.g., wood, concrete, steel, plastic) which provide structural support. Wastewater tanks used for flow equalization are included in this definition.

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

1. **Operating Limitations:**
   a. For each wastewater tank that receives, manages, or treats a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream, the owner or operator shall comply with the requirements of either 40 CFR 63.133(a)(1) or (a)(2) as specified in table 10 to Subpart G. [40 CFR 63.133(a)]
      (1) When 40 CFR 63.133(a) refers to table 10 to subpart G, the maximum true vapor pressure in the table shall be limited to the HAP listed in tables 8 and 9 of 40 CFR 63 FFFF. [40 CFR 63.2485 (d)(2)]
      (2) Tanks with a storage capacity greater than or equal to 75 m3 but less than 151 m3, and with a maximum true vapor pressure of Table 8 and 9 HAP less than 13.1 kPa, shall comply with the requirements of 63.133(a)(1). [Table 10 of Subpart G]
      (3) Tanks with a storage capacity greater than or equal to 151 m^3, and with a maximum true vapor pressure of Table 8 and 9 HAP less than 5.2 kPa, shall comply with the requirements of 63.133(a)(1). [Table 10 of Subpart G]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(4) The owner or operator shall operate and maintain a fixed roof except that if the wastewater tank is used for heating wastewater, or treating by means of an exothermic reaction or the contents of the tank is sparged, the owner or operator shall comply with the requirements specified in 40 CFR 63.133(a)(2). [40 CFR 63.133(a)(1)]

b. The waste management units may be equipped with pressure relief devices that vent directly to the atmosphere provided the pressure relief device is not used for planned or routine venting of emissions. [40 CFR 63.132(a)(2)(i)(A)]

c. The pressure relief device remains in a closed position at all times except when it is necessary for the pressure relief device to open for the purpose of preventing physical damage or permanent deformation of the waste management unit in accordance with good engineering and safety practices. [40 CFR 63.132(a)(2)(i)(B)]

2. Emission Limitations:
None

3. Testing Requirements:
Pursuant to 401 KAR 50:045, Section 1, performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

a. 40 CFR 63.133(f), Each wastewater tank shall be inspected initially, and semi-annually thereafter, for improper work practices in accordance with 40 CFR 63.143. For wastewater tanks, improper work practice includes, but is not limited to, leaving open any access door or other opening when such door or opening is not in use.
(g) Each wastewater tank shall be inspected for control equipment failures as defined in 40 CFR 63.133(g)(1) according to the schedule in 40 CFR 63.133 (g)(3).
(1) Control equipment failures for wastewater tanks include, but are not limited to, the conditions specified in 40 CFR 63.133 (g)(1)(ix).
(ix) A gasket, joint, lid, cover, or door has a crack or gap, or is broken.
(2) The owner or operator shall inspect for the control equipment failures in 40 CFR 63.133(g)(1)(ix) initially, and semi-annually thereafter.
(i) For each wastewater tank that receives, manages, or treats a Group 1 wastewater stream, a residual removed from a Group 1 wastewater stream, a recycled Group 1 wastewater stream, or a recycled residual removed from a Group 1 wastewater stream, the owner or operator shall comply with the inspection requirements specified in table 11 of 40 CFR 63, Subpart G. [40 CFR 63.143(a)]
(ii) For wastewater tanks complying with 63.133(f) or 63.133(g), the permittee shall visually inspect the wastewater tank initially, and semi-annually thereafter, for control equipment failures and improper work practices. [Table 11 of 40 CFR 63, Subpart G]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. Except as provided in 40 CFR 63.140, when an improper work practice or a control equipment failure is identified, first efforts at repair shall be made no later than 5 calendar days after identification and repair shall be completed within 45 calendar days after identification. If a failure that is detected during inspections required by this section cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the owner or operator may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical. [40 CFR 63.133(h)]

c. Process wastewater provisions—delay of repair: [40 CFR 63.140]
   (1) Delay of repair of equipment for which a control equipment failure or a gap, crack, tear, or hole has been identified, is allowed if the repair is technically infeasible without a shutdown, as defined in 40 CFR 63.101 of subpart F of this part, or if the owner or operator determines that emissions of purged material from immediate repair would be greater than the emissions likely to result from delay of repair. Repair of this equipment shall occur by the end of the next shutdown. [40 CFR 63.140(a)]
   (2) Delay of repair of equipment for which a control equipment failure or a gap, crack, tear, or hole has been identified, is allowed if the equipment is emptied or is no longer used to treat or manage Group 1 wastewater streams or residuals removed from Group 1 wastewater streams. [40 CFR 63.140(b)]
   (3) Delay of repair of equipment for which a control equipment failure or a gap, crack, tear, or hole has been identified is also allowed if additional time is necessary due to the unavailability of parts beyond the control of the owner or operator. Repair shall be completed as soon as practical. The owner or operator who uses this provision shall comply with the requirements of 40 CFR 63.147(b)(7) to document the reasons that the delay of repair was necessary. [40 CFR 63.140(c)]

5. <u>Specific Recordkeeping Requirements</u>:

a. A record that each waste management unit inspection required by 40 CFR 63.133 was performed. [40 CFR 63.147(b)(1)]

b. Documentation of a decision to use an extension, as specified in 40 CFR 63.133 (h), which shall include a description of the failure, documentation that alternate storage capacity is unavailable, and specification of a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical. [40 CFR 63.147(b)(6)]

c. Documentation of a decision to use a delay of repair due to unavailability of parts, as specified in 40 CFR 63.140(c), shall include a description of the failure, the reason additional time was necessary (including a statement of why replacement parts were not kept on site and when the manufacturer promised delivery), and the date when repair was completed. [40 CFR 63.147(b)(7)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:

a. For each waste management unit that receives, manages, or treats a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream, the owner or operator shall submit as part of the next Periodic Report the results of each inspection required by 40 CFR 63.143(a) in which a control equipment failure was identified. Control equipment failure is defined for each waste management unit in 40 CFR 63.133. Each Periodic Report shall include the date of the inspection, identification of each waste management unit in which a control equipment failure was detected, description of the failure, and description of the nature of and date the repair was made. [40 CFR 63.146(c)]

b. If an extension is utilized in accordance with 40 CFR 63.133(h), the owner or operator shall include in the next periodic report the information specified in 40 CFR 63.133(h). [40 CFR 63.146(g)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS FOR 40 CFR 63, Subpart FFFF - 14. OPEN BIOLOGICAL TREATMENT SYSTEM

Equipment ID	Description	Capacity (gal)
432/3004	Aeration tank	1.25 MM
432/3005	Aeration tank	1.25 MM
421/5302	Splitter	
421/5308	E Clarifier	300,000
421/5309	W Clarifier	300,000

Pursuant to 40 CFR 63.2485 (b): *Wastewater HAP*. Where 40 CFR 63.105 and 40 CFR 63.132 through 63.148 refer to compounds in table 9 of subpart G of this part 63, the compounds in tables 8 and 9 to 40 CFR 63, Subpart FFFF apply for the purposes of this subpart FFFF.

Pursuant to 40 CFR 63.101(b):

Treatment process means a specific technique that removes or destroys the organics in a wastewater or residual stream such as a steam stripping unit, thin-film evaporation unit, waste incinerator, biological treatment unit, or any other process applied to wastewater streams or residuals to comply with 40 CFR 63.138. Most treatment processes are conducted in tanks. Treatment processes are a subset of waste management units.

Open biological treatment process means a biological treatment process that is not a closed biological treatment process as defined in this section.

Enhanced biological treatment system or *enhanced biological treatment process* means an aerated, thoroughly mixed treatment unit(s) that contains biomass suspended in water followed by a clarifier that removes biomass from the treated water and recycles recovered biomass to the aeration unit. The mixed liquor volatile suspended solids (biomass) is greater than 1 kilogram per cubic meter throughout each aeration unit. The biomass is suspended and aerated in the water of the aeration unit(s) by either submerged air flow or mechanical agitation. A thoroughly mixed treatment unit is a unit that is designed and operated to approach or achieve uniform biomass distribution and organic compound concentration throughout the aeration unit by quickly dispersing the recycled biomass and the wastewater entering the unit.

Residual means any liquid or solid material containing Table 8 or 9 compounds that is removed from a wastewater stream by a waste management unit or treatment process that does not destroy organics (nondestructive unit). Examples of residuals from nondestructive wastewater management units are: the organic layer and bottom residue removed by a decanter or organic-water separator and the overheads from a steam stripper or air stripper. Examples of materials which are not residuals are: silt; mud; leaves; bottoms from a steam stripper or air stripper; and sludges, ash, or other materials removed from wastewater being treated by destructive devices such as biological treatment units and incinerators.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

APPLICABLE REGULATIONS:
401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.1019 through 63.1039, Table 1 (Subpart UU), National Emission Standards for Equipment Leaks - Control Level 2 Standards, as required by Table 6 of 40 CFR 63, Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

1. Operating Limitations:

a. General requirements. Once a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream has been treated in accordance with 40 CFR 63, Subpart G, it is no longer subject to the requirements of 40 CFR 63, Subpart G. [40 CFR 63.138(a)]

b. Control options: Group 1 wastewater streams for Table 8 and 9 compounds. The owner or operator shall comply with either 40 CFR 63.138(b)(1) or (b)(2) for the control of Table 8 and 9 compounds at new or existing sources. [40 CFR 63.138(b)]
   (1) Other compliance options. Comply with the requirements specified in any one of 40 CFR 63.138(d), (e), (f), (g), (h), or (i). [40 CFR 63.138(c)(2)]
   Note: The permittee has chosen to comply with the 63.138(f) RMR option referenced by 63.138(b)(2).
   (2) Required mass removal (RMR) option. The owner or operator shall achieve the required mass removal (RMR) of Table 8 and Table 9 compounds at a new or existing source for a wastewater stream that is Group 1 for Table 8 and Table 9 compounds. For open biological treatment processes compliance shall be determined using the procedures specified in 40 CFR 63.145(f). [40 CFR 63.138(f)]

c. Biological treatment processes. Biological treatment processes in compliance with this section may be either open or closed biological treatment processes as defined in 40 CFR 63.111. An open biological treatment process in compliance with this section need not be covered and vented to a control device as required in 40 CFR 63.133 through 40 CFR 63.137. An open or a closed biological treatment process in compliance with this section and using 40 CFR 63.145(f) of 40 CFR 63, Subpart G to demonstrate compliance is not subject to the requirements of 40 CFR 63.133 through 40 CFR 63.137. Waste management units upstream of an open or closed biological treatment process shall meet the requirements of 40 CFR 63.133 through 40 CFR 63.137, as applicable. [40 CFR 63.138(a)(3)]

d. Residuals. For each residual removed from a Group 1 wastewater stream, the owner or operator shall control for air emissions by complying with 40 CFR 63.133–137 and by complying with one of the provisions in 40 CFR 63.138(k)(1) through (k)(4). [40 CFR 63.138(k)]
   (1) Recycle the residual to a production process or sell the residual for the purpose of recycling. Once a residual is returned to a production process, the residual is no longer subject to this section. [40 CFR 63.138(k)(1)]
   (2) Return the residual to the treatment process. [40 CFR 63.138(k)(2)]
   (3) Treat the residual to destroy the total combined mass flow rate of Table 8 and/or Table 9 compounds by 99 percent or more, as determined by the procedures specified in 40 CFR 63.145(c) or (d). [40 CFR 63.138(k)(3)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(4) Comply with the requirements for RCRA treatment options specified in 40 CFR 63.138(h). [40 CFR 63.138(k)(4)]

2. Emission Limitations:
None

3. Testing Requirements:

a. Design evaluations or performance tests for treatment processes. If an open biological treatment unit is used to comply with 40 CFR 63.138(f), the owner or operator shall comply with 40 CFR 63.145(f). Some biological treatment processes may not require a performance test. Refer to 40 CFR 63.145(h) and table 36 of 40 CFR 63, Subpart G to determine whether the open biological treatment process meets the criteria that exempt the owner or operator from conducting a performance test. [40 CFR 63.138(j)]

b. Performance tests and design evaluations for treatment processes. For each open biological treatment process, the owner or operator shall conduct a performance test as specified in this section. [40 CFR 63.145(a)(1)]

Note: Some open biological treatment processes may not require a performance test. Refer to 40 CFR 63.145(h) and table 36 of 40 CFR 63, Subpart G to determine whether the biological treatment process meets the criteria that exempt the owner or operator from conducting a performance test.

(1) Representative process unit operating conditions. Compliance shall be demonstrated for representative operating conditions. Operations during periods of startup, shutdown, or malfunction and periods of nonoperation shall not constitute representative conditions. The owner or operator shall record the process information that is necessary to document operating conditions during the test. [40 CFR 63.145(a)(3)]

(2) Representative treatment process or control device operating conditions. Performance tests shall be conducted when the treatment process or control device is operating at a representative inlet flow rate and concentration. If the treatment process or control device will be operating at several different sets of representative operating conditions, the owner or operator shall comply with 40 CFR 63.145(a)(4)(i) and (a)(4)(ii). The owner or operator shall record information that is necessary to document treatment process or control device operating conditions during the test. [40 CFR 63.145(a)(4)]

(i) *Range of operating conditions*. If the treatment process or control device will be operated at several different sets of representative operating conditions, performance testing over the entire range is not required. In such cases, the performance test results shall be supplemented with modeling and/or engineering assessments to demonstrate performance over the operating range. [40 CFR 63.145(a)(4)(i)]

(ii) *Consideration of residence time*. If concentration and/or flow rate to the treatment process or control device are not relatively constant (i.e., comparison of inlet and outlet data will not be representative of performance), the owner or operator shall consider residence time, when determining concentration and flow rate. [40 CFR 63.145(a)(4)(ii)]

(3) Testing equipment. All testing equipment shall be prepared and installed as specified in the applicable test methods, or as approved by the Division. [40 CFR 63.145(a)(5)]

(4) Compounds not required to be considered in performance tests or design evaluations. Compounds that meet the requirements specified in 40 CFR 63.145(a)(6)(i), (a)(6)(ii), or

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(a)(6)(iii) are not required to be included in the performance test. Concentration measurements based on Method 305 shall be adjusted by dividing each concentration by the compound-specific Fm factor listed in table 34 of 40 CFR 63, Subpart G. Concentration measurements based on methods other than Method 305 shall not be adjusted by the compound-specific Fm factor listed in table 34 of 40 CFR 63, Subpart G. [40 CFR 63.145(a)(6)]

(i) Compounds not used or produced by the chemical manufacturing process unit; or [40 CFR 63.145(a)(6)(i)]

(ii) Compounds with concentrations at the point of determination that are below 1 part per million by weight; or [40 CFR 63.145(a)(6)(ii)]

(iii) Compounds with concentrations at the point of determination that are below the lower detection limit where the lower detection limit is greater than 1 part per million by weight. The method shall be an analytical method for wastewater which has that compound as a target analyte. [40 CFR 63.145(a)(6)(iii)]

(5) When using a biological treatment process to comply with 40 CFR 63.138, the owner or operator may elect to calculate the AMR using a subset of Table 8 and/or Table 9 compounds determined at the point of determination or downstream of the point of determination with adjustment for concentration and flowrate changes made according to 40 CFR 63.144(b)(6) and 40 CFR 63.144(c)(4), respectively. All Table 8 and/or Table 9 compounds measured to determine the RMR, except as provided by 40 CFR 63.145(a)(6), shall be included in the RMR calculation. [40 CFR 63.145(a)(8)]

c. Open or closed aerobic biological treatment processes*: Required mass removal (RMR) option*. This paragraph applies to the use of performance tests that are conducted for open or closed aerobic biological treatment processes to demonstrate compliance with the mass removal provisions for Table 8 and/or Table 9 compounds. These compliance options are specified in 40 CFR 63.138(f). The owner or operator shall comply with the requirements specified in 40 CFR 63.145 (f)(1) through (6). Some compounds may not require a performance test. Refer to 40 CFR 63.145(h) and table 36 to Subpart G to determine which compounds may be exempt from the requirements of this paragraph. [40 CFR 63.145(f)]

(1) *Concentration in wastewater stream*. The concentration of Table 8 and/or Table 9 compounds shall be determined as provided in this paragraph. Concentration measurements to determine RMR shall be taken at the point of determination or downstream of the point of determination with adjustment for concentration change made according to 40 CFR 63.144(b)(6). Concentration measurements to determine AMR shall be taken at the inlet and outlet to the treatment process and as provided in 40 CFR 63.145(a)(7) for a series of treatment processes. Wastewater samples shall be collected using sampling procedures which minimize loss of organic compounds during sample collection and analysis and maintain sample integrity per 40 CFR 63.144(b)(5)(ii). The method shall be an analytical method for wastewater which has that compound as a target analyte. Samples may be grab samples or composite samples. Samples shall be taken at approximately equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of 3 runs. Concentration measurements based on Method 305 shall be adjusted by dividing each concentration by the compound-specific Fm factor listed in table 34 of 40 CFR 63, Subpart G. Concentration measurements based on methods other than Method 305 shall not adjust

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

by the compound-specific Fm factor listed in table 34 of 40 CFR 63, Subpart G. [40 CFR 63.145(f)(1)]

(2) *Flow rate*. Flow rate measurements to determine RMR shall be taken at the point of determination or downstream of the point of determination with adjustment for flow rate change made according to 40 CFR 63.144(c)(4). Flow rate measurements to determine AMR shall be taken at the inlet and outlet to the treatment process and as provided in 40 CFR 63.145(a)(7) for a series of treatment processes. Flow rate shall be determined using inlet and outlet flow measurement devices. Where the outlet flow is not greater than the inlet flow, a flow measurement device shall be used, and may be used at either the inlet or outlet. Flow rate measurements shall be taken at the same time as the concentration measurements. [40 CFR 63.145(f)(2)]

(3) *Calculation of RMR for open or closed aerobic biological treatment processes*. The required mass removal of Table 8 and/or Table 9 compounds for each Group 1 wastewater stream shall be calculated using Equation WW11 as specified. [40 CFR 63.145(f)(3)]

(4) The required mass removal is calculated by adding together the required mass removal for each Group 1 wastewater stream to be combined for treatment. [40 CFR 63.145(f)(4)]

(5) *Actual mass removal calculation procedure for open or closed aerobic biological treatment processes*. The actual mass removal (AMR) shall be calculated using Equation WW12 as specified in 40 CFR 63.145(f)(5)(i) when the performance test is performed across the open or closed aerobic biological treatment process only. If compliance is being demonstrated in accordance with 40 CFR 63.145(a)(7)(i), the AMR for the series shall be calculated using Equation WW13 in 40 CFR 63.145(f)(5)(ii). (This equation is for situations where treatment is performed in a series of treatment processes connected by hard-piping.) If compliance is being demonstrated in accordance with 40 CFR 63.145(a)(7)(ii), the AMR for the biological treatment process shall be calculated using Equation WW12 in 40 CFR 63.145(f)(5)(i). The AMR for the biological treatment process used in a series of treatment processes calculated using Equation WW12 shall be added to the AMR determined for each of the other individual treatment processes in the series of treatment processes. [40 CFR 63.145(f)(5)]

(6) *Compare RMR to AMR*. Compare the RMR calculated in Equation WW11 to the AMR calculated in either Equation WW12 or WW13, as applicable. Compliance is demonstrated if the AMR is greater than or equal to the RMR. [40 CFR 63.145(f)(6)]

d. Site-specific fraction biodegraded (Fbio). The compounds listed in table 9 of 40 CFR 63, Subpart G are divided into two sets for the purpose of determining whether Fbiomust be determined, and if Fbiomust be determined, which procedures may be used to determine compound-specific kinetic parameters. These sets are designated as lists 1 and 2 in table 36 of 40 CFR 63, Subpart G. [40 CFR 63.145(h)]

(1) Performance test exemption. If a biological treatment process meets the requirements specified in 40 CFR 63.145(h)(1)(i) and (h)(1)(ii), the owner or operator is not required to determine Fbioand is exempt from the applicable performance test requirements specified in 40 CFR 63.138. [40 CFR 63.145(h)(1)]

(i) The biological treatment process meets the definition of "enhanced biological treatment process" in 40 CFR 63.111. [40 CFR 63.145(h)(1)(i)]

(ii) At least 99 percent by weight of all compounds on table 36 of 40 CFR 63, Subpart G that are present in the aggregate of all wastewater streams using the biological treatment

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

process to comply with 40 CFR 63.138 are compounds on list 1 of table 36 of 40 CFR 63, Subpart G. [40 CFR 63.145(h)(1)(ii)]

(2) F_{bio} determination. If a biological treatment process does not meet the requirement specified in 40 CFR 63.145(h)(1)(i), the owner or operator shall determine Fbiofor the biological treatment process using the procedures in appendix C to part 63, and 40 CFR 63.145(h)(2)(ii). If a biological treatment process meets the requirements of 40 CFR 63.145(h)(1)(i) but does not meet the requirement specified in 40 CFR 63.145(h)(1)(ii), the owner or operator shall determine Fbiofor the biological treatment process using the procedures in appendix C to part 63, and 40 CFR 63.145(h)(2)(i). [40 CFR 63.145(h)(2)]

(i) *Enhanced biological treatment processes*. If the biological treatment process meets the definition of "enhanced biological treatment process" in 40 CFR 63.111 and the wastewater streams include one or more compounds on list 2 of table 36 of 40 CFR 63, Subpart G that do not meet the criteria in 40 CFR 63.145(h)(1)(ii), the owner or operator shall determine fbiofor the list 2 compounds using any of the procedures specified in appendix C of 40 CFR part 63. (The symbol "fbio" represents the site specific fraction of an individual Table 8 or Table 9 compound that is biodegraded.) The owner or operator shall calculate fbiofor the list 1 compounds using the defaults for first order biodegradation rate constants (K1) in table 37 of subpart G and follow the procedure explained in form III of appendix C, 40 CFR part 63, or any of the procedures specified in appendix C, 40 CFR part 63. [40 CFR 63.145(h)(2)(i)]

(ii) *Biological treatment processes that are not enhanced biological treatment processes*. For biological treatment processes that do not meet the definition for "enhanced biological treatment process" in 40 CFR 63.111, the owner or operator shall determine the fbiofor the list 1 and 2 compounds using any of the procedures in appendix C to part 63, except procedure 3 (inlet and outlet concentration measurements). (The symbol "fbio" represents the site specific fraction of an individual Table 8 or Table 9 compound that is biodegraded.) [40 CFR 63.145(h)(2)(ii)]

4. Specific Monitoring Requirements:

a. For each biological treatment unit used to comply with 40 CFR 63.138, the owner or operator shall comply with the monitoring requirements specified in table 12 to Subpart G. [40 CFR 63.143(b)]

(1) To comply with the required mass removal of Table 8 and/or Table 9 compound(s) from wastewater treated in a properly operated biological treatment unit, 40 CFR 63.138(f), and 63.138(g), the permittee shall monitor appropriate parameters as specified in 63.143(c) and approved by the permitting authority. Monitoring shall be done at the appropriate frequency and using the appropriate methods as specified in 63.143 and as approved by the permitting authority. [Table 12 to 40 CFR 63, Subpart G]

b. The owner or operator shall request approval to monitor appropriate parameters that demonstrate proper operation of the biological treatment unit. The request shall be submitted according to the procedures specified in 40 CFR 63.151(f), and shall include a description of planned reporting and recordkeeping procedures. The owner or operator shall include as part of the submittal the basis for the selected monitoring frequencies and the methods that will be used. The Director will specify appropriate reporting and

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

recordkeeping requirements as part of the review of the permit application or by other appropriate means. [40 CFR 63.143(c)]

c. For each parameter monitored in accordance with 40 CFR 63.143(c), the owner or operator shall establish a range that indicates proper operation of the treatment process. In order to establish the range, the owner or operator shall comply with the requirements specified in 40 CFR 63.146(b)(8)(ii). [40 CFR 63.143(f)]

d. Monitoring equipment shall be installed, calibrated, and maintained according to the manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately. [40 CFR 63.143(g)]

5. Specific Recordkeeping Requirements:

The owner or operator shall keep the records approved by the Administrator. [40 CFR 63.147(b)(4), For Item 1 of table 12 to 40 CFR 63, Subpart G]

6. Specific Reporting Requirements:

a. The owner or operator shall submit the information specified in 40 CFR 63.146(b)(1) through (b)(9) as part of the Notification of Compliance Status. [40 CFR 63.146(b)]

(1) For each treatment process used to comply with 40 CFR 63.138(f), the owner or operator shall submit the information specified in 40 CFR 63.146(b)(8)(i). [40 CFR 63.146(b)(8)]

(i) For Items 1 and 2 in table 12 of 40 CFR 63, Subpart G, the owner or operator shall submit the information specified in 40 CFR 63.146(b)(8)(i)(A) and (b)(8)(i)(B). [40 CFR 63.146(b)(8)(i)]

(A) The information on parameter ranges specified in 40 CFR 63.152(b)(2) for the parameters approved by the Division, unless the parameter range has already been established in the operating permit. [40 CFR 63.146(b)(8)(i)(A)]

(B) Results of the initial measurements of the parameters approved by the Division and any applicable supporting calculations. [40 CFR 63.146(b)(8)(i)(B)]

(2) For each waste management unit or treatment process used to comply with 40 CFR 63.138(f), the owner or operator shall submit the information specified in either 40 CFR 63.146(b)(9)(i) or (ii). [40 CFR 63.146(b)(9)]

(i) Results of the performance test specified in 40 CFR 63.138(j)(2). Performance test results shall include operating ranges of key process and control parameters during the performance test; the value of each parameter being monitored in accordance with 40 CFR 63.143; and applicable supporting calculations. If the performance test report is submitted electronically through the EPA's CEDRI in accordance with 40 CFR 63.152(h), the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was conducted may be submitted in the notification of compliance status report in lieu of the performance test results. The performance test results must be submitted to CEDRI by the date the notification of compliance status report is submitted [40 CFR 63.146(b)(9)(ii)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. For each treatment process used to comply with 40 CFR 63.138(f), the owner or operator shall submit as part of the next Periodic Report the information specified in 40 CFR 63.146(d)(1) for the monitoring required by 40 CFR 63.143(b). [40 CFR 63.146(d)]
   (1) For Item 1 in table 12, the owner or operator shall submit the results of measurements that indicate that the biological treatment unit is outside the range established in the Notification of Compliance Status or operating permit. Include the identification of the biological treatment unit, the parameter that was out of range and the date that the parameter is out of range [40 CFR 63.146(d)(1)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS FOR 40 CFR 63, Subpart FFFF - 15. CONTAINERS

Description
Containers handling, transferring, or storing a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream.

Pursuant to 40 CFR 63.101(b):

Container, as used in the wastewater provisions, means any portable waste management unit that has a capacity greater than or equal to 0.1 m^3 in which a material is stored, transported, treated, or otherwise handled. Examples of containers are drums, barrels, tank trucks, barges, dumpsters, tank cars, dump trucks, and ships.

Cover, as used in the wastewater provisions, means a device or system which is placed on or over a waste management unit containing wastewater or residuals so that the entire surface area is enclosed to minimize air emissions. A cover may have openings necessary for operation, inspection, and maintenance of the waste management unit such as access hatches, sampling ports, and gauge wells provided that each opening is closed when not in use. Examples of covers include a fixed roof installed on a wastewater tank, a lid installed on a container, and an air-supported enclosure installed over a waste management unit.

APPLICABLE REGULATIONS:
401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

1. Operating Limitations:

a. For each container that receives, manages, or treats a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream, the owner or operator shall comply with the requirements of 40 CFR 63.135(b) through (f). [40 CFR 63.135(a)]

b. The owner or operator shall operate and maintain a cover on each container used to handle, transfer, or store a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream in accordance with the following requirements: [40 CFR 63.135(b)]

(1) If the capacity of the container is greater than 0.42 m^3, the cover and all openings (e.g., bungs, hatches, sampling ports, and pressure relief devices) shall be maintained in accordance with the requirements specified in 40 CFR 63.148. [40 CFR 63.135(b)(1)]

(2) If the capacity of the container is less than or equal to 0.42 m^3, the owner or operator shall comply with either 40 CFR 63.135(b)(2)(i) or (b)(2)(ii). [40 CFR 63.135(b)(2)]

(i) The container must meet existing Department of Transportation specifications and testing requirements under 49 CFR part 178; or [40 CFR 63.135(b)(2)(i)]

(ii) The cover and all openings shall be maintained without leaks as specified in 40 CFR 63.148. [40 CFR 63.135(b)(2)(ii)]

(3) The cover and all openings shall be maintained in a closed position (e.g., covered by a lid) at all times that a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream is in the container except when it is necessary to use the opening for

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

filling, removal, inspection, sampling, or pressure relief events related to safety considerations. [40 CFR 63.135(b)(3)]

c. For containers with a capacity greater than or equal to 0.42 m^3, a submerged fill pipe shall be used when a container is being filled by pumping with a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream. [40 CFR 63.135(c)]
   (1) The submerged fill pipe outlet shall extend to no more than 6 inches or within two fill pipe diameters of the bottom of the container while the container is being filled. [40 CFR 63.135(c)(1)]
   (2) The cover shall remain in place and all openings shall be maintained in a closed position except for those openings required for the submerged fill pipe and for venting of the container to prevent physical damage or permanent deformation of the container or cover. [40 CFR 63.135(c)(2)]

d. Requirements for Group 1 Wastewater Streams. [40 CFR 63.132(a)(2)]
   (1) The waste management units may be equipped with pressure relief devices that vent directly to the atmosphere provided the pressure relief device is not used for planned or routine venting of emissions. [40 CFR 63.132(a)(2)(i)(A)]
   (2) The pressure relief device remains in a closed position at all times except when it is necessary for the pressure relief device to open for the purpose of preventing physical damage or permanent deformation of the waste management unit in accordance with good engineering and safety practices. [40 CFR 63.132(a)(2)(B)]

2. Emission Limitations:
None

3. Testing Requirements:
Pursuant to 401 KAR 50:045, Section 1, performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:
a. All containers [40 CFR 63.135]
   (1) Each container shall be inspected initially, and semi-annually thereafter, for improper work practices and control equipment failures in accordance with 40 CFR 63.143. [40 CFR 63.135(e)]
      (i) For containers, improper work practice includes, but is not limited to, leaving open any access hatch or other opening when such hatch or opening is not in use. [40 CFR 63.135(e)(1)]
      (ii) For containers, control equipment failure includes, but is not limited to, any time a cover or door has a gap or crack, or is broken. [40 CFR 63.135(e)(2)]

b. For each container that receives, manages, or treats a Group 1 wastewater stream, a residual removed from a Group 1 wastewater stream, a recycled Group 1 wastewater stream, or a recycled residual removed from a Group 1 wastewater stream, the owner or operator shall

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

comply with the inspection requirements specified in table 11 of 40 CFR 63, Subpart FFFF. [40 CFR 63.143(a)]

(1) For containers complying with 63.135(b)(1) or 63.135(b)(2)(ii), the permittee shall visually inspect the cover and all openings for leaks initially, and semi-annually thereafter. For containers complying with 63.135(e), the permittee shall visually inspect the container for control equipment failures and improper work practices initially, and semi-annually thereafter. [Table 11 of 40 CFR 63, Subpart G]

c. Except as provided in 40 CFR 63.140, when an improper work practice or a control equipment failure is identified, first efforts at repair shall be made no later than 5 calendar days after identification and repair shall be completed within 15 calendar days after identification. [40 CFR 63.135(f)]

d. Delay of repair of equipment for which a control equipment failure or a gap, crack, tear, or hole has been identified, is allowed if the repair is technically infeasible without a shutdown, as defined in 40 CFR 63.101 of subpart F of this part, or if the owner or operator determines that emissions of purged material from immediate repair would be greater than the emissions likely to result from delay of repair. Repair of this equipment shall occur by the end of the next shutdown. [40 CFR 63.140(a)]

e. Delay of repair of equipment for which a control equipment failure or a gap, crack, tear, or hole has been identified, is allowed if the equipment is emptied or is no longer used to treat or manage Group 1 wastewater streams or residuals removed from Group 1 wastewater streams. [40 CFR 63.140(b)]

f. Delay of repair of equipment for which a control equipment failure or a gap, crack, tear, or hole has been identified is also allowed if additional time is necessary due to the unavailability of parts beyond the control of the owner or operator. Repair shall be completed as soon as practical. The owner or operator who uses this provision shall comply with the requirements of 40 CFR 63.147(b)(7) to document the reasons that the delay of repair was necessary. [40 CFR 63.140(c)]

g. Except as provided in 40 CFR 63.148(g) and (h), each cover shall be inspected according to the procedures and schedule specified in 40 CFR 63.148(b)(3). [40 CFR 63.148(b)]

(1) For each cover, the owner or operator shall conduct initial visual inspections and semi-annual visual inspections for visible, audible, or olfactory indications of leaks as specified in 40 CFR 63.135. [40 CFR 63.148(b)(3)]

h. Leaks, as indicated by visual inspections, shall be repaired as soon as practicable, except as provided in 40 CFR 63.148(e). [40 CFR 63.148(d)]

(1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. [40 CFR 63.148(d)(1)]

(2) Repair shall be completed no later than 15 calendar days after the leak is detected. [40 CFR 63.148(d)(2)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

i. Delay of repair of a cover for which leaks have been detected is allowed if the repair is technically infeasible without a shutdown, as defined in 40 CFR 63.101 of subpart F of this part, or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next shutdown. [40 CFR 63.148(e)]

j. Any parts of the cover that are designated, as described in 40 CFR 63.148(i)(1), as unsafe to inspect are exempt from the inspection requirements of 40 CFR 63.148(b)(3)(i) if: [40 CFR 63.148(g)]
   (1) The owner or operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with 40 CFR 63.148(b)(3)(i); and [40 CFR 63.148(g)91)]
   (2) The owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times. [40 CFR 63.148(g)(2)]

k. Any parts of the cover that are designated, as described in 40 CFR 63.148(i)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR 63.148(b)(3)(i) if: [40 CFR 63.148(h)]
   (1) The owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and [40 CFR 63.148(h)(1)]
   (2) The owner or operator has a written plan that requires inspection of the equipment at least once every 5 years. [40 CFR 63.148(h)(2)]

5. <u>Specific Recordkeeping Requirements</u>:

a. The owner or operator shall record the information specified in 40 CFR 63.148(i)(1) through (i)(5). [40 CFR 63.148(i)]
   (1) Identification of all parts of the cover that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment. [40 CFR 63.148(i)(1)]
   (2) Identification of all parts of the cover that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment. [40 CFR 63.148(i)(2)]

b. For each inspection during which a leak is detected, a record of the information specified in 40 CFR 63.148(i)(4)(i) through (i)(4)(viii). [40 CFR 63.148(i)(4)]
   (1) The instrument identification numbers; operator name or initials; and identification of the equipment. [40 CFR 63.148(i)(4)(i)]
   (2) The date the leak was detected and the date of the first attempt to repair the leak. [40 CFR 63.148(i)(4)(ii)]
   (3) “Repair delayed” and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak. [40 CFR 63.148(i)(4)(iv)]
   (4) The name, initials, or other form of identification of the owner or operator (or designee) whose decision it was that repair could not be effected without a shutdown. [40 CFR 63.148(i)(4)(v)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(5) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days. [40 CFR 63.148(i)(4)(vi)]
(6) Dates of shutdowns that occur while the equipment is unrepaired. [40 CFR 63.148(i)(4)(vii)]
(7) The date of successful repair of the leak. [40 CFR 63.148(i)(4)(viii)]

c. For each visual inspection conducted in accordance with 40 CFR 63.148(b)(1)(ii) or (b)(3)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 63.148(i)(6)]

d. A record that each waste management unit inspection required by 40 CFR 63.135 was performed. [40 CFR 63.147(b)(1)]

e. Documentation of a decision to use a delay of repair due to unavailability of parts, as specified in 40 CFR 63.140(c), shall include a description of the failure, the reason additional time was necessary (including a statement of why replacement parts were not kept on site and when the manufacturer promised delivery), and the date when repair was completed. [40 CFR 63.147(b)(7)]

6. <u>Specific Reporting Requirements</u>:

a. The owner or operator shall submit with the reports required by 40 CFR 63.152(c) the information specified in 40 CFR 63.148(j)(1) through (3) and if applicable, the information in 40 CFR 63.148(j)(4). [Periodic Reports] [40 CFR 63.148(j)]
(1) The information specified in 63.148 (i)(4). [40 CFR 63.148(j)(1)]
(i) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 63.148(i)(4)(i) through (i)(4)(viii). [40 CFR 63.148(i)(4)]
(ii) The instrument identification numbers; operator name or initials; and identification of the equipment. [40 CFR 63.148(i)(4)(i)]
(iii) The date the leak was detected and the date of the first attempt to repair the leak. [40 CFR 63.148(i)(4)(ii)]
(iv) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak. [40 CFR 63.148(i)(4)(iv)]
(v) The name, initials, or other form of identification of the owner or operator (or designee) whose decision it was that repair could not be effected without a shutdown. [40 CFR 63.148(i)(4)(v)]
(vi) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days. [40 CFR 63.148(i)(4)(vi)]
(vii) Dates of shutdowns that occur while the equipment is unrepaired. [40 CFR 63.148(i)(4)(vii)]
(viii) The date of successful repair of the leak. [40 CFR 63.148(i)(4)(viii)]

b. For each waste management unit that receives, manages, or treats a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream, the owner or operator shall

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

submit as part of the next Periodic Report the results of each inspection required by 40 CFR 63.143(a) in which a control equipment failure was identified. Control equipment failure is defined for each waste management unit in 40 CFR 63.135. Each Periodic Report shall include the date of the inspection, identification of each waste management unit in which a control equipment failure was detected, description of the failure, and description of the nature of and date the repair was made. [40 CFR 63.146(c)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS FOR 40 CFR 63, Subpart FFFF - 16. MAINTENANCE WASTEWATER

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing

Pursuant to 40 CFR 63, Subpart FFFF, Section 63.2485(a) and Table 7 of Subpart FFFF, the permittee shall comply with following requirements:

For each	Comply with
Maintenance wastewater stream	The requirements in 40 CFR 63.105 and the requirements referenced therein, except as specified in 63.2485

Pursuant to 40 CFR 63.2485 (b): *Wastewater HAP*. Where 40 CFR 63.105 and 40 CFR 63.132 through 63.148 refer to compounds in table 9 of subpart G of this part 63, the compounds in tables 8 and 9 to 40 CFR 63, Subpart FFFF apply for the purposes of this subpart FFFF.

Pursuant to 40 CFR 63.2550(i):

Wastewater means water that is discarded from an MCPU or control device through a POD and that contains either: an annual average concentration of compounds in tables 8 and 9 to Subpart FFFF of at least 5 ppmw and has an annual average flowrate of 0.02 liters per minute or greater; or an annual average concentration of compounds in tables 8 and 9 to Subpart FFFF of at least 10,000 ppmw at any flowrate. Wastewater means process wastewater or maintenance wastewater. The following are not considered wastewater for the purposes of 40 CFR 63, Subpart FFFF:

1) Stormwater from segregated sewers;
2) Water from fire-fighting and deluge systems, including testing of such systems;
3) Spills;
4) Water from safety showers;
5) Samples of a size not greater than reasonably necessary for the method of analysis that is used;
6) Equipment leaks;
7) Wastewater drips from procedures such as disconnecting hoses after cleaning lines; and
8) Noncontact cooling water.

Maintenance wastewater means wastewater generated by the draining of process fluid from components in the MCPU into an individual drain system in preparation for or during maintenance activities. Maintenance wastewater can be generated during planned and unplanned shutdowns and during periods not associated with a shutdown. Examples of activities that can generate maintenance wastewater include descaling of heat exchanger tubing bundles, cleaning of distillation column traps, draining of pumps into an individual drain system, and draining of portions of the MCPU for repair. Wastewater from routine cleaning operations occurring as part of batch operations is not considered maintenance wastewater.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

1. **Operating Limitations:**
   None

2. **Emission Limitations:**
   None

3. **Testing Requirements:**
   Pursuant to 401 KAR 50:045, Section 1, performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. **Specific Monitoring Requirements:**
   None

5. **Specific Recordkeeping Requirements:**
   a. Each owner or operator of a source subject to 40 CFR 63, Subpart F shall comply with the requirements of 40 CFR 63.105(b) through (e) for maintenance wastewaters containing those organic HAP's listed in tables 8 and 9 of subpart G. [40 CFR 63.105(a)]

   b. The owner or operator shall prepare a description of maintenance procedures for management of wastewaters generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair (i.e., a maintenance-turnaround) and during periods which are not shutdowns (i.e., routine maintenance). The descriptions shall: [40 CFR 63.105(b)(1)]
      (1) Specify the process equipment or maintenance tasks that are anticipated to create wastewater during maintenance activities. [40 CFR 63.105(b)(2)]
      (2) Specify the procedures that will be followed to properly manage the wastewater and control organic HAP emissions to the atmosphere; and [40 CFR 63.105(b)]
      (3) Specify the procedures to be followed when clearing materials from process equipment. [40 CFR 63.105(b)(3)]

   c. The owner or operator shall modify and update the information required by 40 CFR 63.105(b) as needed following each maintenance procedure based on the actions taken and the wastewaters generated in the preceding maintenance procedure. [40 CFR 63.105(c)]

   d. The owner or operator shall maintain a record of the information required by 40 CFR 63.105(b) and (c). [40 CFR 63.105(e)]

6. **Specific Reporting Requirements:**
   None

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS FOR 40 CFR 63, Subpart FFFF - 17. LIQUID STREAMS IN OPEN SYSTEMS WITHIN AN MCPU

APPLICABLE REGULATIONS:

40 CFR 63, Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing. Pursuant to 40 CFR 63, Subpart FFFF, Section 63.2485(a) and Table 7 of Subpart FFFF, the permittee shall comply with following requirements:

For each	Comply with
Liquid streams in an open system within an MCPU	The requirements in 40 CFR 63.149 and the requirements referenced therein, except as specified in 63.2485

Liquid streams in an open system within an MCPU are defined at 63.149(a).

63.2485 (l) Requirements for liquid streams in open systems.

(1) References in 40 CFR 63.149 to 40 CFR 63.100(b) mean 40 CFR 63.2435(b) for the purposes of 40 CFR 63, Subpart FFFF.

(2) When 40 CFR 63.149(e) refers to 40 CFR 63.100(l) (1) or (2), 40 CFR 63.2445(a) applies for the purposes of 40 CFR 63, Subpart FFFF.

(3) When 40 CFR 63.149 uses the term "chemical manufacturing process unit," the term "MCPU" applies for the purposes of 40 CFR 63, Subpart FFFF.

(4) When 40 CFR 63.149(e)(1) refers to characteristics of water that contain compounds in Table 9 to 40 CFR part 63, subpart G, the characteristics specified in 40 CFR 63.2485(c)(1) through (3) apply for the purposes of 40 CFR 63, Subpart FFFF.

(5) When 40 CFR 63.149(e)(2) refers to characteristics of water that contain compounds in Table 9 to 40 CFR part 63, subpart G, the characteristics specified in 40 CFR 63.2485(c)(2) apply for the purposes of 40 CFR 63, Subpart FFFF.

1. Operating Limitations:

a. The owner or operator shall comply with the provisions of table 35 of 40 CFR63, Subpart G, for each item of equipment meeting all the criteria specified in 40 CFR 63.149(b) through (d) and either 40 CFR 63.149(e)(1) or (e)(2). [40 CFR 63.149(a)]

b. The item of equipment is of a type identified in table 35 of 40 CFR 63, Subpart G; [40 CFR 63.149(b)]

c. The item of equipment is part of a MCPU that meets the criteria of 40 CFR 63.2435(b) of subpart FFFF of this part; [40 CFR 63.149(c)]

d. The item of equipment is controlled less stringently than in table 35 and is not listed in 40 CFR 63.100(f) of subpart F of this part, and the item of equipment is not otherwise exempt from controls by the provisions of subparts A, F, G, or H of this part; and 40 CFR 63.149(d)]

e. The item of equipment: [40 CFR 63.149(e)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(1) is a drain, drain hub, manhole, lift station, trench, pipe, or oil/water separator that conveys water with the total annual average concentration of compounds in table 8 to 40 CFR 63, Subpart G is greater than or equal to 10,000 ppmw at any flowrate, and the total annual load of compounds in table 8 to 40 CFR 63, Subpart G is greater than or equal to 200 lb/yr. The total annual average concentration of compounds in table 8 to 40 CFR 63, Subpart G is greater than or equal to 1,000 ppmw, and the annual average flowrate is greater than or equal to 1 l/min. The combined total annual average concentration of compounds in tables 8 and 9 to 40 CFR 63, Subpart G is greater than or equal to 30,000 ppmw, and the combined total annual load of compounds in tables 8 and 9 to 40 CFR 63, Subpart G is greater than or equal to 1 tpy. [40 CFR 63.149(e)(1)]

or

(2) Is a tank that receives one or more streams that contain water with the total annual average concentration of compounds in table 8 to Subpart G is greater than or equal to 1,000 ppmw, and the annual average flowrate is greater than or equal to 1 l/min. The owner or operator of the source shall determine the characteristics of the stream as specified in 40 CFR 63.149(e)(2) (i) and (ii). [40 CFR 63.149(e)(2)]

(i) The characteristics of the stream being received shall be determined at the inlet to the tank. [40 CFR 63.149(e)(2)(i)]

(ii) The characteristics shall be determined according to the procedures in 40 CFR 63.144 (b) and (c). [40 CFR 63.149(e)(2)(ii)]

Table 35 to Subpart G of Part 63—Control Requirements for Items of Equipment That Meet the Criteria of 40 CFR 63.149 of Subpart G

Item of equipment	Control requirement[a]
Drain or drain hub	(a) Tightly fitting solid cover (TFSC); or (b) TFSC with a vent to either a process, or to a fuel gas system, or to a control device meeting the requirements of 40 CFR 63.139(c); or (c) Water seal with submerged discharge or barrier to protect discharge from wind.
Manhole[b]	(a) TFSC; or (b) TSFC with a vent to either a process, or to a fuel gas system, or to a control device meeting the requirements of 40 CFR 63.139(c); or (c) If the item is vented to the atmosphere, use a TFSC with a properly operating water seal at the entrance or exit to the item to restrict ventilation in the collection system. The vent pipe shall be at least 90 cm in length and not exceeding 10.2 cm in nominal inside diameter.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Table 35 to Subpart G of Part 63—Control Requirements for Items of Equipment That Meet the Criteria of 40 CFR 63.149 of Subpart G	
Item of equipment	**Control requirement[a]**
Lift station	(a) TFSC; or (b) TFSC with a vent to either a process, or to a fuel gas system, or to a control device meeting the requirements of 40 CFR 63.139(c); or (c) If the lift station is vented to the atmosphere, use a TFSC with a properly operating water seal at the entrance or exit to the item to restrict ventilation in the collection system. The vent pipe shall be at least 90 cm in length and not exceeding 10.2 cm in nominal inside diameter. The lift station shall be level controlled to minimize changes in the liquid level.
Trench	(a) TFSC; or (b) TFSC with a vent to either a process, or to a fuel gas system, or to a control device meeting the requirements of 40 CFR 63.139(c); or (c) If the item is vented to the atmosphere, use a TFSC with a properly operating water seal at the entrance or exit to the item to restrict ventilation in the collection system. The vent pipe shall be at least 90 cm in length and not exceeding 10.2 cm in nominal inside diameter.
Pipe	Each pipe shall have no visible gaps in joints, seals, or other emission interfaces.
Oil/Water separator	(a) Equip with a fixed roof and route vapors to a process or to a fuel gas system, or equip with a closed vent system that routes vapors to a control device meeting the requirements of 40 CFR 63.139(c); or (b) Equip with a floating roof that meets the equipment specifications of §60.693 (a)(1)(i), (a)(1)(ii), (a)(2), (a)(3), and (a)(4).
Tank[c]	Maintain a fixed roof.[d]If the tank is sparged[e]or used for heating or treating by means of an exothermic reaction, a fixed roof and a system shall be maintained that routes the organic hazardous air pollutants vapors to other process equipment or a fuel gas system, or a closed vent system that routes vapors to a control device that meets the requirements of 40 CFR 40 CFR 63.119 (e)(1) or (e)(2).

[a] Where a tightly fitting solid cover is required, it shall be maintained with no visible gaps or openings, except during periods of sampling, inspection, or maintenance.

[b] Manhole includes sumps and other points of access to a conveyance system.

[c] Applies to tanks with capacities of 38 m^3or greater.

[d] A fixed roof may have openings necessary for proper venting of the tank, such as pressure/vacuum vent, j-pipe vent.

[e] The liquid in the tank is agitated by injecting compressed air or gas.

2. <u>Emission Limitations</u>:
None

3. <u>Testing Requirements</u>:
None

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. **Specific Monitoring Requirements:**
   None

5. **Specific Recordkeeping Requirements:**
   None

6. **Specific Reporting Requirements:**
   None

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS FOR 40 CFR 63, Subpart FFFF - 18. CLOSED-VENT SYSTEMS for CONTROLLING GROUP 1 SOURCES

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

401 KAR 63:002, Section 2(4)(ii), 40 C.F.R. 63.980 through 63.999 (Subpart SS), National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process.

Pursuant to 40 CFR 63.982(c) Closed vent system and nonflare control device. Owners or operators who control emissions through a closed vent system to a nonflare control device shall meet the requirements in 40 CFR 63.983 of 40 CFR 63, Subpart SS for closed vent systems.

Pursuant to 40 CFR 63.983(a) Closed vent system equipment and operating requirements. Except for closed vent systems operated and maintained under negative pressure, the provisions of 63.983(a) apply to closed vent systems collecting regulated material from a regulated source, as those terms are defined in 40 CFR 63, Subpart SS.

Pursuant to 40 CFR 63.981:

Closed vent system means a system that is not open to the atmosphere and is composed of piping, ductwork, connections, and, if necessary, flow inducing devices that transport gas or vapor from an emission point to a control device. Closed vent system does not include the vapor collection system that is part of any tank truck or railcar.

Closed vent system shutdown means a work practice or operational procedure that stops production from a process unit or part of a process unit during which it is technically feasible to clear process material from a closed vent system or part of a closed vent system consistent with safety constraints and during which repairs can be effected. An unscheduled work practice or operational procedure that stops production from a process unit or part of a process unit for less than 24 hours is not a closed vent system shutdown. An unscheduled work practice or operational procedure that would stop production from a process unit or part of a process unit for a shorter period of time than would be required to clear the closed vent system or part of the closed vent system of materials and start up the unit, and would result in greater emissions than delay of repair of leaking components until the next scheduled closed vent system shutdown, is not a closed vent system shutdown. The use of spare equipment and technically feasible bypassing of equipment without stopping production are not closed vent system shutdowns.

Ductwork means a conveyance system such as those commonly used for heating and ventilation systems. It is often made of sheet metal and often has sections connected by screws or crimping. Hard-piping is not ductwork.

First attempt at repair, for the purposes of 40 CFR63, Subpart SS, means to take action for the purpose of stopping or reducing leakage of organic material to the atmosphere, followed by

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

monitoring as specified in 40 CFR 63.983(c) to verify whether the leak is repaired, unless the owner or operator determines by other means that the leak is not repaired.

Flow indicator means a device which indicates whether gas flow is, or whether the valve position would allow gas flow to be, present in a line.

Hard-piping means pipe or tubing that is manufactured and properly installed using good engineering judgment and standards, such as ANSI B31.3.

Regulated material, for purposes of 40 CFR63, Subpart SS, refers to vapors from volatile organic liquids (VOL), volatile organic compounds (VOC), or hazardous air pollutants (HAP), or other chemicals or groups of chemicals that are regulated by a referencing subpart.
Repaired, for the purposes of 40 CFR63, Subpart SS, means that equipment; is adjusted, or otherwise altered, to eliminate a leak as defined in the applicable sections of 40 CFR 63, Subpart SS; and unless otherwise specified in applicable provisions of 40 CFR63, Subpart SS, is inspected as specified in 40 CFR 63.983(c) to verify that emissions from the equipment are below the applicable leak definition.

1. Operating Limitations:

a. Closed vent system equipment and operating requirement. [40 CFR 63.983(a)]
   (1) Collection of emissions. Each closed vent system shall be designed and operated to collect the regulated material vapors from the emission point, and to route the collected vapors to a control device. [40 CFR 63.983(a)(1)]
   (2) *Period of operation*. Closed vent systems used to comply with the provisions of 40 CFR63, Subpart SS shall be operated at all times when emissions are vented to, or collected by, them. [40 CFR 63.983(a)(2)]

b. Closed vent system leak repair provisions. The provisions of this paragraph apply to closed vent systems collecting regulated material from a regulated source. [40 CFR 63.983(d)]
   (1) If there are visible, audible, or olfactory indications of leaks at the time of the annual visual inspections required by 40 CFR 63.983(b)(1)(i)(B), the owner or operator shall follow the procedure specified in either 40 CFR 63.983(d)(1)(i) or (ii). [40 CFR 63.983(d)(1)]
      (i) The owner or operator shall eliminate the leak. [40 CFR 63.983(d)(1)(i)]
      (ii) The owner or operator shall monitor the equipment according to the procedures in 40 CFR 63.983(c). [40 CFR 63.983(d)(1)(ii)]

c. Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practical, except as provided in 40 CFR 63.983(d)(3). Records shall be generated as specified in 40 CFR 63.998(d)(1)(iii) when a leak is detected. [40 CFR 63.983(d)(2)]
   (1) A first attempt at repair shall be made no later than 5 days after the leak is detected. [40 CFR 63.983(d)(2)(i)]
   (2) Except as provided in 40 CFR 63.983(d)(3), repairs shall be completed no later than 15 days after the leak is detected or at the beginning of the next introduction of vapors to the system, whichever is later. [40 CFR 63.983(d)(2)(ii)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

d. Delay of repair of a closed vent system for which leaks have been detected is allowed if repair within 15 days after a leak is detected is technically infeasible or unsafe without a closed vent system shutdown, as defined in 40 CFR 63.981, or if the owner or operator determines that emissions resulting from immediate repair would be greater than the emissions likely to result from delay of repair. Repair of such equipment shall be completed as soon as practical, but not later than the end of the next closed vent system shutdown. [40 CFR 63.983(d)(3)]

e. Beginning no later than the compliance dates specified in 40 CFR 63.2445(g), the use of a bypass line at any time on a closed vent system to divert emissions subject to the requirements in 40 CFR 63, Subpart FFFF, Tables 1 through 7 to the atmosphere or to a control device not meeting the requirements specified in Tables 1 through 7 to 40 CFR 63, Subpart FFFF is an emissions standards deviation. You must also comply with the requirements specified in 40 CFR 63.2450(e)(6)(i) through (v), as applicable. [40 CFR 63.2450(e)(6)]
   (1) If you are subject to the bypass monitoring requirements of 40 CFR 63.983(a)(3) of subpart SS, then you must continue to comply with the requirements in 40 CFR 63.983(a)(3) of subpart SS and the recordkeeping and reporting requirements in 40 CFR 63.998(d)(1)(ii) and 40 CFR 63.999(c)(2) of subpart SS, in addition to the requirements specified in 40 CFR 63.2450(e)(4), the recordkeeping requirements specified in § 63.2525(n), and the reporting requirements specified in 40 CFR 63.2520(e)(12). [40 CFR 63.2450(e)(6)(iii)]
   (2) For purposes of compliance with 40 CFR 63.2450(e)(6), 40 CFR 63.148(f)(3) of subpart G, and 40 CFR 63.172(j)(3) of subpart H, the phrase "Except for equipment needed for safety purposes such as pressure relief devices, low leg drains, high point bleeds, analyzer vents, and open-ended valves or lines" in 40 CFR 63.983(a)(3) of subpart SS, and the phrase "Except for pressure relief devices needed for safety purposes, low leg drains, high point bleeds, analyzer vents, and open-ended valves or lines" in 40 CFR 65.143(a)(3) of this chapter do not apply; instead, the exemptions specified in 40 CFR 63.2450(e)(6)(v)(A) and (B) apply. [40 CFR 63.2450(e)(6)(v)]
      (i) Except for pressure relief devices subject to 40 CFR 63.2480(e)(4), equipment such as low leg drains and equipment subject to the requirements specified in 40 CFR 63.2480 are not subject to 40 CFR 63.2450(e)(6). [40 CFR 63.2450(e)(6)(v)(A)]
      (ii) Open-ended valves or lines that use a cap, blind flange, plug, or second valve and follow the requirements specified in 40 CFR 60.482-6(a)(2), (b), and (c) or follow requirements codified in another regulation that are the same as 40 CFR 60.482-6(a)(2), (b), and (c) are not subject to 40 CFR 63.2450(e)(6). [40 CFR 63.2450(e)(6)(v)(B)]

2. <u>Emission Limitations</u>:
None

3. <u>Testing Requirements</u>:
Pursuant to 401 KAR 50:045, Section 1, performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

a. Bypass monitoring. The owner or operator shall comply with the provisions of either 40 CFR 63.983(a)(3)(i) or (ii) for each closed vent system that contains bypass lines that could divert a vent stream to the atmosphere. [40 CFR 63.983(a)(3)]

(1) Properly install, maintain, and operate a flow indicator that is capable of taking periodic readings. Records shall be generated as specified in 40 CFR 63.998(d)(1)(ii)(A). The flow indicator shall be installed at the entrance to any bypass line. [40 CFR 63.983(a)(3)(i)]

(2) Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. Records shall be generated as specified in 40 CFR 63.998(d)(1)(ii)(B). [40 CFR 63.983(a)(3)(ii)]

b. Closed vent system inspection and monitoring requirements. The provisions of 40 CFR 63, Subpart SS apply to closed vent systems collecting regulated material from a regulated source. Inspection records shall be generated as specified in 40 CFR 63.998(d)(1)(iii) and (iv). [40 CFR 63.983(b)]

(1) Except for any closed vent systems that are designated as unsafe or difficult to inspect as provided in 40 CFR 63.983(b)(2) and (3), each closed vent system shall be inspected as specified in 40 CFR 63.983(b)(1)(i) or (ii). [40 CFR 63.983(b)(1)]

(i) If the closed vent system is constructed of hard-piping, the owner or operator shall comply with the requirements specified in 40 CFR 63.983(b)(1)(i)(A) and (B). [40 CFR 63.983(b)(1)(i)]

(A) Conduct an initial inspection according to the procedures in 40 CFR 63.983(c); and [40 CFR 63.983(b)(1)(i)(A)]

(B) Conduct annual inspections for visible, audible, or olfactory indications of leaks. [40 CFR 63.983(b)(1)(i)(B)]

(ii) If the closed vent system is constructed of ductwork, the owner or operator shall conduct an initial and annual inspection according to the procedures in 40 CFR 63.983(c). [40 CFR 63.983(b)(1)(ii)]

c. Any parts of the closed vent system that are designated, as described in 40 CFR 63.998(d)(1)(i), as unsafe to inspect are exempt from the inspection requirements of 40 CFR 63.983(b)(1) if the conditions of 40 CFR 63.983(b)(2)(i) and (ii) are met. [40 CFR 63.983(b)(2)]

(1) The owner or operator determines that the equipment is unsafe-to-inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with 40 CFR 63.983(b)(1); and [40 CFR 63.983(b)(2)(i)]

(2) The owner or operator has a written plan that requires inspection of the equipment as frequently as practical during safe-to-inspect times. Inspection is not required more than once annually. [40 CFR 63.983(b)(2)(ii)]

d. Any parts of the closed vent system that are designated, as described in 40 CFR 63.998(d)(1)(i), as difficult-to-inspect are exempt from the inspection requirements of 40 CFR 63.983(b)(1) if the provisions of 40 CFR 63.983(b)(3)(i) and (ii) apply. [40 CFR 63.983(b)(3)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(1) The owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters (7 feet) above a support surface; and [40 CFR 63.983(b)(3)(i)]
(2) The owner or operator has a written plan that requires inspection of the equipment at least once every 5 years. [40 CFR 63.983(b)(3)(ii)]

e. For each bypass line, the owner or operator shall comply with 40 CFR 63.983(b)(4)(i) or (ii). [40 CFR 63.983(b)(4)]
(1) If a flow indicator is used, take a reading at least once every 15 minutes. [40 CFR 63.983(b)(4)(i)]
(2) If the bypass line valve is secured in the non-diverting position, visually inspect the seal or closure mechanism at least once every month to verify that the valve is maintained in the non-diverting position, and the vent stream is not diverted through the bypass line. [40 CFR 63.983(b)(4)(ii)]

f. Closed vent system inspection procedures. The provisions of this paragraph apply to closed vent systems collecting regulated material from a regulated source. [40 CFR 63.983(c)]
(1) Each closed vent system subject to this paragraph shall be inspected according to the procedures specified in 40 CFR 63.983(c)(1)(i) through (vii). [40 CFR 63.983(c)(1)]
(i) Inspections shall be conducted in accordance with Method 21 of 40 CFR part 60, appendix A, except as specified in this section. [40 CFR 63.983(c)(1)(i)]
(ii) Except as provided in 40 CFR 63.983(c)(1)(iii), the detection instrument shall meet the performance criteria of Method 21 of 40 CFR 60, appendix A, except the instrument response factor criteria in section 3.1.2(a) of Method 21 must be for the representative composition of the process fluid and not of each individual VOC in the stream. For process streams that contain nitrogen, air, water, or other inerts that are not organic HAP or VOC, the representative stream response factor must be determined on an inert-free basis. The response factor may be determined at any concentration for which the monitoring for leaks will be conducted. [40 CFR 63.983(c)(1)(ii)]
(iii) If no instrument is available at the plant site that will meet the performance criteria of Method 21 specified in 40 CFR 63.983(c)(1)(ii), the instrument readings may be adjusted by multiplying by the representative response factor of the process fluid, calculated on an inert-free basis as described in 40 CFR 63.983(c)(1)(ii). [40 CFR 63.983(c)(1)(iii)]
(iv) The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A. [40 CFR 63.983(c)(1)(iv)]
(v) Calibration gases shall be as specified in 40 CFR 63.983(c)(1)(v)(A) through (C). [40 CFR 63.983(c)(1)(v)]
(A) Zero air (less than 10 parts per million hydrocarbon in air); and [40 CFR 63.983(c)(1)(v)(A)]
(B) Mixtures of methane in air at a concentration less than 10,000 parts per million. A calibration gas other than methane in air may be used if the instrument does not respond to methane or if the instrument does not meet the performance criteria specified in 40 CFR 63.983(c)(1)(ii). In such cases, the

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

calibration gas may be a mixture of one or more of the compounds to be measured in air. [40 CFR 63.983(c)(1)(v)(B)]

(C) If the detection instrument's design allows for multiple calibration scales, then the lower scale shall be calibrated with a calibration gas that is no higher than 2,500 parts per million. [40 CFR 63.983(c)(1)(v)(C)]

(vi) An owner or operator may elect to adjust or not adjust instrument readings for background. If an owner or operator elects not to adjust readings for background, all such instrument readings shall be compared directly to 500 parts per million to determine whether there is a leak. If an owner or operator elects to adjust instrument readings for background, the owner or operator shall measure background concentration using the procedures in this section. The owner or operator shall subtract the background reading from the maximum concentration indicated by the instrument. [40 CFR 63.983(c)(1)(vi)]

(vii) If the owner or operator elects to adjust for background, the arithmetic difference between the maximum concentration indicated by the instrument and the background level shall be compared with 500 parts per million for determining whether there is a leak. [40 CFR 63.983(c)(1)(vii)]

(2) The instrument probe shall be traversed around all potential leak interfaces as described in Method 21 of 40 CFR part 60, appendix A. [40 CFR 63.983(c)(2)]

(3) Except as provided in 40 CFR 63.983(c)(4), inspections shall be performed when the equipment is in regulated material service, or in use with any other detectable gas or vapor. [40 CFR 63.983(c)(3]

5. <u>Specific Recordkeeping Requirements</u>:

a. For closed vent systems collecting regulated material from a regulated source, the owner or operator shall record the identification of all parts of the closed vent system, that are designated as unsafe or difficult to inspect, an explanation of why the equipment is unsafe or difficult to inspect, and the plan for inspecting the equipment required by 40 CFR 63.983(b)(2)(ii) or (iii). [40 CFR 63.998(d)(1)(i)]

b. For each closed vent system that contains bypass lines that could divert a vent stream away from the control device and to the atmosphere, the owner or operator shall keep a record of the information specified in either 40 CFR 63.998(d)(1)(ii)(A) or (B), as applicable. [40 CFR 63.998(d)(1)(ii)]

(1) Hourly records of whether the flow indicator specified under 40 CFR 63.983(a)(3)(i) was operating and whether a diversion was detected at any time during the hour, as well as records of the times of all periods when the vent stream is diverted from the control device, or the flow indicator is not operating. [40 CFR 63.998(d)(1)(ii)(A)]

(2) Where a seal mechanism is used to comply with 40 CFR 63.983(a)(3)(ii), hourly records of flow are not required. In such cases, the owner or operator shall record that the monthly visual inspection of the seals or closure mechanisms has been done and shall record the occurrence of all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for a lock-and-key type lock has been checked out, and records of any car-seal that has been broken. [40 CFR 63.998(d)(1)(ii)(B)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c. For a closed vent system collecting regulated material from a regulated source, when a leak is detected as specified in 40 CFR 63.983(d)(2), the information specified in 40 CFR 63.998(d)(1)(iii)(A) through (F) shall be recorded and kept for 5 years. [40 CFR 63.998(d)(1)(iii)]
   (1) The instrument and the equipment identification number and the operator name, initials, or identification number. [40 CFR 63.998(d)(1)(iii)(A)]
   (2) The date the leak was detected and the date of the first attempt to repair the leak. [40 CFR 63.998(d)(1)(iii)(B)]
   (3) The date of successful repair of the leak. [40 CFR 63.998(d)(1)(iii)(C)]
   (4) The maximum instrument reading measured by the procedures in 40 CFR 63.983(c) after the leak is successfully repaired or determined to be nonrepairable. [40 CFR 63.998(d)(1)(iii)(D)]
   (5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 days after discovery of the leak. The owner or operator may develop a written procedure that identifies the conditions that justify a delay of repair. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure. [40 CFR 63.998(d)(1)(iii)(E)]
   (6) Copies of the Periodic Reports as specified in 40 CFR 63.999(c), if records are not maintained on a computerized database capable of generating summary reports from the records. [40 CFR 63.998(d)(1)(iii)(F)]

d. For each instrumental or visual inspection conducted in accordance with 40 CFR 63.983(b)(1) for closed vent systems collecting regulated material from a regulated source during which no leaks are detected, the owner or operator shall record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 63.998(d)(1)(iv)]

e. For each flow event from a bypass line subject to the requirements in 40 CFR 63 63.2450(e)(6), you must maintain records sufficient to determine whether or not the detected flow included flow requiring control. For each flow event from a bypass line requiring control that is released either directly to the atmosphere or to a control device not meeting the requirements specified in Tables 1 through 7 to 40 CFR 63, Subpart FFFF, you must include an estimate of the volume of gas, the concentration of organic HAP in the gas and the resulting emissions of organic HAP that bypassed the control device using process knowledge and engineering estimates. [40 CFR 63.2525(n)]

6. <u>Specific Reporting Requirements</u>:

a. <u>Compliance Report</u>, For closed vent systems subject to the requirements of 40 CFR 63.983, the owner or operator shall submit as part of the periodic report the information specified in 40 CFR 63.999(c)(2)(i) through (iii), as applicable. [40 CFR 63.999(c)(2)]
   (1) The information recorded in 40 CFR 63.998(d)(1)(iii)(B) through (E); [40 CFR 63.999(c)(2)(i)]
   (2) Reports of the times of all periods recorded under 40 CFR 63.998(d)(1)(ii)(A) when the vent stream is diverted from the control device through a bypass line; and [40 CFR 63.999(c)(2)(ii)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(3) Reports of all times recorded under 40 CFR 63.998(d)(1)(ii)(B) when maintenance is performed in car-sealed valves, when the seal is broken, when the bypass line valve position is changed, or the key for a lock-and-key type configuration has been checked out. [40 CFR 63.999(c)(2)(iii)]

b. For bypass lines subject to the requirements 40 CFR 63.2450(e)(6), the compliance report must include the start date, start time, duration in hours, estimate of the volume of gas in standard cubic feet, the concentration of organic HAP in the gas in parts per million by volume and the resulting mass emissions of organic HAP in pounds that bypass a control device. For periods when the flow indicator is not operating, report the start date, start time, and duration in hours. [40 CFR 63.2520(e)(12)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS FOR 40 CFR 63, Subpart FFFF - 19. The 240 THERMAL OXIDIZER

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

401 KAR 63:002, Section 2(4)(ii), 40 C.F.R. 63.980 through 63.999 (Subpart SS), National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process.

401 KAR 63:002, Section 2(1), 40 C.F.R. 63.1 through 63.16, Table 1 (Subpart A), General Provisions.

1. **Operating Limitations:**
   None

2. **Emission Limitations:**
   a. Incinerators used to comply with the provisions of a referencing subpart and Subpart FFFF shall be operated at all times when emissions are vented to them. [40 CFR 63.988(2)]

   b. You must be in compliance with the emission limits and work practice standards in tables 1 through 7 to Subpart FFFF at all times. [40 CFR 63.2450(a)]

   c. When controlling emissions from Group 1 Storage Tanks and not controlling emissions from Group 1 Process Vents or any other Group 1 source types:
   Planned routine maintenance. The emission limits in Table 4 to 40 CFR 63, Subpart FFFF for control devices used to control emissions from storage tanks do not apply during periods of planned routine maintenance. Under the provisions of 40 CFR 63.2470(d), the Division has granted an extension of up to 360 hours per year of planned routine maintenance for the 240 Thermal Oxidizer. Periods of planned routine maintenance of each control device, during which the control device does not meet the emission limit specified in Table 4 to 40 CFR 63, Subpart FFFF, must not exceed 360 hours per year (hr/yr). No material shall be added to the storage tank between the time 240 hr/yr of planned routine maintenance is reached and the time the control device is again operational. [40 CFR 63.2470(d)]

3. **Testing Requirements:**
   a. Performance test requirements. [40 CFR 63.988(b)]
      (1) Except as specified in 40 CFR 63.997(b), the owner or operator shall conduct an initial performance test of any incinerator used to comply with the provisions of a referencing subpart and 40 CFR 63, Subpart SS according to the procedures in 40 CFR 63.997. [40 CFR 63.988(b)(1)]

   b. Except as provided in 40 CFR 63.7(a)(4), if required to do performance testing by a relevant standard, and unless a waiver of performance testing is obtained under this section or the conditions of 40 CFR 63.7(c)(3)(ii)(B) apply, the owner or operator of the affected

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

source must perform such tests within 150 days of the compliance date for such source. [40 CFR 63.7(a)(2)]

(1) The performance test must be performed within 150 days of the compliance date instead of the 180 days normally specified by 63.7(a)(2). [Table 12 to 40 CFR 63, Subpart FFFF]

c. Notification of performance test. [40 CFR 63.7 (as referenced by 63.2515(a)]

(1) The owner or operator of an affected source must notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is initially scheduled to begin to allow the Division, upon request, to review and approve the site-specific test plan required under 40 CFR 63.7(c) and to have an observer present during the test. [40 CFR 63.7(b)(1)]

(2) In the event the owner or operator is unable to conduct the performance test on the date specified in the notification requirement specified in 40 CFR 63.7(b)(1) due to unforeseeable circumstances beyond his or her control, the owner or operator must notify the Administrator as soon as practicable and without delay prior to the scheduled performance test date and specify the date when the performance test is rescheduled. This notification of delay in conducting the performance test shall not relieve the owner or operator of legal responsibility for compliance with any other applicable provisions of this part or with any other applicable Federal, State, or local requirement, nor will it prevent the Administrator from implementing or enforcing this part or taking any other action under the Act. [40 CFR 63.7(b)(2)]

d. *Notification of performance test*. The owner or operator of an affected source shall notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin to allow the Administrator to review and approve the site-specific test plan required under 40 CFR 63.7(c), if requested by the Division, and to have an observer present during the test. [40 CFR 63.9(e), as referenced by 63.2515(a)]

e. *Notification of performance test*. If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in 40 CFR 63.7(b)(1). For any performance test required as part of the initial compliance procedures for batch process vents in Table 2 to 40 CFR 63, Subpart FFFF, you must also submit the test plan required by 40 CFR 63.7(c) and the emission profile with the notification of the performance test. [40 CFR 63.2515]

f. Table 12 to Subpart FFFF requires that a test plan be submitted with the notification of the performance test if the control device controls batch processes. [40 CFR 63.7 as referenced by 63.2515(a)]

(1) Submission of site-specific test plan. Before conducting a required performance test, the owner or operator of an affected source shall develop and, if requested by the Division, shall submit a site-specific test plan to the Administrator for approval. The test plan shall include a test program summary, the test schedule, data quality objectives, and both an internal and external quality assurance (QA) program. Data

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

quality objectives are the pretest expectations of precision, accuracy, and completeness of data. [40 CFR 63.7(c)(2)(i)]

(2) 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 replicate samples. [40 CFR 63.7(c)(2)(ii)]

(3) The performance testing shall include a test method performance audit (PA) during the performance test. See 40 CFR 63.7(c)(2)(iii)(A) through (D). [40 CFR 63.7(c)(2)(iii)]

(4) The owner or operator of an affected source shall submit the site-specific test plan to the Division upon the Division's request at least 60 calendar days before the performance test is scheduled to take place, that is, simultaneously with the notification of intention to conduct a performance test required under 40 CFR 63.7(b), or on a mutually agreed upon date. [40 CFR 63.7(c)(2)(iv)]

(5) The Division may request additional relevant information after the submittal of a site-specific test plan. [40 CFR 63.7(c)(2)(v)]

g. Table 12 to Subpart FFFF requires that a test plan be submitted with the notification of the performance test if the control device controls batch processes. [40 CFR 63.7 as referenced by 63.2515(a)]

(1) Approval of site-specific test plan. [40 CFR 63.7(c)(3)]

(i) The Administrator will notify the owner or operator of approval or intention to deny approval of the site-specific test plan (if review of the site-specific test plan is requested) within 30 calendar days after receipt of the original plan and within 30 calendar days after receipt of any supplementary information that is submitted under 40 CFR 63.7(c)(3)(i)(B). Before disapproving any site-specific test plan, the Division will notify the applicant of the Administrator's intention to disapprove the plan together with— [40 CFR 63.7(c)(3)(i)]

(A) Notice of the information and findings on which the intended disapproval is based; and [40 CFR 63.7(c)(3)(i)(A)]

(B) Notice of opportunity for the owner or operator to present, within 30 calendar days after he/she is notified of the intended disapproval, additional information to the Administrator before final action on the plan. [40 CFR 63.7(c)(3)(i)(B)]

(ii) In the event that the Administrator fails to approve or disapprove the site-specific test plan within the time period specified in 40 CFR 63.7(c)(3)(i), the following conditions shall apply: [40 CFR 63.7(c)(3)(ii)]

(A) If the owner or operator intends to demonstrate compliance using the test method(s) specified in the relevant standard or with only minor changes to those tests methods (see 40 CFR 63.7(e)(2)(i)), the owner or operator must conduct the performance test within the time specified in this section using the specified method(s); [40 CFR 63.7(c)(3)(ii)(A)]

(B) If the owner or operator intends to demonstrate compliance by using an alternative to any test method specified in the relevant standard, the owner or operator is authorized to conduct the performance test using an alternative test method after the Administrator approves the use of the alternative method when the Administrator approves the site-specific test plan (if review of the site-specific test plan is requested) or after the alternative method is approved (see 40 CFR 63.7(f)). However, the owner or operator is authorized to conduct the

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

performance test using an alternative method in the absence of notification of approval 45 days after submission of the site-specific test plan or request to use an alternative method. The owner or operator is authorized to conduct the performance test within 60 calendar days after he/she is authorized to demonstrate compliance using an alternative test method. Notwithstanding the requirements in the preceding three sentences, the owner or operator may proceed to conduct the performance test as required in this section (without the Division's prior approval of the site-specific test plan) if he/she subsequently chooses to use the specified testing and monitoring methods instead of an alternative. [40 CFR 63.7(c)(3)(ii)(B)]

h. When you conduct a performance test or design evaluation for a non-flare control device used to control emissions from batch process vents, you must establish emission profiles and conduct the test under worst-case conditions according to 40 CFR 63.1257(b)(8) instead of under normal operating conditions as specified in 40 CFR 63.7(e)(1). The requirements in 40 CFR 63.997(e)(1)(i) and (iii) also do not apply for performance tests conducted to determine compliance with the emission limits for batch process vents. For purposes of 40 CFR 63, Subpart FFFF, references in 40 CFR 63.997(b)(1) to "methods specified in 40 CFR 63.997(e)" include the methods specified in 40 CFR 63.1257(b)(8). [40 CFR 63.2460(c)(2)(ii)]

i. Conduct of performance tests. [40 CFR 63.7(e)]
Table 12 to Subpart FFFF requires that performance tests for batch process vents be conducted under worst-case conditions as specified in 63.2460(c)(2)(ii).
(1) Performance tests shall be conducted, and data shall be reduced in accordance with the test methods and procedures set forth in this section, in each relevant standard, and, if required, in applicable appendices of parts 51, 60, 61, and 63 of this chapter unless the Administrator makes one of the determinations in 63.7(e)(2)(i) through (iv). [40 CFR 63.7(e)(2)]

j. You must conduct a subsequent performance test or compliance demonstration equivalent to an initial compliance demonstration within 180 days of a change in the worst-case conditions. [40 CFR 63.2460(c)(2)(vi)]

k. Unless otherwise specified in a relevant standard or test method, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the relevant standard. For the purpose of determining compliance with a relevant standard, the arithmetic mean of the results of the three runs shall apply. Upon receiving approval from the Division, results of a test run may be replaced with results of an additional test run in the event that— [40 CFR 63.7(e)(3)]
(1) A sample is accidentally lost after the testing team leaves the site; or [40 CFR 63.7(e)(3)(i)]
(2) Conditions occur in which one of the three runs must be discontinued because of forced shutdown; or [40 CFR 63.7(e)(3)(ii)]
(3) Extreme meteorological conditions occur; or [40 CFR 63.7(e)(3)(iii)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(4) Other circumstances occur that are beyond the owner or operator's control. [40 CFR 63.7(e)(3)(iv)]

l. Requirements for performance tests. The requirements specified in 40 CFR 63.2450(g)(1) through (7) apply instead of or in addition to the requirements specified in subpart SS of this part 63. [40 CFR 63.2450(g)]
   (1) Conduct gas molecular weight analysis using Method 3, 3A, or 3B in appendix A to part 60 of this chapter. [40 CFR 63.2450(g)(1)]
   (2) Measure moisture content of the stack gas using Method 4 in appendix A to part 60 of this chapter. [40 CFR 63.2450(g)(2)]
   (3) As an alternative to using Method 18, Method 25/25A, or Method 26/26A of 40 CFR part 60, appendix A, to comply with any of the emission limits specified in tables 1 through 7 to 40 CFR 63, Subpart FFFF, you may use Method 320 of 40 CFR part 60, appendix A. When using Method 320, you must follow the analyte spiking procedures of section 13 of Method 320, unless you demonstrate that the complete spiking procedure has been conducted at a similar source. [40 CFR 63.2450(g)(4)]
   (4) Section 63.997(c)(1) does not apply. For the purposes of 40 CFR 63, Subpart FFFF, results of all initial compliance demonstrations must be included in the notification of compliance status report, which is due 150 days after the compliance date, as specified in 40 CFR 63.2520(d)(1). If the initial compliance demonstration includes a performance test and the results are submitted electronically via CEDRI in accordance with 40 CFR 63.2520(f), the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was conducted may be submitted in the notification of compliance status report in lieu of the performance test results. The performance test results must be submitted to CEDRI by the date the notification of compliance status report is submitted. [40 CFR 63.2450(g)(5)]
   (5) In lieu of the requirements specified in 40 CFR 63.7(e)(1) of subpart A, you must conduct performance tests under such conditions as the Administrator specifies based on representative performance of the affected source for the period being tested. Representative conditions exclude periods of startup and shutdown. You may not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, you must make available to the Administrator such records as may be necessary to determine the conditions of performance tests. [40 CFR 63.2450(g)(6)]
   (6) Comply with the requirements in 40 CFR 63.2450(e)(4), as applicable. [40 CFR 63.2450(g)(7)]

m. The requirements in 40 CFR 63.997(e)(1)(i) and (iii) also do not apply for performance tests conducted to determine compliance with the emission limits for batch process vents. [40 CFR 63.2460(c)(2)(ii)]

n. Alternatives to performance test requirements. Performance tests shall be conducted and data shall be reduced in accordance with the test methods and procedures set forth in 40 CFR 63, Subpart SS, in each relevant standard, and, if required, in applicable appendices

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

of 40 CFR parts 51, 60, 61, and 63 unless the Division specifies one of the provisions in 40 CFR 63.997(e)(1)(iv)(A) through (E). [40 CFR 63.997(e)(1)(iv)]

o. Performance test runs. Except as provided in 40 CFR 63.997(e)(1)(v)(A) and (B), each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for at least 1 hour and under the conditions specified in this section. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Division's approval, be determined using the arithmetic mean of the results of the two other runs. [40 CFR 63.997(e)(1)(v)]

p. Specific procedures. Where 40 CFR 63.985 through 63.995 require the owner or operator to conduct a performance test of a control device, or a halogen reduction device, an owner or operator shall conduct that performance test using the procedures in 40 CFR 63.997(e)(2)(i) through (iv), as applicable. The regulated material concentration and percent reduction may be measured as either total organic regulated material or as TOC minus methane and ethane according to the procedures specified. [40 CFR 63.997(e)(2)]
   (1) *Selection of sampling sites*. Method 1 or 1A of 40 CFR part 60, appendix A, as appropriate, shall be used for selection of the sampling sites. [40 CFR 63.997(e)(2)(i)]
      (i) For determination of compliance with a percent reduction requirement of total organic regulated material or TOC, sampling sites shall be located as specified in 40 CFR 63.997(e)(2)(i)(A)(1) and (e)(2)(i)(A)(2), and at the outlet of the control device. [40 CFR 63.997(e)(2)(i)(A)]
      (ii) For determination of compliance with a parts per million by volume total regulated material or TOC limit in a referencing subpart, the sampling site shall be located at the outlet of the control device. [40 CFR 63.997(e)(2)(i)(B)]
   (2) *Gas volumetric flow rate*. The gas volumetric flow rate shall be determined using Method 2, 2A, 2C, 2D, 2F, or 2G of 40 CFR part 60, appendix A, as appropriate. [40 CFR 63.997(e)(2)(ii)]
   (3) *Total organic regulated material or TOC concentration*. To determine compliance with a parts per million by volume total organic regulated material or TOC limit, the owner or operator shall use Method 18 or 25A of 40 CFR part 60, appendix A, as applicable. The ASTM D6420–99 may be used in lieu of Method 18 of 40 CFR part 60, appendix A, under the conditions specified in 40 CFR 63.997(e)(2)(iii)(D)(1) through (3). Alternatively, any other method or data that have been validated according to the applicable procedures in Method 301 of appendix A of 40 CFR part 63 may be used. The procedures specified in 40 CFR 63.997(e)(2)(iii)(A), (B), (D), and (E) shall be used to calculate parts per million by volume concentration. The calculated concentration shall be corrected to 3 percent oxygen using the procedures specified in 40 CFR 63.997(e)(2)(iii)(C) if a combustion device is the control device and supplemental combustion air is used to combust the emissions. [40 CFR 63.997(e)(2)(iii)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(i) Outlet concentration correction for combustion devices. When 40 CFR 63.997(e)(2)(iii)(C) requires you to correct the measured concentration at the outlet of a combustion device to 3 percent oxygen if you add supplemental combustion air, the requirements in either 40 CFR 63.997(i)(1) or (2) apply for the purposes of 40 CFR 63, Subpart SS. [40 CFR 63.2450(i)]

(A) You must correct the concentration in the gas stream at the outlet of the combustion device to 3 percent oxygen if you add supplemental gases, as defined in 40 CFR 63.2550, to the vent stream, or;

(B) You must correct the measured concentration for supplemental gases using Equation 1 of 40 CFR 63.2460; you may use process knowledge and representative operating data to determine the fraction of the total flow due to supplemental gas.

(4) *Percent reduction calculation*. To determine compliance with a percent reduction requirement, the owner or operator shall use Method 18, 25, or 25A of 40 CFR part 60, appendix A, as applicable. The method ASTM D6420–99 may be used in lieu of Method 18 of 40 CFR part 60, appendix A, under the conditions specified in 40 CFR 63.997(e)(2)(iii)(D)(1) through (3). Alternatively, any other method or data that have been validated according to the applicable procedures in Method 301 of appendix A of 40 CFR part 63 may be used. The procedures specified in 40 CFR 63.997(e)(2)(iv)(A) through (I) shall be used to calculate percent reduction efficiency. [40 CFR 63.997(e)(2)(iv)]

q. When 40 CFR 63.1257(d)(3)(i)(B)(7) specifies that condenser-controlled emissions from an air dryer must be calculated using Equation 11 of 40 CFR part 63, subpart GGG, with "V equal to the air flow rate," it means "V equal to the dryer outlet gas flow rate," for the purposes of 40 CFR 63, Subpart FFFF. Alternatively, you may use Equation 12 of 40 CFR part 63, subpart GGG, with V equal to the dryer inlet air flow rate. Account for time as appropriate in either equation. [40 CFR 63.2460(c)(2)(iv)]

(1) If a process condenser is used for any boiling operations, you must demonstrate that it is properly operated according to the procedures specified in 40 CFR 63.1257(d)(2)(i)(C)(4)(ii) and (d)(3)(iii)(B), and the demonstration must occur only during the boiling operation. The reference in 40 CFR 63.1257(d)(3)(iii)(B) to the alternative standard in 40 CFR 63.1254(c) means 40 CFR 63.2505 for the purposes of 40 CFR 63, Subpart FFFF. As an alternative to measuring the exhaust gas temperature, as required by 40 CFR 63.1257(d)(3)(iii)(B), you may elect to measure the liquid temperature in the receiver. [40 CFR 63.2460(c)(2)(iv)(5)]

r. Establishing operating limits. You must establish operating limits under the conditions required for your initial compliance demonstration, except you may elect to establish operating limit(s) for conditions other than those under which a performance test was conducted as specified in 40 CFR 63.2460(c)(3)(i) and, if applicable, 40 CFR 63.2460(c)(3)(ii). [40 CFR 63.2460(c)(3)]

(1) The operating limits may be based on the results of the performance test and supplementary information such as engineering assessments and manufacturer's recommendations. These limits may be established for conditions as unique as individual emission episodes for a batch process. You must provide rationale in the

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

precompliance report for the specific level for each operating limit, including any data and calculations used to develop the limit and a description of why the limit indicates proper operation of the control device. The procedures provided in this 40 CFR 63.2460(c)(3)(i) have not been approved by the Division and determination of the operating limit using these procedures is subject to review and approval by the Division. [40 CFR 63.2460(c)(3)(i)]

(2) If you elect to establish separate monitoring levels for different emission episodes within a batch process, you must maintain records in your daily schedule or log of processes indicating each point at which you change from one operating limit to another, even if the duration of the monitoring for an operating limit is less than 15 minutes. You must maintain a daily schedule or log of processes according to 40 CFR 63.2525(c). [40 CFR 63.2460(c)(3)(ii)]

s. Data analysis, recordkeeping, and reporting. [40 CFR 63.7(g)]

(1) Unless otherwise specified in a relevant standard or test method, or as otherwise approved by the Division in writing, results of a performance test shall include the analysis of samples, determination of emissions, and raw data. A performance test is "completed" when field sample collection is terminated. The owner or operator of an affected source shall report the results of the performance test to the Division before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard or as approved otherwise in writing by the Division (see 40 CFR 63.9(i)). The results of the performance test shall be submitted as part of the notification of compliance status required under 40 CFR 63.9(h). Before a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall send the results of the performance test to the Division. After a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall send the results of the performance test to the appropriate permitting authority. [40 CFR 63.7(g)(1)]

4. Specific Monitoring Requirements:

a. Incinerator monitoring requirements. Where an incinerator is used, a temperature monitoring device capable of providing a continuous record that meets the provisions specified in 40 CFR 63.988(c)(1) is required. [40 CFR 63.988(c)]

(1) Where an incinerator other than a catalytic incinerator is used, a temperature monitoring device shall be installed in the fire box or in the ductwork immediately downstream of the fire box in a position before any substantial heat exchange occurs. [40 CFR 63.988(c)(1)]

b. Operation and maintenance of continuous parameter monitoring systems. [40 CFR 63.996(c)]

(1) All monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately. [40 CFR 63.996(c)(1)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(2) The owner or operator of a regulated source shall maintain and operate each CPMS as specified in this section, or in a relevant subpart, and in a manner consistent with good air pollution control practices. [40 CFR 63.996(c)(2)]
   (i) The owner or operator of a regulated source shall ensure the immediate repair or replacement of CPMS parts to correct "routine" or otherwise predictable CPMS malfunctions. The necessary parts for routine repairs of the affected equipment shall be readily available. [40 CFR 63.996(c)(2)(i)]
   (ii) If under the referencing subpart, an owner or operator has developed a start-up, shutdown, and malfunction plan, the plan is followed, and the CPMS is repaired immediately, this action shall be recorded as specified in 40 CFR 63.998(c)(1)(ii)(E). [40 CFR 63.996(c)(2)(ii)]
   (iii) The Administrator's determination of whether acceptable operation and maintenance procedures are being used for the CPMS will be based on information that may include, but is not limited to, review of operation and maintenance procedures, operation and maintenance records as specified in 40 CFR 63.998(c)(1)(i) and (ii), manufacturer's recommendations and specifications, and inspection of the CPMS. [40 CFR 63.996(c)(2)(iii)]

(3) All CPMS's shall be installed such that representative measurements of parameters from the regulated source are obtained. [40 CFR 63.996(c)(4)]

(4) In accordance with the referencing subpart, except for system breakdowns, repairs, maintenance periods, instrument adjustments, or checks to maintain precision and accuracy, calibration checks, and zero and span adjustments, all continuous parameter monitoring systems shall be in continuous operation when emissions are being routed to the monitored device. [40 CFR 63.996(c)(5)]

c. Operation and maintenance of continuous monitoring systems. [40 CFR 63.8(c)]
   (1) The owner or operator of an affected source shall maintain and operate each CMS as specified in this section, or in a relevant standard, and in a manner consistent with good air pollution control practices. [40 CFR 63.8(c)(1)]
      (i) The owner or operator must keep the necessary parts for routine repairs of the affected CMS equipment readily available. [40 CFR 63.8(c)(1)(ii)]

d. All CMS must be installed such that representative measures of emissions or process parameters from the affected source are obtained. In addition, CEMS must be located according to procedures contained in the applicable performance specification(s). [40 CFR 63.8(c)(2)(i)]
   (1) Unless the individual subpart states otherwise, the owner or operator must ensure the read out (that portion of the CMS that provides a visual display or record), or other indication of operation, from any CMS required for compliance with the emission standard is readily accessible on site for operational control or inspection by the operator of the equipment. [40 CFR 63.8(c)(2)(ii)]

e. All CMS shall be installed, operational, and the data verified as specified in the relevant standard either prior to or in conjunction with conducting performance tests under 40 CFR 63.7. Verification of operational status shall, at a minimum, include completion of the

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

manufacturer's written specifications or recommendations for installation, operation, and calibration of the system. [40 CFR 63.8(c)(3)]

f. When subpart SS of part 63 uses the term “a range” or “operating range” of a monitored parameter, it means an “operating limit” for a monitored parameter for the purposes of 40 CFR 63, Subpart FFFF. [40 CFR 63.2450(k)(2)]

g. The owner or operator shall establish a range for monitored parameters that indicates proper operation of the control or recovery device. In order to establish the range, the information required in 40 CFR 63.999(b)(3) shall be submitted in the Notification of Compliance Status or the operating permit application or amendment. The range may be based upon a prior performance test meeting the specifications of 40 CFR 63.997(b)(1) or a prior TRE index value determination, as applicable, or upon existing ranges or limits established under a referencing subpart. [40 CFR 63.996(c)(6)]

h. If flow to a control device could be intermittent, you must install, calibrate, and operate a flow indicator at the inlet or outlet of the control device to identify periods of no flow. Periods of no flow may not be used in daily or block averages, and it may not be used in fulfilling a minimum data availability requirement. [40 CFR 63.2460(c)(7)]

5. Specific Recordkeeping Requirements:

a. For a minimum of 5 years after a performance test is conducted, the owner or operator shall retain and make available, upon request, for inspection by the Division the records or results of such performance test and other data needed to determine emissions from an affected source. [40 CFR 63.998(g)(3)]

b. Nonflare control device performance test records. [40 CFR 63.998(a)(2)]

(1) Availability of performance test records. Upon request, the owner or operator shall make available to the Division such records as may be necessary to determine the conditions of performance tests performed pursuant to 40 CFR 63.988(b). [40 CFR 63.998(a)(2)(i)]

(2) Nonflare control device and halogen reduction device performance test records. [40 CFR 63.998(a)(2)(ii)]

(i) General requirements. Each owner or operator subject to the provisions of 40 CFR 63, Subpart SS shall keep up-to-date, readily accessible continuous records of the data specified in 40 CFR 63.998(a)(2)(ii)(B) through (C), as applicable, measured during each performance test performed pursuant to 40 CFR 63.988(b) and also include that data in the Notification of Compliance Status required under 40 CFR 63.999(b). The same data specified in this section shall be submitted in the reports of all subsequently required performance tests where either the emission control efficiency of a combustion device, or the outlet concentration of TOC or regulated material is determined. [40 CFR 63.998(a)(2)(ii)(A)]

(ii) Nonflare combustion device. Where an owner or operator subject to the provisions of this 40 CFR 63.998 seeks to demonstrate compliance with a percent reduction requirement or a parts per million by volume requirement using a nonflare

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

combustion device the information specified in (a)(2)(ii)(B)(1) through (6) shall be recorded. [40 CFR 63.998(a)(2)(ii)(B)]

(A) For thermal incinerators, record the fire box temperature averaged over the full period of the performance test. [40 CFR 63.998(a)(2)(ii)(B)(*1*)]

(B) For an incinerator, record the percent reduction of organic regulated material, if applicable, or TOC achieved by the incinerator determined as specified in 40 CFR 63.997(e)(2)(iv), as applicable, or the concentration of organic regulated material (parts per million by volume, by compound) determined as specified in 40 CFR 63.997(e)(2)(iii) at the outlet of the incinerator. [40 CFR 63.998(a)(2)(ii)(B)(*4*)]

c. Continuous records and monitoring system data handling. [40 CFR 63.998(b)]

(1) *Continuous records*. Where 40 CFR 63, Subpart SS requires a continuous record, the owner or operator shall maintain a record as specified in 40 CFR 63.998(b)(1)(i) through (iv), as applicable: [40 CFR 63.998(b)(1)]

(i) A record of values measured at least once every 15 minutes or each measured value for systems which measure more frequently than once every 15 minutes; or [40 CFR 63.998(b)(1)(i)]

(ii) A record of block average values for 15-minute or shorter periods calculated from all measured data values during each period or from at least one measured data value per minute if measured more frequently than once per minute. [40 CFR 63.998(b)(1)(ii)]

(iii) Where data is collected from an automated continuous parameter monitoring system, the owner or operator may calculate and retain block hourly average values from each 15-minute block average period or from at least one measured value per minute if measured more frequently than once per minute, and discard all but the most recent three valid hours of continuous (15-minute or shorter) records, if the hourly averages do not exclude periods of CPMS breakdown or malfunction. An automated CPMS records the measured data and calculates the hourly averages through the use of a computerized data acquisition system. [40 CFR 63.998(b)(1)(iii)]

(iv) A record as required by an alternative approved under a referencing subpart. [40 CFR 63.998(b)(1)(iv)]

d. *N*onflare control and recovery device regulated source monitoring records —[40 CFR 63.998(c)]

(1) *Monitoring system records*. For process vents, the owner or operator subject to 40 CFR 63, Subpart SS shall keep the records specified in this paragraph, as well as records specified elsewhere in 40 CFR 63, Subpart SS. [40 CFR 63.998(c)(1)]

(i) For a CPMS used to comply with this part, a record of the procedure used for calibrating the CPMS. [40 CFR 63.998(c)(1)(i)]

(ii) For a CPMS used to comply with 40 CFR 63, Subpart SS, records of the information specified in 40 CFR 63.998(c)(ii)(A) through (H), as indicated in a referencing subpart. [40 CFR 63.998(c)(1)(ii)]

(A) The date and time of completion of calibration and preventive maintenance of the CPMS. [40 CFR 63.998(c)(1)(ii)(A)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(B) The "as found" and "as left" CPMS readings, whenever an adjustment is made that affects the CPMS reading and a "no adjustment" statement otherwise. [40 CFR 63.998(c)(1)(ii)(B)]
(C) The start time and duration or start and stop times of any periods when the CPMS is inoperative. [40 CFR 63.998(c)(1)(ii)(C)]
(D) Records of the total duration of operating time. [40 CFR 63.998(c)(1)(ii)(H)]

e. Records of the results of each CPMS calibration check and the maintenance performed, as specified in 40 CFR 63.2450(k)(1). [40 CFR 63.2525(g)]

f. You must record the results of each calibration check, and all maintenance performed on the CPMS as specified in 40 CFR 63.998(c)(1)(ii)(A), except you must record all maintenance, not just preventative maintenance. [40 CFR 63.2450(k)(1)(i)]

g. Excluded data. Monitoring data recorded during periods identified in 40 CFR 63.998(b)(2)(i) through (iii) shall not be included in any average computed to determine compliance with an emission limit in a referencing subpart. [40 CFR 63.998(b)(2)]
(1) Monitoring system breakdowns, repairs, preventive maintenance, calibration checks, and zero (low-level) and high-level adjustments; [40 CFR 63.998(b)(2)(i)]
(2) Periods of non-operation of the process unit (or portion thereof), resulting in cessation of the emissions to which the monitoring applies. [40 CFR 63.998(b)(2)(ii)]
(3) Startup, shutdown, and malfunction. 40 CFR 63.998(b)(2)(iii), which apply to the exclusion of monitoring data collected during periods of SSM from daily averages, do not apply for the purposes of 40 CFR 63, Subpart FFFF. [40 CFR 63.2450(l)]

h. Records of daily averages. In addition to the records specified in 40 CFR 63.998(a), owners or operators shall keep records as specified in 40 CFR 63.998(b)(3)(i) and (ii) and submit reports as specified in 40 CFR 63.999(c), unless an alternative recordkeeping system has been requested and approved under a referencing subpart. [40 CFR 63.998(b)(3)]
(1) Except as specified in 40 CFR 63.998(b)(3)(ii), daily average values of each continuously monitored parameter shall be calculated from data meeting the specifications of 40 CFR 63.998(b)(2) for each operating day and retained for 5 years. [40 CFR 63.998(b)(3)(i)]
(i) The daily average shall be calculated as the average of all values for a monitored parameter recorded during the operating day. The average shall cover a 24-hour period if operation is continuous, or the period of operation per operating day if operation is not continuous (e.g., for transfer racks the average shall cover periods of loading). If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the daily average instead of all measured values. [40 CFR 63.998(b)(3)(i)(A)]
(ii) The operating day shall be the period defined in the operating permit or in the Notification of Compliance Status. It may be from midnight to midnight or another daily period. [40 CFR 63.998(b)(3)(i)(B)]
(2) If all recorded values for a monitored parameter during an operating day are within the range established in the Notification of Compliance Status or in the operating permit, the owner or operator may record that all values were within the range and retain this record for 5 years rather than calculating and recording a daily average for that

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

operating day. In such cases, the owner or operator may not discard the recorded values as allowed in 40 CFR 63.998(b)(1)(iii). [40 CFR 63.998(b)(3)(ii)]

i. Averaging periods. As an alternative to the requirement for daily averages in 40 CFR 63.998(b)(3), you may determine averages for operating blocks. An operating block is a period of time that is equal to the time from the beginning to end of batch process operations within a process. [40 CFR 63.2460(c)(4)]

j. For the purposes of 40 CFR 63.998, and excursion means that the daily average value of monitoring data for a parameter is greater than the maximum, or less than the minimum established value. [40 CFR 63.998(b)(6)(i)]

k. Combustion control and halogen reduction device monitoring records. [40 CFR 63.998(c)(2)]
   (1) Each owner or operator using a combustion control device to comply with 40 CFR 63, Subpart SS shall keep the following records up-to-date and readily accessible, as applicable. Continuous records of the equipment operating parameters specified to be monitored under 40 CFR 63.988(c) (incinerator, boiler, and process heater monitoring) or approved by the Division in accordance with a referencing subpart. [40 CFR 63.998(c)(2)(i)]
   (2) Each owner or operator shall keep records of the daily average value of each continuously monitored parameter for each operating day determined according to the procedures specified in 40 CFR 63.998(b)(3)(i). [40 CFR 63.998(c)(2)(ii)]
   (3) Each owner or operator subject to the provisions of 40 CFR 63, Subpart SS shall keep up-to-date, readily accessible records of periods of operation during which the parameter boundaries are exceeded. The parameter boundaries are established pursuant to 40 CFR 63.996(c)(6). [40 CFR 63.998(c)(2)(iii)]

l. Records of monitored parameters outside of range. The owner or operator shall record the occurrences and the cause of periods when the monitored parameters are outside of the parameter ranges documented in the Notification of Compliance Status report. This information shall also be reported in the Periodic Report. [40 CFR 63.998(d)(5)]

m. The owner or operator of an affected source subject to the provisions of this part shall maintain relevant records for such source of—[40 CFR 63.10(b)(2)]
   (1) All required maintenance performed on the air pollution control and monitoring equipment; [40 CFR 63.10(b)(2)(iii)]
   (2) All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report); [40 CFR 63.10(b)(2)(vii)]
   (3) All results of performance tests, CMS performance evaluations, and opacity and visible emission observations; and [40 CFR 63.10(b)(2)(viii)]
   (4) All measurements as may be necessary to determine the conditions of performance tests and performance evaluations. [40 CFR 63.10(b)(2)(ix)]

n. When controlling emissions from Group 1 Storage Tanks and not controlling emissions from Group 1 Process Vents or any other Group 1 source types: [40 CFR 63.998(d)(2)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(1) A record of the planned routine maintenance performed on the control system during which the control system does not meet the applicable specifications of 40 CFR 63.983(a), 63.985(a), or 63.987(a), as applicable, due to the planned routine maintenance. Such a record shall include the information specified in 40 CFR 63.998(d)(2)(ii)(A) through (C). This information shall be submitted in the Periodic Reports as specified in 40 CFR 63.999(c)(4). [40 CFR 63.998(d)(2)(ii)]
   (i) The first time of day and date the requirements of 40 CFR 63.983(a), 40 CFR 63.985(a), or 40 CFR 63.987(a), as applicable, were not met at the beginning of the planned routine maintenance, and [40 CFR 63.998(d)(2)(ii)(A)]
   (ii) The first time of day and date the requirements of 40 CFR 63.983(a), 63.985(a), or 63.987(a), as applicable, were met at the conclusion of the planned routine maintenance. [40 CFR 63.998(d)(2)(ii)(B)]
   (iii) A description of the type of maintenance performed. [40 CFR 63.998(d)(2)(ii)(C)]

o. The manufacturer's specifications or your written procedures must include a schedule for calibrations, preventative maintenance procedures, a schedule for preventative maintenance, and corrective actions to be taken if a calibration fails. If a CPMS calibration fails, the CPMS is considered to be inoperative until you take corrective action and the system passes calibration. You must record the nature and cause of instances when the CPMS is inoperative and the corrective action taken. [40 CFR 63.2450(k)(7)]

6. Specific Reporting Requirements:

a. General requirements. [40 CFR 63.999(a)(1)]
   (1) The owner or operator shall notify the Division of the intention to conduct a performance test or flare compliance assessment at least 30 days before such a compliance demonstration is scheduled to allow the Division the opportunity to have an observer present. If after 30 days notice for such an initially scheduled compliance demonstration, there is a delay (due to operational problems, etc.) in conducting the scheduled compliance demonstration, the owner or operator of an affected facility shall notify the Division as soon as possible of any delay in the original demonstration date. The owner or operator shall provide at least 7 days prior notice of the rescheduled date of the compliance demonstration, or arrange a rescheduled date with the Administrator by mutual agreement. [40 CFR 63.999(a)(1)(i)]
   (2) Unless specified differently in 40 CFR 63, Subpart SS or a referencing subpart, performance test and flare compliance assessment reports, not submitted as part of a Notification of Compliance Status report, shall be submitted to the Division within 60 days of completing the test or determination. [40 CFR 63.999(a)(1)(ii)]

b. Reporting. [40 CFR 63.2450(m)]
   (1) When 40 CFR 63.2455 through 63.2490 reference other subparts in this part 63 that use the term “periodic report,” it means “compliance report” for the purposes of 40 CFR 63, Subpart FFFF. The compliance report must include the information specified in 40 CFR 63.2520(e), as well as the information specified in referenced subparts. [40 CFR 63.2450(m)(1)]
   (2) When there are conflicts between 40 CFR 63, Subpart FFFF and referenced subparts for the due dates of reports required by 40 CFR63, Subpart FFFF, reports must be

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

submitted according to the due dates presented in 40 CFR 63, Subpart FFFF. [40 CFR 63.2450(m)(2)]

(3) Excused excursions, as defined in subparts G and SS of this part 63, are not allowed. [40 CFR 63.2450(m)(3)]

c. Notification of Compliance Status Report [40 CFR 63.999(a)(2)]

(1) For performance tests or flare compliance assessments, the Notification of Compliance Status or performance test and flare compliance assessment report shall include one complete test report as specified in 40 CFR 63.999(a)(2)(ii) for each test method used for a particular kind of emission point and other applicable information specified in (a)(2)(iii). For additional tests performed for the same kind of emission point using the same method, the results and any other information required in applicable sections of 40 CFR 63, Subpart SS shall be submitted, but a complete test report is not required. [40 CFR 63.999(a)(2)(i)]

(2) A complete test report shall include a brief process description, sampling site description, description of sampling and analysis procedures and any modifications to standard procedures, quality assurance procedures, record of operating conditions during the test, record of preparation of standards, record of calibrations, raw data sheets for field sampling, raw data sheets for field and laboratory analyses, documentation of calculations, and any other information required by the test method. [40 CFR 63.999(a)(2)(ii)]

(3) The performance test or flare compliance assessment report shall also include the information specified in (a)(2)(iii)(A) through (C), as applicable. [40 CFR 63.999(a)(2)(iii)]

(i) For nonflare control device and halogen reduction device performance tests as required under 40 CFR 63.988(b), 63.990(b), 63.994(b), or 63.995(b), also submit the records specified in 40 CFR 63.998(a)(2)(ii), as applicable. [40 CFR 63.999(a)(2)(iii)(B)]

d. Notification of Compliance Status Report [40 CFR 63.999(b)]

(1) *Operating range for monitored parameters*. The owner or operator shall submit as part of the Notification of Compliance Status, the operating range for each monitoring parameter identified for each control, recovery, or halogen reduction device as determined pursuant to 40 CFR 63.996(c)(6). The specified operating range shall represent the conditions for which the control, recovery, or halogen reduction device is being properly operated and maintained. This report shall include the information in 40 CFR 63.999(b)(3)(i) through (iii), as applicable, unless the range and the operating day have been established in the operating permit. [40 CFR 63.999(b)(3)]

(i) The specific range of the monitored parameter(s) for each emission point; [40 CFR 63.999(b)(3)(i)]

(ii) The rationale for the specific range for each parameter for each emission point, including any data and calculations used to develop the range and a description of why the range indicates proper operation of the control, recovery, or halogen reduction device, as specified in 40 CFR 63.999(b)(3)(ii)(A), (B), or (C), as applicable. [40 CFR 63.999(b)(3)(ii)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(A) If a performance test or TRE index value determination is required by a referencing subpart for a control, recovery or halogen reduction device, the range shall be based on the parameter values measured during the TRE index value determination or performance test and may be supplemented by engineering assessments and/or manufacturer's recommendations. TRE index value determinations and performance testing are not required to be conducted over the entire range of permitted parameter values. [40 CFR 63.999(b)(3)(ii)(A)]

(B) The range may be based on ranges or limits previously established under a referencing subpart. [40 CFR 63.999(b)(3)(ii)(C)]

(iii) A definition of the source's operating day for purposes of determining daily average values of monitored parameters. The definition shall specify the times at which an operating day begins and ends. [40 CFR 63.999(b)(3)(iii)]

e. Section 63.997(c)(1) does not apply. For the purposes of 40 CFR 63, Subpart FFFF, results of all initial compliance demonstrations must be included in the notification of compliance status report, which is due 150 days after the compliance date, as specified in 40 CFR 63.2520(d)(1). If the initial compliance demonstration includes a performance test and the results are submitted electronically via CEDRI in accordance with 40 CFR 63.2520(f), the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was conducted may be submitted in the notification of compliance status report in lieu of the performance test results. The performance test results must be submitted to CEDRI by the date the notification of compliance status report is submitted. [40 CFR 63.2450(g)(5)]

f. Compliance Report. When one CPMS is used as a backup to another CPMS, the owner or operator shall report the results from the CPMS used to meet the monitoring requirements of 40 CFR 63, Subpart SS. If both such CPMS's are used during a particular reporting period to meet the monitoring requirements of 40 CFR 63, Subpart SS, then the owner or operator shall report the results from each CPMS for the time during the six month period that the instrument was relied upon to demonstrate compliance. [40 CFR 63.996(b)(2)]

g. Compliance Report *Periodic reports*. [40 CFR 63.999(c)]

(1) Periodic reports shall include the reporting period dates, the total source operating time for the reporting period, and, as applicable, all information specified in this section and in the referencing subpart, including reports of periods when monitored parameters are outside their established ranges. [40 CFR 63.999(c)(1)]

h. Compliance Report For storage vessels, the owner or operator shall include in each periodic report required the information specified in 40 CFR 63.999(c)(4)(i) through (iii). [40 CFR 63.999(c)(4)]

(1) For the 6-month period covered by the periodic report, the information recorded in 40 CFR 63.998(d)(2)(ii)(A) through (C). [40 CFR 63.999(c)(4)(i)]

(2) For the time period covered by the periodic report and the previous periodic report, the total number of hours that the control system did not meet the requirements of 40 CFR 63.983(a), 63.985(a), or 63.987(a) due to planned routine maintenance. [40 CFR 63.999(c)(4)(ii)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(3) A description of the planned routine maintenance during the next 6-month periodic reporting period that is anticipated to be performed for the control system when it is not expected to meet the required control efficiency. This description shall include the type of maintenance necessary, planned frequency of maintenance, and expected lengths of maintenance periods. [40 CFR 63.999(c)(4)(iii)]

i. Compliance Report If a control device other than a flare is used to control emissions from storage vessels or low throughput transfer racks, the periodic report shall describe each occurrence when the monitored parameters were outside of the parameter ranges documented in the Notification of Compliance Status in accordance with 40 CFR 63.999(b)(3). The description shall include the information specified in 40 CFR 63.999(c)(5)(i) and (ii). [40 CFR 63.999(c)(5)]
   (1) Identification of the control device for which the measured parameters were outside of the established ranges, and [40 CFR 63.999(c)(5)(i)]
   (2) The cause for the measured parameters to be outside of the established ranges. [40 CFR 63.999(c)(5)(ii)

j. Compliance Report. For process vents and transfer racks (except low throughput transfer racks), periodic reports shall include the information specified in 40 CFR 63.999(c)(6)(i) through (iv). [40 CFR 63.999(c)(6)]
   (1) Periodic reports shall include the daily average values of monitored parameters, calculated as specified in 40 CFR 63.998(b)(3)(i) for any days when the daily average value is outside the bounds as defined in 40 CFR 63.998(c)(2)(iii) or (c)(3)(iii), or the data availability requirements defined in 40 CFR 63.999(c)(6)(i)(A) through (D) are not met, whether these excursions are excused or unexcused excursions. For excursions caused by lack of monitoring data, the duration of periods when monitoring data were not collected shall be specified. An excursion means any of the cases listed in 40 CFR 63.999(c)(6)(i)(A) through (C). If the owner or operator elects not to retain the daily average values pursuant to 40 CFR 63.998(b)(5)(ii)(A), the owner or operator shall report this in the Periodic Report. [40 CFR 63.999(c)(6)(i)]
      (i) When the daily average value of one or more monitored parameters is outside the permitted range. [40 CFR 63.999(c)(6)(i)(A)]
      (ii) When the period of control or recovery device operation is 4 hours or greater in an operating day and monitoring data are insufficient to constitute a valid hour of data for at least 75 percent of the operating hours. [40 CFR 63.999(c)(6)(i)(B)]
      (iii) When the period of control or recovery device operation is less than 4 hours in an operating day and more than one of the hours during the period of operation does not constitute a valid hour of data due to insufficient monitoring data. [40 CFR 63.999(c)(6)(i)(C)]
      (iv) Monitoring data are insufficient to constitute a valid hour of data as used in 40 CFR 63.999(c)(6)(i)(B) and (C), if measured values are unavailable for any of the 15-minute periods within the hour. [40 CFR 63.999(c)(6)(i)(D)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS FOR 40 CFR 63, Subpart FFFF - 20. The 236 REGENERATIVE THERMAL OXIDIZER

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

401 KAR 63:002, Section 2(4)(ii), 40 C.F.R. 63.980 through 63.999 (Subpart SS), National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process.

401 KAR 63:002, 40 C.F.R. 63.1 through 63.16, Table 1 (Subpart A), General Provisions.

1. **Operating Limitations:**
   None

2. **Emission Limitations:**
   a. Incinerators used to comply with the provisions of a referencing subpart and 40 CFR 63, Subpart SS shall be operated at all times when emissions are vented to them. [40 CFR 63.988(2)]

   b. You must be in compliance with the emission limits and work practice standards in tables 1 through 7 to Subpart FFFF at all times. [40 CFR 63.2450(a)(2)]

3. **Testing Requirements:**
   a. Performance test requirements. [40 CFR 63.988(b]
      (1) Except as specified in 40 CFR 63.997(b), the owner or operator shall conduct an initial performance test of any incinerator used to comply with the provisions of a referencing subpart and 40 CFR 63, Subpart SS according to the procedures in 40 CFR 63.997. [40 CFR 63.988(b)(1)]

   b. Except as provided in 40 CFR 63.7(a)(4), if required to do performance testing by a relevant standard, and unless a waiver of performance testing is obtained under this section or the conditions of 40 CFR 63.7(c)(3)(ii)(B) apply, the owner or operator of the affected source must perform such tests within 150 days of the compliance date for such source. [40 CFR 63.7(a)(2)]
      (1) The performance test must be performed within 150 days of the compliance date instead of the 180 days normally specified by 63.7(a)(2). [Table 12 to 40 CFR 63, Subpart FFFF]

   c. Notification of performance test. [40 CFR 63.7 (as referenced by 63.2515(a)]
      (1) The owner or operator of an affected source must notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is initially scheduled to begin to allow the Administrator, upon

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

request, to review and approve the site-specific test plan required under 40 CFR 63.7(c) and to have an observer present during the test. [40 CFR 63.7(b)(1)]

(2) In the event the owner or operator is unable to conduct the performance test on the date specified in the notification requirement specified in 40 CFR 63.7(b)(1) due to unforeseeable circumstances beyond his or her control, the owner or operator must notify the Administrator as soon as practicable and without delay prior to the scheduled performance test date and specify the date when the performance test is rescheduled. This notification of delay in conducting the performance test shall not relieve the owner or operator of legal responsibility for compliance with any other applicable provisions of this part or with any other applicable Federal, State, or local requirement, nor will it prevent the Administrator from implementing or enforcing this part or taking any other action under the Act. [40 CFR 63.7(b)(2)]

d. The owner or operator of an affected source shall notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin to allow the Administrator to review and approve the site-specific test plan required under 40 CFR 63.7(c), if requested by the Division, and to have an observer present during the test. [40 CFR 63.9(e), as referenced by 63.2515(a)]

e. *Notification of performance test*. If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in 40 CFR 63.7(b)(1). For any performance test required as part of the initial compliance procedures for batch process vents in Table 2 to 40 CFR 63, Subpart FFFF, you must also submit the test plan required by 40 CFR 63.7(c) and the emission profile with the notification of the performance test. [40 CFR 63.2515]

f. Table 12 to Subpart FFFF requires that a test plan be submitted with the notification of the performance test if the control device controls batch processes. [40 CFR 63.7, as referenced by 63.2515(a)]

(1) Submission of site-specific test plan. Before conducting a required performance test, the owner or operator of an affected source shall develop and, if requested by the Division, shall submit a site-specific test plan to the Administrator for approval. The test plan shall include a test program summary, the test schedule, data quality objectives, and both an internal and external quality assurance (QA) program. Data quality objectives are the pretest expectations of precision, accuracy, and completeness of data. [40 CFR 63.7(c)(2)(i)]

(2) 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 replicate samples. [40 CFR 63.7(c)(2)(ii)]

(3) The external QA program shall include, at a minimum, application of plans for a test method performance audit (PA) during the performance test. [40 CFR 63.7(c)(2)(iii)]

(4) The owner or operator of an affected source shall submit the site-specific test plan to the Division upon the Division's request at least 60 calendar days before the performance test is scheduled to take place, that is, simultaneously with the notification

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

of intention to conduct a performance test required under 40 CFR 63.7(b), or on a mutually agreed upon date. [40 CFR 63.7(c)(2)(iv)]

(5) The Division may request additional relevant information after the submittal of a site-specific test plan. [40 CFR 63.7(c)(2)(v)]

g. Table 12 to Subpart FFFF requires that a test plan be submitted with the notification of the performance test if the control device controls batch processes. [40 CFR 63.7 as referenced by 63.2515(a)]

(1) Approval of site-specific test plan. [40 CFR 63.7(c)(3)]

(i) The Administrator will notify the owner or operator of approval or intention to deny approval of the site-specific test plan (if review of the site-specific test plan is requested) within 30 calendar days after receipt of the original plan and within 30 calendar days after receipt of any supplementary information that is submitted under 40 CFR 63.7(c)(3)(i)(B). Before disapproving any site-specific test plan, the Administrator will notify the applicant of the Administrator 's intention to disapprove the plan together with— [40 CFR 63.7(c)(3)(i)]

(A) Notice of the information and findings on which the intended disapproval is based; and [40 CFR 63.7(c)(3)(i)(A)

(B) Notice of opportunity for the owner or operator to present, within 30 calendar days after he/she is notified of the intended disapproval, additional information to the Division before final action on the plan. [40 CFR 63.7(c)(3)(i)(B)

(ii) In the event that the Division fails to approve or disapprove the site-specific test plan within the time period specified in 40 CFR 63.7(c)(3)(i), the following conditions shall apply: [40 CFR 63.7(c)(3)(ii)]

(A) If the owner or operator intends to demonstrate compliance using the test method(s) specified in the relevant standard or with only minor changes to those tests methods (see 40 CFR 63.7(e)(2)(i)), the owner or operator must conduct the performance test within the time specified in this section using the specified method(s); [40 CFR 63.7(c)(3)(ii)(A)]

(B) If the owner or operator intends to demonstrate compliance by using an alternative to any test method specified in the relevant standard, the owner or operator is authorized to conduct the performance test using an alternative test method after the Division approves the use of the alternative method when the Division approves the site-specific test plan (if review of the site-specific test plan is requested) or after the alternative method is approved (see 40 CFR 63.7(f)). However, the owner or operator is authorized to conduct the performance test using an alternative method in the absence of notification of approval 45 days after submission of the site-specific test plan or request to use an alternative method. The owner or operator is authorized to conduct the performance test within 60 calendar days after he/she is authorized to demonstrate compliance using an alternative test method. Notwithstanding the requirements in the preceding three sentences, the owner or operator may proceed to conduct the performance test as required in this section (without the Division's prior approval of the site-specific test plan) if he/she subsequently chooses to use the specified testing and monitoring methods instead of an alternative. [40 CFR 63.7(c)(3)(ii)(B)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Table 12 to Subpart FFFF requires that a test plan be submitted with the notification of the performance test if the control device controls batch processes.

h. When you conduct a performance test or design evaluation for a non-flare control device used to control emissions from batch process vents, you must establish emission profiles and conduct the test under worst-case conditions according to 40 CFR 63.1257(b)(8) instead of under normal operating conditions as specified in 40 CFR 63.7(e)(1). The requirements in 40 CFR 63.997(e)(1)(i) and (iii) also do not apply for performance tests conducted to determine compliance with the emission limits for batch process vents. For purposes of 40 CFR 63, Subpart FFFF, references in 40 CFR 63.997(b)(1) to "methods specified in 40 CFR 63.997(e)" include the methods specified in 40 CFR 63.1257(b)(8). [40 CFR 63.2460(c)(2)(ii)]

i. Conduct of performance tests. [40 CFR 63.7(e)]
Table 12 to Subpart FFFF requires that performance tests for batch process vents be conducted under worst-case conditions as specified in 40 CFR 63.2460(c)(2)(ii).
(1) Performance tests shall be conducted, and data shall be reduced in accordance with the test methods and procedures set forth in this section, in each relevant standard, and, if required, in applicable appendices of parts 51, 60, 61, and 63 of this chapter unless the Division makes one of the determinations in 63.7(e)(2)(i) through (iv). [40 CFR 63.7(e)(2)]

j. You must conduct a subsequent performance test or compliance demonstration equivalent to an initial compliance demonstration within 180 days of a change in the worst-case conditions. [40 CFR 63.2460(c)(2)(vi)]

k. Unless otherwise specified in a relevant standard or test method, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the relevant standard. For the purpose of determining compliance with a relevant standard, the arithmetic mean of the results of the three runs shall apply. Upon receiving approval from the Division, results of a test run may be replaced with results of an additional test run in the event that— [40 CFR 63.7(e)(3)]
(1) A sample is accidentally lost after the testing team leaves the site; or [40 CFR 63.7(e)(3)(i)]
(2) Conditions occur in which one of the three runs must be discontinued because of forced shutdown; or [40 CFR 63.7(e)(3)(ii)]
(3) Extreme meteorological conditions occur; or [40 CFR 63.7(e)(3)(iii)]
(4) Other circumstances occur that are beyond the owner or operator's control. [40 CFR 63.7(e)(3)(iv)]

l. Requirements for performance tests. The requirements specified in 40 CFR 63.2450(g)(1) through (7) apply instead of or in addition to the requirements specified in subpart SS of this part 63. [40 CFR 63.2450(g)]
(1) Conduct gas molecular weight analysis using Method 3, 3A, or 3B in appendix A to part 60 of this chapter. [40 CFR 63.2450(g)(1)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(2) Measure moisture content of the stack gas using Method 4 in appendix A to part 60 of this chapter. [40 CFR 63.2450(g)(2)]

(4) As an alternative to using Method 18, Method 25/25A, or Method 26/26A of 40 CFR part 60, appendix A, to comply with any of the emission limits specified in tables 1 through 7 to 40 CFR 63, Subpart FFFF, you may use Method 320 of 40 CFR part 60, appendix A. When using Method 320, you must follow the analyte spiking procedures of section 13 of Method 320, unless you demonstrate that the complete spiking procedure has been conducted at a similar source. [40 CFR 63.2450(g)(4)]

(5) 40 CFR 63.997(c)(1) does not apply. For the purposes of 40 CFR 63, Subpart FFFF, results of all initial compliance demonstrations must be included in the notification of compliance status report, which is due 150 days after the compliance date, as specified in 40 CFR 63.2520(d)(1). If the initial compliance demonstration includes a performance test and the results are submitted electronically via CEDRI in accordance with 40 CFR 63.2520(f), the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was conducted may be submitted in the notification of compliance status report in lieu of the performance test results. The performance test results must be submitted to CEDRI by the date the notification of compliance status report is submitted. [40 CFR 63.2450(g)(5)]

(5) In lieu of the requirements specified in § 63.7(e)(1) of subpart A you must conduct performance tests under such conditions as the Administrator specifies based on representative performance of the affected source for the period being tested. Representative conditions exclude periods of startup and shutdown. You may not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, you must make available to the Administrator such records as may be necessary to determine the conditions of performance tests. [40 CFR 63.2450(g)(6)]

(6) Comply with the requirements in § 63.2450(e)(4), as applicable. [40 CFR 63.2450(g)(7)]

m. The requirements in 40 CFR 63.997(e)(1)(i) and (iii) also do not apply for performance tests conducted to determine compliance with the emission limits for batch process vents. [40 CFR 63.2460(c)(2)(ii)]

n. Alternatives to performance test requirements. Performance tests shall be conducted and data shall be reduced in accordance with the test methods and procedures set forth in 40 CFR 63, Subpart SS, in each relevant standard, and, if required, in applicable appendices of 40 CFR parts 51, 60, 61, and 63 unless the Division specifies one of the provisions in 40 CFR 63.997(e)(1)(iv)(A) through (E). [40 CFR 63.997(e)(1)(iv)]

o. Performance test runs. Except as provided in 40 CFR 63.997(e)(1)(v)(A) and (B), each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for at least 1 hour and under the conditions specified in this section. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Division's approval, be determined using the arithmetic mean of the results of the two other runs. [40 CFR 63.997(e)(1)(v)]

p. Specific procedures. Where 40 CFR 63.985 through 63.995 require the owner or operator to conduct a performance test of a control device, or a halogen reduction device, an owner or operator shall conduct that performance test using the procedures in 40 CFR 63.997(e)(2)(i) through (iv), as applicable. The regulated material concentration and percent reduction may be measured as either total organic regulated material or as TOC minus methane and ethane according to the procedures specified. [40 CFR 63.997(e)(2)]
   (1) *Selection of sampling sites*. Method 1 or 1A of 40 CFR part 60, appendix A, as appropriate, shall be used for selection of the sampling sites. [40 CFR 63.997(e)(2)(i)]
      (i) For determination of compliance with a percent reduction requirement of total organic regulated material or TOC, sampling sites shall be located as specified in 40 CFR 63.997(e)(2)(i)(A)(1) and (e)(2)(i)(A)(2), and at the outlet of the control device. [40 CFR 63.997(e)(2)(i)(A)]
      (ii) For determination of compliance with a parts per million by volume total regulated material or TOC limit in a referencing subpart, the sampling site shall be located at the outlet of the control device. [40 CFR 63.997(e)(2)(i)(B)]
   (2) *Gas volumetric flow rate*. The gas volumetric flow rate shall be determined using Method 2, 2A, 2C, 2D, 2F, or 2G of 40 CFR part 60, appendix A, as appropriate. [40 CFR 63.997(e)(2)(ii)]
   (3) *Total organic regulated material or TOC concentration*. To determine compliance with a parts per million by volume total organic regulated material or TOC limit, the owner or operator shall use Method 18 or 25A of 40 CFR part 60, appendix A, as applicable. The ASTM D6420–99 may be used in lieu of Method 18 of 40 CFR part 60, appendix A, under the conditions specified in 40 CFR 63.997(e)(2)(iii)(D)(1) through (3). Alternatively, any other method or data that have been validated according to the applicable procedures in Method 301 of appendix A of 40 CFR part 63 may be used. The procedures specified in 40 CFR 63.997(e)(2)(iii)(A), (B), (D), and (E) shall be used to calculate parts per million by volume concentration. The calculated concentration shall be corrected to 3 percent oxygen using the procedures specified in 40 CFR 63.997(e)(2)(iii)(C) if a combustion device is the control device and supplemental combustion air is used to combust the emissions. [40 CFR 63.997(e)(2)(iii)]
      (i) Outlet concentration correction for combustion devices. When 40 CFR 63.997(e)(2)(iii)(C) requires you to correct the measured concentration at the outlet of a combustion device to 3 percent oxygen if you add supplemental combustion air, the requirements in either 40 CFR 63.997(i)(1) or (2) apply for the purposes of 40 CFR 63, Subpart FFFF. [40 CFR 63.2450(i)]
         (A) You must correct the concentration in the gas stream at the outlet of the combustion device to 3 percent oxygen if you add supplemental gases, as defined in 40 CFR 63.2550, to the vent stream, or;

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(B) You must correct the measured concentration for supplemental gases using Equation 1 of 40 CFR 63.2460; you may use process knowledge and representative operating data to determine the fraction of the total flow due to supplemental gas.

(4) *Percent reduction calculation*. To determine compliance with a percent reduction requirement, the owner or operator shall use Method 18, 25, or 25A of 40 CFR part 60, appendix A, as applicable. The method ASTM D6420–99 may be used in lieu of Method 18 of 40 CFR part 60, appendix A, under the conditions specified in 40 CFR 63.997(e)(2)(iii)(D)(1) through (3). Alternatively, any other method or data that have been validated according to the applicable procedures in Method 301 of appendix A of 40 CFR part 63 may be used. The procedures specified in 40 CFR 63.997(e)(2)(iv)(A) through (I) shall be used to calculate percent reduction efficiency. [40 CFR 63.997(e)(2)(iv)]

q. When 40 CFR 63.1257(d)(3)(i)(B)(7) specifies that condenser-controlled emissions from an air dryer must be calculated using Equation 11 of 40 CFR part 63, subpart GGG, with "V equal to the air flow rate," it means "V equal to the dryer outlet gas flow rate," for the purposes of 40 CFR 63, Subpart FFFF. Alternatively, you may use Equation 12 of 40 CFR part 63, subpart GGG, with V equal to the dryer inlet air flow rate. Account for time as appropriate in either equation. [40 CFR 63.2460(c)(2)(iv)]

(1) If a process condenser is used for any boiling operations, you must demonstrate that it is properly operated according to the procedures specified in 40 CFR 63.1257(d)(2)(i)(C)(4)(ii) and (d)(3)(iii)(B), and the demonstration must occur only during the boiling operation. The reference in 40 CFR 63.1257(d)(3)(iii)(B) to the alternative standard in 40 CFR 63.1254(c) means 40 CFR 63.2505 for the purposes of 40 CFR 63, Subpart FFFF. As an alternative to measuring the exhaust gas temperature, as required by 40 CFR 63.1257(d)(3)(iii)(B), you may elect to measure the liquid temperature in the receiver. [40 CFR 63.2460(c)(2)(iv)(5)]

r. Establishing operating limits. You must establish operating limits under the conditions required for your initial compliance demonstration, except you may elect to establish operating limit(s) for conditions other than those under which a performance test was conducted as specified in 40 CFR 63.2460(c)(3)(i) and, if applicable, 40 CFR 63.2460(c)(3)(ii). [40 CFR 63.2460(c)(3)]

(1) The operating limits may be based on the results of the performance test and supplementary information such as engineering assessments and manufacturer's recommendations. These limits may be established for conditions as unique as individual emission episodes for a batch process. You must provide rationale in the precompliance report for the specific level for each operating limit, including any data and calculations used to develop the limit and a description of why the limit indicates proper operation of the control device. The procedures provided in this 40 CFR 63.2460(c)(3)(i) have not been approved by the Division and determination of the operating limit using these procedures is subject to review and approval by the Division. [40 CFR 63.2460(c)(3)(i)]

(2) If you elect to establish separate monitoring levels for different emission episodes within a batch process, you must maintain records in your daily schedule or log of

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

processes indicating each point at which you change from one operating limit to another, even if the duration of the monitoring for an operating limit is less than 15 minutes. You must maintain a daily schedule or log of processes according to 40 CFR 63.2525(c). [40 CFR 63.2460(c)(3)(ii)]

s. Data analysis, recordkeeping, and reporting. [40 CFR 63.7(g)]
(1) Unless otherwise specified in a relevant standard or test method, or as otherwise approved by the Division in writing, results of a performance test shall include the analysis of samples, determination of emissions, and raw data. A performance test is "completed" when field sample collection is terminated. The owner or operator of an affected source shall report the results of the performance test to the Division before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard or as approved otherwise in writing by the Division (see 40 CFR 63.9(i)). The results of the performance test shall be submitted as part of the notification of compliance status required under 40 CFR 63.9(h). Before a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall send the results of the performance test to the Division. After a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall send the results of the performance test to the appropriate permitting authority. [40 CFR 63.7(g)(1)]

4. Specific Monitoring Requirements:

a. Incinerator monitoring requirements. Where an incinerator… is used, a temperature monitoring device capable of providing a continuous record that meets the provisions specified in 40 CFR 63.998(c)(1) is required. [40 CFR 63.988(c)]
(1) Where an incinerator other than a catalytic incinerator is used, a temperature monitoring device shall be installed in the fire box or in the ductwork immediately downstream of the fire box in a position before any substantial heat exchange occurs. [40 CFR 63.988(c)(1)]

b. Operation and maintenance of continuous parameter monitoring systems. [40 CFR 63.996(c)]
(1) All monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately. [40 CFR 63.996(c)(1)]
(2) The owner or operator of a regulated source shall maintain and operate each CPMS as specified in this section, or in a relevant subpart, and in a manner consistent with good air pollution control practices. [40 CFR 63.996(c)(2)]
(i) The owner or operator of a regulated source shall ensure the immediate repair or replacement of CPMS parts to correct "routine" or otherwise predictable CPMS malfunctions. The necessary parts for routine repairs of the affected equipment shall be readily available. [40 CFR 63.996(c)(2)(i)]
(ii) The Division's determination of whether acceptable operation and maintenance procedures are being used for the CPMS will be based on information that may include, but is not limited to, review of operation and maintenance procedures,

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

operation and maintenance records as specified in 40 CFR 63.998(c)(1)(i) and (ii), manufacturer's recommendations and specifications, and inspection of the CPMS. [40 CFR 63.996(c)(2)(iii)]

(3) All CPMS's shall be installed such that representative measurements of parameters from the regulated source are obtained. [40 CFR 63.996(c)(4)]

(4) In accordance with the referencing subpart, except for system breakdowns, repairs, maintenance periods, instrument adjustments, or checks to maintain precision and accuracy, calibration checks, and zero and span adjustments, all continuous parameter monitoring systems shall be in continuous operation when emissions are being routed to the monitored device. [40 CFR 63.996(c)(5)]

c. Operation and maintenance of continuous monitoring systems. [40 CFR 63.8(c)]

(1) The owner or operator of an affected source shall maintain and operate each CMS as specified in this section, or in a relevant standard, and in a manner consistent with good air pollution control practices. [40 CFR 63.8(c)(1)]

(i) The owner or operator must keep the necessary parts for routine repairs of the affected CMS equipment readily available. [40 CFR 63.8(c)(1)(ii)]

d. All CMS must be installed such that representative measures of emissions or process parameters from the affected source are obtained. In addition, CEMS must be located according to procedures contained in the applicable performance specification(s). [40 CFR 63.8(c)(2)(i)]

(1) Unless the individual subpart states otherwise, the owner or operator must ensure the read out (that portion of the CMS that provides a visual display or record), or other indication of operation, from any CMS required for compliance with the emission standard is readily accessible on site for operational control or inspection by the operator of the equipment. [40 CFR 63.8(c)(2)(ii)]

e. All CMS shall be installed, operational, and the data verified as specified in the relevant standard either prior to or in conjunction with conducting performance tests under 40 CFR 63.7. Verification of operational status shall, at a minimum, include completion of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system. [40 CFR 63.8(c)(3)]

f. When subpart SS of this part 63 uses the term “a range” or “operating range” of a monitored parameter, it means an “operating limit” for a monitored parameter for the purposes of 40 CFR 63, Subpart FFFF. [40 CFR 63.2450(k)(2)]

g. The owner or operator shall establish a range for monitored parameters that indicates proper operation of the control or recovery device. In order to establish the range, the information required in 40 CFR 63.999(b)(3) shall be submitted in the Notification of Compliance Status or the operating permit application or amendment. The range may be based upon a prior performance test meeting the specifications of 40 CFR 63.997(b)(1) or a prior TRE index value determination, as applicable, or upon existing ranges or limits established under a referencing subpart. [40 CFR 63.996(c)(6)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

h. If flow to a control device could be intermittent, you must install, calibrate, and operate a flow indicator at the inlet or outlet of the control device to identify periods of no flow. Periods of no flow may not be used in daily or block averages, and it may not be used in fulfilling a minimum data availability requirement. [40 CFR 63.996(c)(7)]

5. Specific Recordkeeping Requirements:

a. For a minimum of 5 years after a performance test is conducted, the owner or operator shall retain and make available, upon request, for inspection by the Division the records or results of such performance test and other data needed to determine emissions from an affected source. [40 CFR 63.998(g)(3)]

b. Nonflare control device performance test records. [40 CFR 63.998(a)(2)]
   (1) Availability of performance test records. Upon request, the owner or operator shall make available to the Division such records as may be necessary to determine the conditions of performance tests performed pursuant to 40 CFR 63.988(b). [40 CFR 63.998(a)(2)(i)]
   (2) Nonflare control device and halogen reduction device performance test records. [40 CFR 63.998(a)(2)(ii)]
      (i) General requirements. Each owner or operator subject to the provisions of 40 CFR 63, Subpart SS shall keep up-to-date, readily accessible continuous records of the data specified in 40 CFR 63.998(a)(2)(ii)(B) through (C), as applicable, measured during each performance test performed pursuant to 40 CFR 63.988(b) and also include that data in the Notification of Compliance Status required under 40 CFR 63.999(b). The same data specified in this section shall be submitted in the reports of all subsequently required performance tests where either the emission control efficiency of a combustion device, or the outlet concentration of TOC or regulated material is determined. [40 CFR 63.998(a)(2)(ii)(A)]
      (ii) Nonflare combustion device. Where an owner or operator subject to the provisions of this paragraph seeks to demonstrate compliance with a percent reduction requirement or a parts per million by volume requirement using a nonflare combustion device the information specified in (a)(2)(ii)(B)(1) through (6) shall be recorded. [40 CFR 63.998(a)(2)(ii)(B)]
         (A) For thermal incinerators, record the fire box temperature averaged over the full period of the performance test. [40 CFR 63.998(a)(2)(ii)(B)(*1*)]
         (B) For an incinerator, record the percent reduction of organic regulated material, if applicable, or TOC achieved by the incinerator determined as specified in 40 CFR 63.997(e)(2)(iv), as applicable, or the concentration of organic regulated material (parts per million by volume, by compound) determined as specified in 40 CFR 63.997(e)(2)(iii) at the outlet of the incinerator. [40 CFR 63.998(a)(2)(ii)(B)(*2*)]

c. Continuous records and monitoring system data handling —[40 CFR 63.998(b)]
   (1) *Continuous records*. Where 40 CFR 63, Subpart SS requires a continuous record, the owner or operator shall maintain a record as specified in 40 CFR 63.998(b)(1)(i) through (iv), as applicable: [40 CFR 63.998(b)(1)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(i) A record of values measured at least once every 15 minutes or each measured value for systems which measure more frequently than once every 15 minutes; or [40 CFR 63.998(b)(1)(i)]

(ii) A record of block average values for 15-minute or shorter periods calculated from all measured data values during each period or from at least one measured data value per minute if measured more frequently than once per minute. [40 CFR 63.998(b)(1)(ii)]

(iii) Where data is collected from an automated continuous parameter monitoring system, the owner or operator may calculate and retain block hourly average values from each 15-minute block average period or from at least one measured value per minute if measured more frequently than once per minute, and discard all but the most recent three valid hours of continuous (15-minute or shorter) records, if the hourly averages do not exclude periods of CPMS breakdown or malfunction. An automated CPMS records the measured data and calculates the hourly averages through the use of a computerized data acquisition system. [40 CFR 63.998(b)(1)(iii)]

(iv) A record as required by an alternative approved under a referencing subpart. [40 CFR 63.998(b)(1)(iv)]

d. Nonflare control and recovery device regulated source monitoring records —[40 CFR 63.998(c)]

(1) *Monitoring system records*. For process vents, the owner or operator subject to 40 CFR 63, Subpart SS shall keep the records specified in this paragraph, as well as records specified elsewhere in 40 CFR 63, Subpart SS. [40 CFR 63.998(c)(1)]

(i) For a CPMS used to comply with this part, a record of the procedure used for calibrating the CPMS. [40 CFR 63.998(c)(1)(i)]

(ii) For a CPMS used to comply with 40 CFR 63, Subpart SS, records of the information specified in 40 CFR 63.998(c)(ii)(A) through (H), as indicated in a referencing subpart. [40 CFR 63.998(c)(1)(ii)]

(A) The date and time of completion of calibration and preventive maintenance of the CPMS. [40 CFR 63.998(c)(1)(ii)(A)]

(B) The "as found" and "as left" CPMS readings, whenever an adjustment is made that affects the CPMS reading and a "no adjustment" statement otherwise. [40 CFR 63.998(c)(1)(ii)(B)]

(C) The start time and duration or start and stop times of any periods when the CPMS is inoperative. [40 CFR 63.998(c)(1)(ii)(C)]

(D) Records of the total duration of operating time. [40 CFR 63.998(c)(1)(ii)(H)]

e. Records of the results of each CPMS calibration check and the maintenance performed, as specified in 40 CFR 63.2450(k)(1). [40 CFR 63.2525(g)]

f. You must record the results of each calibration check and all maintenance performed on the CPMS as specified in 40 CFR 63.998(c)(1)(ii)(A), except you must record all maintenance, not just preventative maintenance. [40 CFR 63.2450(k)(1)(i)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

g. Excluded data. Monitoring data recorded during periods identified in 40 CFR 63.998(b)(2)(i) through (iii) shall not be included in any average computed to determine compliance with an emission limit in a referencing subpart. [40 CFR 63.998(b)(2)]
   (1) Monitoring system breakdowns, repairs, preventive maintenance, calibration checks, and zero (low-level) and high-level adjustments; [40 CFR 63.998(b)(2)(i)]
   (2) Periods of non-operation of the process unit (or portion thereof), resulting in cessation of the emissions to which the monitoring applies. [40 CFR 63.998(b)(2)(ii)]
   (3) *Startup, shutdown, and malfunction*. Sections 63.998(b)(2)(iii), which apply to the exclusion of monitoring data collected during periods of SSM from daily averages, do not apply for the purposes of 40 CFR 63, Subpart SS. [40 CFR 63.2450(l)]

h. Records of daily averages. In addition to the records specified in 40 CFR 63.998(a), owners or operators shall keep records as specified in 40 CFR 63.998(b)(3)(i) and (ii) and submit reports as specified in 40 CFR 63.999(c), unless an alternative recordkeeping system has been requested and approved under a referencing subpart. [40 CFR 63.998(b)(3)]
   (1) Except as specified in 40 CFR 63.998(b)(3)(ii), daily average values of each continuously monitored parameter shall be calculated from data meeting the specifications of 40 CFR 63.998(b)(2) for each operating day and retained for 5 years. [40 CFR 63.998(b)(3)(i)]
      (i) The daily average shall be calculated as the average of all values for a monitored parameter recorded during the operating day. The average shall cover a 24-hour period if operation is continuous, or the period of operation per operating day if operation is not continuous (e.g., for transfer racks the average shall cover periods of loading). If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the daily average instead of all measured values. [40 CFR 63.998(b)(3)(i)(A)]
      (ii) The operating day shall be the period defined in the operating permit or in the Notification of Compliance Status. It may be from midnight to midnight or another daily period. [40 CFR 63.998(b)(3)(i)(B)]
   (2) If all recorded values for a monitored parameter during an operating day are within the range established in the Notification of Compliance Status or in the operating permit, the owner or operator may record that all values were within the range and retain this record for 5 years rather than calculating and recording a daily average for that operating day. In such cases, the owner or operator may not discard the recorded values as allowed in 40 CFR 63.998(b)(1)(iii). [40 CFR 63.998(b)(3)(ii)]

i. Averaging periods. As an alternative to the requirement for daily averages in 40 CFR 63.998(b)(3), you may determine averages for operating blocks. An operating block is a period of time that is equal to the time from the beginning to end of batch process operations within a process. [40 CFR 63.2460(c)(4)]

j. For the purposes of 40 CFR 63.998, an excursion means that the daily average value of monitoring data for a parameter is greater than the maximum, or less than the minimum established value. [40 CFR 63.998(b)(6)(i)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

k. Combustion control and halogen reduction device monitoring records. [40 CFR 63.998(c)(2)]
   (1) Each owner or operator using a combustion control device to comply with 40 CFR 63, Subpart SS shall keep the following records up-to-date and readily accessible, as applicable. Continuous records of the equipment operating parameters specified to be monitored under 40 CFR 63.988(c) (incinerator, boiler, and process heater monitoring) or approved by the Division in accordance with a referencing subpart. [40 CFR 63.998(c)(2)(i)]
   (2) Each owner or operator shall keep records of the daily average value of each continuously monitored parameter for each operating day determined according to the procedures specified in 40 CFR 63.998(b)(3)(i). [40 CFR 63.998(c)(2)(ii)]
   (3) Each owner or operator subject to the provisions of 40 CFR 63, Subpart SS shall keep up-to-date, readily accessible records of periods of operation during which the parameter boundaries are exceeded. The parameter boundaries are established pursuant to 40 CFR 63.996(c)(6). [40 CFR 63.998(c)(2)(iii)]

l. Records of monitored parameters outside of range. The owner or operator shall record the occurrences and the cause of periods when the monitored parameters are outside of the parameter ranges documented in the Notification of Compliance Status report. This information shall also be reported in the Periodic Report. [40 CFR 63.998(d)(5)]

m. The owner or operator of an affected source subject to the provisions of this part shall maintain relevant records for such source of——[40 CFR 63.10(b)(2)]
   (1) All required maintenance performed on the air pollution control and monitoring equipment; [40 CFR 63.10(b)(2)(iii)]
   (2) All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report); [40 CFR 63.10(b)(2)(vii)]
   (3) All results of performance tests, CMS performance evaluations, and opacity and visible emission observations; and [40 CFR 63.10(b)(2)(viii)]
   (4) All measurements as may be necessary to determine the conditions of performance tests and performance evaluations. [40 CFR 63.10(b)(2)(ix)]

n. The manufacturer's specifications or your written procedures must include a schedule for calibrations, preventative maintenance procedures, a schedule for preventative maintenance, and corrective actions to be taken if a calibration fails. If a CPMS calibration fails, the CPMS is considered to be inoperative until you take corrective action and the system passes calibration. You must record the nature and cause of instances when the CPMS is inoperative and the corrective action taken. [40 CFR 63.2450(k)(7)]

6. Specific Reporting Requirements:

a. General requirements. [40 CFR 63.999(a)(1)(i)]
   (1) The owner or operator shall notify the Division of the intention to conduct a performance test or flare compliance assessment at least 30 days before such a compliance demonstration is scheduled to allow the Division the opportunity to have

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

an observer present. If after 30 days notice for such an initially scheduled compliance demonstration, there is a delay (due to operational problems, etc.) in conducting the scheduled compliance demonstration, the owner or operator of an affected facility shall notify the Division as soon as possible of any delay in the original demonstration date. The owner or operator shall provide at least 7 days prior notice of the rescheduled date of the compliance demonstration, or arrange a rescheduled date with the Division by mutual agreement. [40 CFR 63.999(a)(1)(i)]

(2) Unless specified differently in 40 CFR 63, Subpart SS or a referencing subpart, performance test and flare compliance assessment reports, not submitted as part of a Notification of Compliance Status report, shall be submitted to the Division within 60 days of completing the test or determination. [40 CFR 63.999(a)(1)(ii)]

b. Reporting. [40 CFR 63.2450(m)]

(1) When 40 CFR 63.2455 through 63.2490 reference other subparts in this part 63 that use the term "periodic report," it means "compliance report" for the purposes of 40 CFR 63, Subpart FFFF. The compliance report must include the information specified in 40 CFR 63.2520(e), as well as the information specified in referenced subparts. [40 CFR 63.2450(m)(1)]

(2) When there are conflicts between 40 CFR 63, Subpart FFFF and referenced subparts for the due dates of reports required by 40 CFR 63, Subpart FFFF, reports must be submitted according to the due dates presented in 40 CFR 63, Subpart FFFF. [40 CFR 63.2450(m)(2)]

(3) Excused excursions, as defined in subparts G and SS of this part 63, are not allowed. [40 CFR 63.2450(m)(3)]

c. Notification of Compliance Status Report [40 CFR 63.999(a)(2)(i)]

(1) For performance tests or flare compliance assessments, the Notification of Compliance Status or performance test and flare compliance assessment report shall include one complete test report as specified in 40 CFR 63.999(a)(2)(ii) for each test method used for a particular kind of emission point and other applicable information specified in (a)(2)(iii). For additional tests performed for the same kind of emission point using the same method, the results and any other information required in applicable sections of 40 CFR 63, Subpart SS shall be submitted, but a complete test report is not required. [40 CFR 63.999(a)(2)(i)]

(2) A complete test report shall include a brief process description, sampling site description, description of sampling and analysis procedures and any modifications to standard procedures, quality assurance procedures, record of operating conditions during the test, record of preparation of standards, record of calibrations, raw data sheets for field sampling, raw data sheets for field and laboratory analyses, documentation of calculations, and any other information required by the test method. [40 CFR 63.999(a)(2)(ii)]

(3) The performance test or flare compliance assessment report shall also include the information specified in (a)(2)(iii)(A) through (C), as applicable. [40 CFR 63.999(a)(2)(iii)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(i) For nonflare control device and halogen reduction device performance tests as required under 40 CFR 63.988(b), 63.990(b), 63.994(b), or 63.995(b), also submit the records specified in 40 CFR 63.998(a)(2)(ii), as applicable. [40 CFR 63.999(a)(2)(iii)(B)]

d. Notification of Compliance Status Report [40 CFR 63.999(b)(3)]

(1) *Operating range for monitored parameters*. The owner or operator shall submit as part of the Notification of Compliance Status, the operating range for each monitoring parameter identified for each control, recovery, or halogen reduction device as determined pursuant to 40 CFR 63.996(c)(6). The specified operating range shall represent the conditions for which the control, recovery, or halogen reduction device is being properly operated and maintained. This report shall include the information in 40 CFR 63.999(b)(3)(i) through (iii), as applicable, unless the range and the operating day have been established in the operating permit. [40 CFR 63.999(b)(3)]

(i) The specific range of the monitored parameter(s) for each emission point; [40 CFR 63.999(b)(3)(i)]

(ii) The rationale for the specific range for each parameter for each emission point, including any data and calculations used to develop the range and a description of why the range indicates proper operation of the control, recovery, or halogen reduction device, as specified in 40 CFR 63.999(b)(3)(ii)(A), (B), or (C), as applicable. [40 CFR 63.999(b)(3)(ii)]

(A) If a performance test or TRE index value determination is required by a referencing subpart for a control, recovery or halogen reduction device, the range shall be based on the parameter values measured during the TRE index value determination or performance test and may be supplemented by engineering assessments and/or manufacturer's recommendations. TRE index value determinations and performance testing are not required to be conducted over the entire range of permitted parameter values. [40 CFR 63.999(b)(3)(ii)(A)]

(B) The range may be based on ranges or limits previously established under a referencing subpart. [40 CFR 63.999(b)(3)(ii)(C)]

(iii) A definition of the source's operating day for purposes of determining daily average values of monitored parameters. The definition shall specify the times at which an operating day begins and ends. [40 CFR 63.999(b)(3)(iii)]

e. Section 63.997(c)(1) does not apply. For the purposes of 40 CFR 63, Subpart FFFF, results of all initial compliance demonstrations must be included in the notification of compliance status report, which is due 150 days after the compliance date, as specified in 40 CFR 63.2520(d)(1). If the initial compliance demonstration includes a performance test and the results are submitted electronically via CEDRI in accordance with § 63.2520(f), the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was conducted may be submitted in the notification of compliance status report in lieu of the performance test results. The performance test

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

results must be submitted to CEDRI by the date the notification of compliance status report is submitted. [40 CFR 63.2450(g)(5)]

f. Compliance Report When one CPMS is used as a backup to another CPMS, the owner or operator shall report the results from the CPMS used to meet the monitoring requirements of 40 CFR 63, Subpart SS. If both such CPMS's are used during a particular reporting period to meet the monitoring requirements of 40 CFR 63, Subpart SS, then the owner or operator shall report the results from each CPMS for the time during the six month period that the instrument was relied upon to demonstrate compliance. [40 CFR 63.996(b)(2)]

g. Compliance Report *Periodic reports*. [40 CFR 63.999(c)]
   (1) Periodic reports shall include the reporting period dates, the total source operating time for the reporting period, and, as applicable, all information specified in this section and in the referencing subpart, including reports of periods when monitored parameters are outside their established ranges. [40 CFR 63.999(c)(1)]

h. Compliance Report For storage vessels, the owner or operator shall include in each periodic report required the information specified in 40 CFR 63.999(c)(4)(i) through (iii). [40 CFR 63.999(c)(4)]
   (1) For the 6-month period covered by the periodic report, the information recorded in 40 CFR 63.998(d)(2)(ii)(A) through (C). [40 CFR 63.999(c)(4)(i)]
   (2) For the time period covered by the periodic report and the previous periodic report, the total number of hours that the control system did not meet the requirements of 40 CFR 63.983(a), 63.985(a), or 63.987(a) due to planned routine maintenance. [40 CFR 63.999(c)(4)(ii)]
   (3) A description of the planned routine maintenance during the next 6-month periodic reporting period that is anticipated to be performed for the control system when it is not expected to meet the required control efficiency. This description shall include the type of maintenance necessary, planned frequency of maintenance, and expected lengths of maintenance periods. [40 CFR 63.999(c)(4)(iii)]

i. Compliance Report If a control device other than a flare is used to control emissions from storage vessels or low throughput transfer racks, the periodic report shall describe each occurrence when the monitored parameters were outside of the parameter ranges documented in the Notification of Compliance Status in accordance with 40 CFR 63.999(b)(3). The description shall include the information specified in 40 CFR 63.999(c)(5)(i) and (ii). [40 CFR 63.999(c)(5)]
   (1) Identification of the control device for which the measured parameters were outside of the established ranges, and [40 CFR 63.999(c)(5)(i)]
   (2) The cause for the measured parameters to be outside of the established ranges. [40 CFR 63.999(c)(5)(ii)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

j. Compliance Report 40 CFR 63.999(c)(6), For process vents and transfer racks (except low throughput transfer racks), periodic reports shall include the information specified in 40 CFR 63.999(c)(6)(i) through (iv). [40 CFR 63.999(c)(6)]

(1) Periodic reports shall include the daily average values of monitored parameters, calculated as specified in 40 CFR 63.998(b)(3)(i) for any days when the daily average value is outside the bounds as defined in 40 CFR 63.998(c)(2)(iii) or (c)(3)(iii), or the data availability requirements defined in 40 CFR 63.999(c)(6)(i)(A) through (D) are not met, whether these excursions are excused or unexcused excursions. For excursions caused by lack of monitoring data, the duration of periods when monitoring data were not collected shall be specified. An excursion means any of the cases listed in 40 CFR 63.999(c)(6)(i)(A) through (C). If the owner or operator elects not to retain the daily average values pursuant to 40 CFR 63.998(b)(5)(ii)(A), the owner or operator shall report this in the Periodic Report. [40 CFR 63.999(c)(6)(i)]

(i) When the daily average value of one or more monitored parameters is outside the permitted range. [40 CFR 63.999(c)(6)(i)(A)]

(ii) When the period of control or recovery device operation is 4 hours or greater in an operating day and monitoring data are insufficient to constitute a valid hour of data for at least 75 percent of the operating hours. [40 CFR 63.999(c)(6)(i)(B)]

(iii) When the period of control or recovery device operation is less than 4 hours in an operating day and more than one of the hours during the period of operation does not constitute a valid hour of data due to insufficient monitoring data. [40 CFR 63.999(c)(6)(i)(C)]

(iv) Monitoring data are insufficient to constitute a valid hour of data as used in 40 CFR 63.999(c)(6)(i)(B) and (C), if measured values are unavailable for any of the 15-minute periods within the hour. [40 CFR 63.999(c)(6)(i)(D)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS FOR 40 CFR 63, Subpart FFFF - 21. ETHYLENE OXIDE DETERMINATIONS AND RECORDKEEPING REQUIREMENTS

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 2(4)(lll), 40 C.F.R. 63.2430 through 63.2550, Tables 1 through 12 (Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

401 KAR 63:002, 40 C.F.R. 63.1 through 63.16, Table 1 (Subpart A), General Provisions.

Pursuant to 40 CFR 63.2550: I*n ethylene oxide service* means the following:

(1) For equipment leaks, any equipment that contains or contacts a fluid (liquid or gas) that is at least 0.1 percent by weight of ethylene oxide. If information exists that suggests ethylene oxide could be present in equipment, the equipment is considered to be "in ethylene oxide service" unless sampling and analysis is performed as specified in 40 CFR 63.2492 to demonstrate that the equipment does not meet the definition of being "in ethylene oxide service". Examples of information that could suggest ethylene oxide could be present in equipment, include calculations based on safety data sheets, material balances, process stoichiometry, or previous test results provided the results are still relevant to the current operating conditions.

(2) For process vents, each batch and continuous process vent in a process that, when uncontrolled, contains a concentration of greater than or equal to 1 ppmv undiluted ethylene oxide, and when combined, the sum of all these process vents would emit uncontrolled ethylene oxide emissions greater than or equal to 5 lb/yr (2.27 kg/yr). If information exists that suggests ethylene oxide could be present in a batch or continuous process vent, then the batch or continuous process vent is considered to be "in ethylene oxide service" unless an analysis is performed as specified in 40 CFR 63.2492 to demonstrate that the batch or continuous process vent does not meet the definition of being "in ethylene oxide service". Examples of information that could suggest ethylene oxide could be present in a batch or continuous process vent, include calculations based on safety data sheets, material balances, process stoichiometry, or previous test results provided the results are still relevant to the current operating conditions.

(3) For storage tanks, storage tanks of any capacity and vapor pressure storing a liquid that is at least 0.1 percent by weight of ethylene oxide. If knowledge exists that suggests ethylene oxide could be present in a storage tank, then the storage tank is considered to be "in ethylene oxide service" unless the procedures specified in 40 CFR 63.2492 are performed to demonstrate that the storage tank does not meet the definition of being "in ethylene oxide service". The exemptions for "vessels storing organic liquids that contain HAP only as impurities" and "pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere" listed in the definition of "storage tank" in this section do not apply for storage tanks that may be in ethylene oxide service. Examples of information that could suggest ethylene oxide could be present in a storage tank, include calculations based on safety data sheets, material balances, process stoichiometry, or previous test results provided the results are still relevant to the current operating conditions.

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

1. **Operating Limitations:**
   None

2. **Emission Limitations:**
   None

3. **Testing Requirements:**
   To determine if process vents, storage tanks and equipment leaks are in ethylene oxide service as defined in 40 CFR 63.2550(i), the permittee must comply with the requirements in 40 CFR 63.2492(a) through (c) as applicable. [40 CFR 63.2492]
   a. For each batch process vent or continuous process vent stream, you must measure the flow rate and concentration of ethylene oxide of each process vent as specified in 40 CFR 63.2492(a)(1) through (5). [40 CFR 63.2492(a)]
      (1) Measurements must be made prior to any dilution of the vent streams. [40 CFR 63.2492(a)(1)]
      (2) Measurements may be made on the combined vent streams at an MCPU or for each separate vent stream. [40 CFR 63.2492(a)(2)]
      (3) Method 1 or 1A of 40 CFR part 60, appendix A-1, as appropriate, must be used for the selection of the sampling sites. For vents smaller than 0.10 meter in diameter, sample at one point at the center of the duct. [40 CFR 63.2492(a)(3)]
      (4) The gas volumetric flow rate must be determined using Method 2, 2A, 2C, 2D, 2F, or 2G of 40 CFR part 60, appendices A-1 and A-2, as appropriate. [40 CFR 63.2492(a)(4)]
      (5) The concentration of ethylene oxide must be determined using Method 18 of 40 CFR part 60, appendix A-6, or Method 320 of appendix A to this part. [40 CFR 63.2492(a)(5)]

   b. For storage tanks, you must determine the concentration of ethylene oxide of the fluid stored in the storage tanks by complying with the requirements in CFR 63.2492(b)(1) or (2). [40 CFR 63.2492(b)]
      (1) You must measure the concentration of ethylene oxide of the fluid stored in the storage tanks using Method 624.1 of 40 CFR part 136, appendix A, or preparation by Method 5031 and analysis by Method 8260D (both incorporated by reference, see 40 CFR 63.14) in the SW-846 Compendium. In lieu of preparation by SW-846 Method 5031, you may use SW-846 Method 5030B (incorporated by reference, see 40 CFR 63.14), as long as: You do not use a preservative in the collected sample; you store the sample with minimal headspace as cold as possible and at least below 4 degrees C; and you analyze the sample as soon as possible, but in no case longer than 7 days from the time the sample was collected. If you are collecting a sample from a pressure vessel, you must maintain the sample under pressure both during and following sampling. [40 CFR 63.2492(b)(1)]
      (2) Unless specified by the Administrator, you may calculate the concentration of ethylene oxide of the fluid stored in the storage tanks if information specific to the fluid stored is available. Information specific to the fluid stored includes concentration data from safety data sheets. [40 CFR 63.2492(b)(2)]

SECTION B - EMISSION UNITS, EMISSION POINTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c. For equipment leaks, you must comply with the requirements in CFR 63.2492(c)(1) through (4). [40 CFR 63.2492(c)]
   (1) Each piece of equipment within an MCPU that can reasonably be expected to contain equipment in ethylene oxide service is presumed to be in ethylene oxide service unless you demonstrate that the piece of equipment is not in ethylene oxide service. For a piece of equipment to be considered not in ethylene oxide service, it must be determined that the percent ethylene oxide content of the process fluid that is contained in or contacts equipment can be reasonably expected to not exceed 0.1 percent by weight on an annual average basis. For purposes of determining the percent ethylene oxide content of the process fluid, you must use Method 18 of 40 CFR part 60, appendix A-6, for gaseous process fluid, and Method 624.1 of 40 CFR part 136, appendix A, or preparation by Method 5031 and analysis by Method 8260D (both incorporated by reference, see 40 CFR 63.14) in the SW-846 Compendium for liquid process fluid. In lieu of preparation by SW-846 Method 5031, you may use SW-846 Method 5030B (incorporated by reference, see 40 CFR 63.14), as long as: You do not use a preservative in the collected sample; you store the sample with minimal headspace as cold as possible and at least below 4 degrees C; and you analyze the sample as soon as possible, but in no case longer than 7 days from the time the sample was collected. [40 CFR 63.2492(c)(1)]
   (2) Unless specified by the Administrator, you may use good engineering judgment rather than the procedures specified in CFR 63.2492(c)(1) to determine that the percent ethylene oxide content of the process fluid that is contained in or contacts equipment does not exceed 0.1 percent by weight. [40 CFR 63.2492(c)(2)]
   (3) You may revise your determination for whether a piece of equipment is in ethylene oxide service by following the procedures in CFR 63.2492(c)(1), or by documenting that a change in the process or raw materials no longer causes the equipment to be in ethylene oxide service. [40 CFR 63.2492(c)(3)]
   (4) Samples used in determining the ethylene oxide content must be representative of the process fluid that is contained in or contacts the equipment. [40 CFR 63.2492(c)(4)]

4. Specific Monitoring Requirements:
None

5. Specific Recordkeeping Requirements:
See **GROUP REQUIREMENTS FOR 40 CFR 63, Subpart FFFF - 1. GENERAL REQUIREMENTS, 6. Specific Recordkeeping Requirements** m.

6. Specific Reporting Requirements:
See **GROUP REQUIREMENTS FOR 40 CFR 63, Subpart FFFF - 1. GENERAL REQUIREMENTS, 6. Specific Reporting Requirements** m.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. Although these activities are designated as insignificant the permittee must comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to an opacity standard shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspection, evaluation, and any corrective action shall be recorded in a log.

Area	Equipment ID	Description	Date Commenced	Generally Applicable Regulation
200 236 240 334	–	Drumming of products or fines – operation vented inside a building (Operations are vented inside a building, so particulate emissions to the outside atmosphere are not expected. Therefore, monthly inspections and qualitative visible emissions evaluations are not required for these emission points.)	Various	401 KAR 63:010
236	Product recovery cyclones, hoppers, and baghouses	Powder handling and packaging systems for Spray Dryers 236/3501 and 3503 (Operations are vented inside a building, so particulate emissions to the outside atmosphere are not expected. Therefore, monthly inspections and qualitative visible emissions evaluations are not required for these emission points.)	Various	401 KAR 59:010 401 KAR 61:020
236	Product recovery cyclones, hoppers, and baghouses	Powder handling and packaging systems for Drum Dryers 236/3504, 3505, 3506, and 3509 (Operations are vented inside a building, so particulate emissions to the outside atmosphere are not expected. Therefore, monthly inspections and qualitative visible emissions evaluations are not required for these emission points.)	Various	401 KAR 59:010 401 KAR 61:020
240	240AP01 controlled by baghouse 241/3604	240 Building packaging and repack system	2000	401 KAR 59:010
240	240AP02	Slurry system-during normal operations the system is vented to 240AP01. During startups and shutdowns this vent is used.	2000	401 KAR 59:010
326	326/3406	Acetylene purification flame arrestor	1962	None
326	326/3411	Acetylene purification caustic scrubber	1984	None
326	326/3413	Acetylene purification acid tower	1992	None
334	334/3506, 334/3507, and 334/3232	334 Building Central Vacuum System controlled by Cyclone 334/3232	1988	401 KAR 59:010
200	200/3719 controlled by Rotoclone 200/6000	200 Building powder packaging system (1,500 lb/hr)	2016	401 KAR 59:010
243	243/3702	Hopper 243/3702 loading controlled by local ventilation system dust collector; 0.75 tph and 2,730 tpy	5/2023	401 KAR 59:010

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

Area	Equipment ID	Description	Date Commenced	Generally Applicable Regulation
243	243/3703 243/3601 Dust Collector	Hopper 243/3703 loading controlled by 243/3601 dust collector; 0.15 tph and 120 tpy	5/2023	401 KAR 59:010
243	243/3704 243/3602 Dust Collector	Hopper 243/3704 loading controlled by 243/3602 dust collector; 1.5 tph and 59 tpy	5/2023	401 KAR 59:010

Area	Equipment ID	Description	Capacity	Units	Date Commenced	Generally Applicable Regulation
Tanks	115/3001	Storage tank	3,000	gal	1955	None
Tanks	122/3011	HCl Storage tank	6,500	gal	2000	None – Not subject to MON because ancillary activities are not considered part of an MCPU
Tanks	122/3013	Storage tank	6,000	gal	1955	None
Tanks	125/3002	Storage tank	3,825	gal	1999	None
Tanks	125/3205	Storage tank	4,000	gal	1994	None
Tanks	126/3001	Storage tank	3,000	gal	1990	None
Tanks	210/3004	Storage tank	20,000	gal	1955	None
Tanks	210/3008	Storage tank	12,700	gal	1955	None
Tanks	210/3009	Storage tank	12,700	gal	1955	None
Tanks	210/3014	Storage tank	10,000	gal	1956	None
Tanks	210/3015	Storage tank	6,000	gal	1957	None
Tanks	210/3016	Storage tank	10,000	gal	1960	None
Tanks	210/3017	Storage tank	10,000	gal	1960	None
Tanks	210/3018	Storage tank	10,000	gal	1960	None
Tanks	210/3020	Storage tank	15,200	gal	1960	None
Tanks	210/3021	Storage tank	30,000	gal	1962	None
Tanks	210/3025	Storage tank	10,000	gal	1964	None
Tanks	210/3026	Storage tank	60,000	gal	1965	None
Tanks	210/3028	Storage tank	15,000	gal	1965	None
Tanks	210/3033	Storage tank – maximum true vapor pressure of organic liquids stored < 15.0 kPa (2.2 psi)	30,000	gal	1993	None – per 60.110b(b) exempt from 40 CFR 60, Subpart Kb since max tvp < 15.0 kPa
Tanks	223/3004	Storage tank	3,000	gal	2000	None
Tanks	231/3101	Storage tank	5,400	gal	1989	None
Tanks	231/3105	Storage tank	2,330	gal	1990	None
Tanks	231/3106	Storage tank	2,330	gal	1990	None
Tanks	231/3107	Storage tank	6,700	gal	1989	None
Tanks	235/3005	Storage tank	6,000	gal	1967	None
Tanks	235/3013	Storage tank	12,700	gal	1968	None
Tanks	237/3001	Storage tank	16,500	gal	1965	None

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

Area	Equipment ID	Description	Capacity	Units	Date Commenced	Generally Applicable Regulation
Tanks	237/3002	Storage tank	30,000	gal	2014	None – per 60.110b(b) exempt from 40 CFR 60, Subpart Kb since max tvp<15.0 kPa
Tanks	242/3006	Storage tank	1,000	gal	1992	None
Tanks	242/3102	Storage tank - pressure vessel designed to operate in excess of 204.9 kPa and without emissions to the atmosphere	34,000	gal	1992	None – per 60.110b(d)(2) 40 CFR 60, Subpart Kb does not apply to pressure vessels designed to operate in excess of 204.9 kPa and without emissions to the atmosphere
Tanks	242/3103	Storage tank	10,000	gal	2002	None
Tanks	310/3006	Storage tank	15,000	gal	1956	None
Tanks	310/3007	Storage tank	20,000	gal	1956	None
Tanks	310/3013	Storage tank	20,000	gal	1956	None
Tanks	310/3014	Storage tank	20,000	gal	1956	None
Tanks	311/3001	Storage tank	20,000	gal	1959	None
Tanks	311/3005	Storage tank	12,000	gal	1960	None
Tanks	311/3006	Storage tank – maximum true vapor pressure of organic liquids stored < 15.0 kPa (2.2 psi)	20,000	gal	2001	None – per 60.110b(b) exempt from 40 CFR 60, Subpart Kb since max tvp < 15.0 kPa
Tanks	311/3007	Storage tank – maximum true vapor pressure of organic liquids stored < 15.0 kPa (2.2 psi)	20,000	gal	2001	None – per 60.110b(b) exempt from 40 CFR 60, Subpart Kb since max tvp < 15.0 kPa
Tanks	311/3008	Storage tank	20,000	gal	1960	None
Tanks	311/3011	Storage tank	20,000	gal	1956	None
Tanks	311/3012	Storage tank	71,000	gal	Jan-1984	None
Tanks	311/3013	Storage tank	15,000	gal	1957	None
Tanks	311/3014	Storage tank	37,500	gal	1997	None – per 60.110b(b) exempt from 40 CFR 60, Subpart Kb since max tvp < 15.0 kPa
Tanks	313/3006	Storage tank – maximum true vapor pressure of organic liquids stored < 15.0 kPa (2.2 psi)	20,000	gal	2002	None – per 60.110b(b) exempt from 40 CFR 60, Subpart Kb since max tvp < 15.0 kPa
Tanks	313/3007	Storage tank	10,000	gal	1965	None

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

Area	Equipment ID	Description	Capacity	Units	Date Commenced	Generally Applicable Regulation
Tanks	313/3102	Storage tank	5,000	gal	1955	None
Tanks	321/3002	Storage tank	30,000	gal	1960	None
Tanks	321/3005	Storage tank	100,000	gal	1961	None
Tanks	321/3007	Storage tank	30,000	gal	1960	None
Tanks	321/3008	Storage tank	12,700	gal	1955	None
Tanks	321/3010	Storage tank	160,000	gal	1963	None
Tanks	321/3018	Storage tank	20,000	gal	1965	None
Tanks	321/3019	Storage tank	20,000	gal	1965	None
Tanks	321/3027	Storage tank	100,000	gal	1966	None
Tanks	321/3029	Storage tank – maximum true vapor pressure of organic liquids stored < 3.5 kPa (0.51 psi)	110,548	gal	1985	None – per 60.110b(b) exempt from 40 CFR 60, Subpart Kb since max tvp < 3.5 kPa
Tanks	321/3030	Storage tank	19,500	gal	1998	None
Tanks	321/3031	Storage tank	50,000	gal	2014	None – per 60.110b(b) exempt from 40 CFR 60, Subpart Kb since max tvp < 3.5 kPa
Tanks	324/3105	Storage tank	15,000	gal	1963	None
Tanks	326/3003	Storage tank	4,250	gal	1965	None
Tanks	326/3004	Storage tank	6,000	gal	1993	None
Tanks	326/3201	Storage tank	6,460	gal	1954	None
Tanks	330/3002	Storage tank	47,500	gal	1964	None
Tanks	330/3010	Storage tank	8,800	gal	1965	None
Tanks	330/3011	Storage tank – maximum true vapor pressure of organic liquids stored < 15.0 kPa (2.2 psi)	30,000	gal	1992	None – per 60.110b(b) exempt from 40 CFR 60, Subpart Kb since max tvp < 15.0 kPa
Tanks	330/3102	Storage tank	14,400	gal	1964	None
Tanks	330/3103	Storage tank	43,700	gal	1964	None
Tanks	330/3104	Storage tank	30,500	gal	1964	None
Tanks	330/3108	Storage tank	12,000	gal	1964	None
Tanks	330/3109	Storage tank	8,000	gal	1990	None
Tanks	333/3004	Storage tank	15,200	gal	1965	None
Tanks	335/3101	Storage tank – not in volatile organic liquid service	50,000	gal	1992	None – not in volatile organic liquid service
Tanks	340/3001	Storage tank	12,700	gal	1967	None
Tanks	340/3002	Storage tank	12,700	gal	1968	None
Tanks	340/3003	Storage tank	12,700	gal	1968	None
Tanks	340/3004	Storage tank	12,700	gal	1968	None
Tanks	340/3005	Storage tank	12,700	gal	1968	None
Tanks	340/3006	Storage tank	8,000	gal	1968	None
Tanks	421/3001	Storage tank	6,000	gal	1973	None
Tanks	421/3008	Storage tank	12,700	gal	1991	None

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

Area	Equipment ID	Description	Capacity	Units	Date Commenced	Generally Applicable Regulation
Tanks	430/3002	Storage tank	3,825	gal	1999	None
Tanks	430/3003	Storage tank	2,400	gal	2002	None
332	--	MVE tank wagon loading and unloading	--	--	--	None
Load	--	Loading liquid product to drums and tank wagons	--		Various	None
Utilities	--	Water treatment chemical storage and handling	--		Various	None
Utilities	--	Petroleum liquid storage vessels with capacities less than 1,500 gallons each	< 1,500	gal each	Various	401 KAR 59:050 Section 3(2)
Utilities	Non-road engines	Temporary portable reciprocating internal combustion engines that remain on site for less than 12 consecutive months (non-road engines as defined at 40 CFR 1068.30)	--	--	Various	Pursuant to the definition of "Stationary RICE" in 40 CFR 63.6675, non-road engines, as defined in 40 CFR 1068.30, are not stationary RICE. Therefore, non-road engines are not subject to the requirements 60 CFR 63, Subpart ZZZZ
--	--	Process material losses resulting in air emissions (on a per-event basis) less than 10 lbs of any regulated air pollutant and less than any applicable CERCLA Section 302 Reportable Quantity	--	--	--	None

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. Nitrogen oxides, sulfur dioxide, volatile organic compounds, and particulate matter emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.

3. In order to preclude the applicability of 401 KAR 51:017, Prevention of Significant Deterioration of Air Quality (PSD), total emissions of VOC from the vinyl pyrrolidone (VP) acetylene feed system [VP1 (02) and (03)] and the higher vinyl ethers (HVE) acetylene feed system [261 (02) and (03)], shall not equal or exceed 36 tons/year.

   Compliance Demonstration Method:
   Total VOC emissions shall be calculated on a 12-month rolling basis. Refer to **5. Specific Recordkeeping Requirements** for each unit in Section B.

   401 KAR 51:017, Section 16. Source Obligation
   The permittee shall monitor and calculate annual actual VOC emissions from VP1 (02), VP1 (03), HVE 261 (02) and 261 (03) and maintain a record of the annual actual emissions of VOC, in tons per year on a calendar year basis for ten (10) years. The source shall submit a report to the Division if the annual actual VOC emissions equal or exceed 36 tons per year.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
   a. Date, place as defined in this permit, and time of sampling or measurements;
   b. Analyses performance dates;
   c. Company or entity that performed analyses;
   d. Analytical techniques or methods used;
   e. Analyses results; and
   f. Operating conditions during time of sampling or measurement.

2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five (5) years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b-IV-2 and 1a-8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

3. In accordance with the requirements of 401 KAR 52:020, Section 3(1)h, the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
   a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
   b. To access and copy any records required by the permit:
   c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

   Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020, Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.

7. In accordance with the provisions of 401 KAR 50:055, Section 1, the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
   a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
   b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.

8. The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken shall be submitted to the Regional Office listed on the front of this permit. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. Where the underlying applicable requirement does not identify a specific time frame for reporting deviations, prompt reporting, as required by Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, shall be defined as follows:
   a. For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.
   b. For emissions of any regulated air pollutant, excluding those listed in F.8.a., that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.
   c. All deviations from permit requirements, including those previously reported, shall be included in the semiannual report required by F.6.

9. Pursuant to 401 KAR 52:020, Title V permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
   a. Identification of the term or condition;
   b. Compliance status of each term or condition of the permit;
   c. Whether compliance was continuous or intermittent;
   d. The method used for determining the compliance status for the source, currently and over the reporting period.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

f. The certification shall be submitted by January 30th of each year. Annual compliance certifications shall be sent to the following addresses:

Division for Air Quality
Paducah Regional Office
130 Eagle Nest Drive
Paducah, KY 42003

U.S. EPA Region 4
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St. SW
Atlanta, GA 30303-8960

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within 30 days of the date the Kentucky Emissions Inventory System (KYEIS) emissions survey is mailed to the permittee.

SECTION G - GENERAL PROVISIONS

1. General Compliance Requirements

   a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020, Section 3(1)(b), and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

   b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

   c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
      (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
      (2) The Cabinet or the United States Environmental Protection Agency (U. S. EPA) determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
      (3) The Cabinet or the 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;
      (4) New requirements become applicable to a source subject to the Acid Rain Program.

      Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

   d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 7 and 8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

   e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:020, Section 3(1)(c)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

i. All emission limitations and standards contained in this permit shall be enforceable as a practical matter. All emission limitations and standards contained in this permit are enforceable by the U.S. EPA and citizens except for those specifically identified in this permit as state-origin requirements. [Section 1a-15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].

l. This permit does not convey property rights or exclusive privileges [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.

n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].

o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

q. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
(1) Applicable requirements that are included and specifically identified in this permit; and
(2) Non-applicable requirements expressly identified in this permit.

2. Permit Expiration and Reapplication Requirements

a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six (6) months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].

b. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020, Section 8(2)].

3. Permit Revisions

a. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the State Implementation Plan (SIP) or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).

b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

SECTION G - GENERAL PROVISIONS (CONTINUED)

4. Construction, Start-Up, and Initial Compliance Demonstration Requirements
No construction is authorized by this permit V-24-024.

5. Testing Requirements

a. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least thirty (30) days prior to the test.

b. Pursuant to 401 KAR 50:045, Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.

c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements

a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

b. The permittee shall comply with all applicable requirements and conditions of the Acid Rain Permit and the Phase II permit application (including the Phase II NOx compliance plan and averaging plan, if applicable) incorporated into the Title V permit issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

7. Emergency Provisions

a. Pursuant to 401 KAR 52:020, Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:

SECTION G - GENERAL PROVISIONS (CONTINUED)

(1) An emergency occurred and the permittee can identify the cause of the emergency;
(2) The permitted facility was at the time being properly operated;
(3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
(4) Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.1-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
(5) This requirement does not relieve the source of other local, state or federal notification requirements.

b. Emergency conditions listed in General Condition G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].

c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

8. Ozone Depleting Substances

a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
(1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
(2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
(3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
(4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.155.
(5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156 and 40 CFR 82.157.
(6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

SECTION G - GENERAL PROVISIONS (CONTINUED)

9. Risk Management Provisions

   a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to U.S. EPA using the RMP* eSubmit software.

   b. If requested, submit additional relevant information to the Division or the U.S. EPA.

SECTION H - ALTERNATE OPERATING SCENARIOS

None

SECTION I - COMPLIANCE SCHEDULE

None