LANE REGIONAL AIR PROTECTION AGENCY
TITLE V OPERATING PERMIT

1010 Main St.
Springfield, OR 97477
Telephone (541) 736-1056

Issued in accordance with the provisions of ORS 468A.040
and based on the land use compatibility findings included in the permit record.

ISSUED TO:
Bakelite Chemicals LLC
2665 Highway 99 North
Eugene, Oregon 97402

INFORMATION RELIED UPON:
Application: 67233
Received: June 8, 2021

PLANT SITE LOCATION:
2665 Highway 99 North
Eugene, Oregon 97402

LAND USE COMPATIBILITY STATEMENT:
From: City of Eugene
Dated: November 25, 1996

ISSUED BY LANE REGIONAL AIR PROTECTION AGENCY

Steven A. Dietrich
Steven A. Dietrich, Director

12-21-22
Date

NATURE OF BUSINESS:

Synthetic Resin Manufacturing

SIC	NAICS
2821	325211

RESPONSIBLE OFFICIAL:

Title: Plant Manager
Phone: (541) 688-5221

FACILITY CONTACT PERSON:

Name: Ed Park
Title: Environmental & Quality Manager
Phone: (541) 688-5221

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LIST OF ABBREVIATIONS THAT MAY BE USED IN THIS PERMIT

APPU	Amino/phenolic resin process
AQMA	Air Quality Management Area
ASTM	American Society of Testing and Materials
BH	Baghouse
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring Systems
CFR	Code of Federal Regulations
CO	Carbon monoxide
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
CPMS	Continuous Parameter Monitoring System
Day	A calendar 24-hour period
DETA	Diethylenetriamine
DEQ	Oregon Department of Environmental Quality
DMG	Dimethyl Glutarate
dscf	Dry standard cubic foot of gas volume at 29.92" Hg and 68°F
EF	Emission factor
EPA	US Environmental Protection Agency
EU	Emissions unit
FCAA	Federal Clean Air Act
GHG	Greenhouse gas
gr	grain
HAP	Hazardous Air Pollutant as defined by LRAPA title 12
ID	Identification number
I&M	Inspection and Maintenance
IPA	Isopropyl Alcohol
kPa	kiloPascal
LRAPA	Lane Regional Air Protection Agency
M	1,000
MACT	Maximum Achievable Control Technology
MB	Material balance
mg/l	Milligram per liters
Mlb	1,000 pounds
MM	Million
MMBtu	Million British Thermal Units
MMcf	Million cubic feet
Month	Calendar month
MSF	1,000 square feet
NA	Not applicable
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_X	Nitrogen oxides
NSPS	New Source Performance Standards
O_2	Oxygen
OAR	Oregon Administrative Rules
ORS	Oregon Revised Statutes
O&M	Operation and Maintenance
Pa	Pascal
Pb	Lead
PCD	Pollution control device
PF	Phenol Formaldehyde
PM	Particulate matter
PM_{10}	Particulate matter less than 10 microns in size
$PM_{2.5}$	Particulate matter less than 2.5 microns in size
ppm	Parts per million
PSEL	Plant Site Emission Limit
psia	Pounds per square inch absolute
RICE	Reciprocating Internal Combustion Engine
RMP	Risk management plans
scf	Standard cubic foot
SDS	Safety Data Sheet
SI ICE	Spark Ignition Internal Combustion Engine
SIP	State Implementation Plan
SO_2	Sulfur dioxide
SSM	Startup, shutdown, malfunction
ST	Source test
TOC	Total Organic Compound
UF	Urea Formaldehyde
UFC	Urea-Formaldehyde Concentrates
VE	Visible emissions
VHAP	Volatile Hazardous Air Pollutant
VMT	Vehicle mile traveled
VOC	Volatile organic compound
VOL	Volatile organic liquid
WSR	Wet Strength Resin
Year	A period consisting of any 12-consecutive calendar months

DEFINITIONS

Modified EPA Method 9: As used in this permit "Modified EPA Method 9" is defined as follows:

Opacity must be measured in accordance with EPA Method 9 using the data reduction procedures in EPA Method 203B. For all standards, the minimum observation period must be six (6) minutes, though longer periods may be required by a specific rule or permit condition. Aggregate times (e.g., three (3) minutes in any one (1) hour) consist of the total duration of all readings during the observation period that are equal to or greater than the opacity percentage in the standard, whether or not the readings are consecutive. Each EPA Method 9 reading represents 15 seconds of time. See also the definition of "Opacity" in LRAPA title 12.

PERMITTED ACTIVITIES

1. Until such time as this permit expires or is modified or revoked, the permittee is allowed to discharge air contaminants from those processes and activities directly related to or associated with air contaminant source(s) in accordance with the requirements, limitations, and conditions of this permit. [LRAPA 34-180, OAR 340-218-0010 and 340-218-0120(2)]

2. All conditions in this permit are federally enforceable, meaning that they are enforceable by LRAPA, EPA and citizens under the Clean Air Act, except as specified below:

   2.a. Conditions 7, 8, 10, and G5 and part of G9 (LRAPA Title 43) are only enforceable by LRAPA. [OAR 340-218-0060]

EMISSIONS UNIT (EU) AND POLLUTION CONTROL DEVICE (PCD) IDENTIFICATION

3. The emissions units regulated by this permit are the following: [OAR 340-218-0040(3)]

Emission Unit Description	EU ID	Pollution Control Device Description	PCD ID
Boiler – Cleaver Brooks 61.7 MMBtu/hr Water tube boiler constructed in 1972	B-1	None	NA
Resin Reactors (K-1, K-2, K-3)	OX-1	Regenerative Thermal Oxidizer	RTO
Transfer Rack(s): UFC and Methanol Distillate Loading	LOAD-1	Methanol Distillate Loading: Vapor Balance System	Vbal-3
		UFC Loading: None	NA
Cooling Tower	CT-1	None	NA
Process Piping and Component Leaks– Raw Material Handling	LDAR	None	NA
Miscellaneous Emission Units			
Urea Transfer System	Urea	2 Baghouses (1 on Weigh Hopper, 1 on Storage Silo)	BH-1 BH-2
Resimixer	RESI-MIX®	Baghouse	BH-3
Dry Chemical Blower	Salt	Baghouse	BH-4 & BH-5
Dimethyl Glutarate (DMG) Storage Tank	301	None	NA
Polyamide Resin Tanks	Polyamide Resin Tanks	None	NA
Methanol Distillate Tanks 602 and 703	Methanol Distillate Tanks	None	NA
90% Formic Acid Storage Tank	305	None	NA
Acid Quench Storage Tank	AQ-1	None	NA
PF Resin Tanks	PF Resin Tanks	None	NA
UF Resin Tanks	UF Resin Tanks	None	NA
Phenol Storage Tanks 302, 303	Phenol Storage Tanks	None	NA
Formaldehyde Storage Tanks 304, 306	Formaldehyde Storage Tanks	None	NA

Emission Unit Description	EU ID	Pollution Control Device Description	PCD ID
Miscellaneous Emission Units (Continued)			
Diethylenetriamine (DETA) Storage Tank 701	DETA Storage Tank	None	NA
Prepolymer Storage Tank 298, 704, 705	Prepolymer Storage Tanks	None	NA
Isopropyl Alcohol Storage Tank 800	IPA Storage Tank	Vapor Balance System	Vbal-1
Epichlorohydrin Storage Tanks 801, 802	Epichlorohydrin Storage Tanks	Vapor Balance System	Vbal-2
Diesel Fuel Storage Tank	DF-1	None	NA
Precatalyst Storage Tank 309	Precatalyst Storage Tank	None	NA
Waste Resin Pile Emission	WRP	None	NA
Truck and Railcar Loading of Resin	LOAD-2	None	NA
Truck Washing Emission Estimates	TW-1	None	NA
Paved Roads	PR-1	None	NA
Aggregate Insignificant Emission Units			
• Thermal Oxidizer Supplement Burner (natural gas) • Cleaning and Degreasing Metal Parts	AI	None	NA
Categorically Insignificant Activities			
Emergency Generator: 749 hp, diesel-fired	EG-1	None	NA
• Ammonium Hydroxide Storage Tank 300 • Sulfuric Acid Storage Tank 601 • Caustic Storage Tank 702 • WSR Stormwater Storage Tank 900	CIA	None	NA

EMISSION LIMITS AND STANDARDS, TESTING, MONITORING, AND RECORDKEEPING REQUIREMENTS

The following tables contain the applicable requirements along with the testing, monitoring, and recordkeeping requirements for the emissions units to which those requirements apply.

Facility-wide Emission Limits and Standards

Applicable Requirement	Condition Number	Pollutant/ Parameter	Limit/Standard	Monitoring Requirements	
				Method	Condition Number
48-015(1)	4	Fugitive Emissions	Minimize	Recordkeeping	5, 6
49-010(1)	7	Nuisance	No nuisance	Recordkeeping	10
32-055	8	PM fallout	No deposition of PM >250µm on others' property	Recordkeeping	10
32-090(1)	9	Injury or damage to persons or property	Prohibited	Recordkeeping	10
51-015	11	Source Emission Reduction Plan	Reduce Emissions	Recordkeeping	12
32-065(2)	13	Fuel oil sulfur content specifications	Percent by weight sulfur	Recordkeeping	14
40 CFR Part 68	15	Risk management	Risk management plan	NA	15

4. Applicable Requirement: The permittee must not allow or permit any materials to be handled, transported, or stored; or a building, its appurtenances; or a road to be used, constructed, altered, repaired or demolished; or any equipment to be operated, without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions must include, but not be limited to the following: [LRAPA 48-015(1)]

   4.a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;

   4.b. Application of water or other suitable chemicals on unpaved roads, materials stockpiles, and other surfaces which can create airborne dusts;

   4.c. Full or partial enclosure of materials stockpiles in cases where applicable of oil, water, or chemicals are not sufficient to prevent particulate matter from becoming airborne;

   4.d. Installation and use of hoods, fans, and fabrics filters to enclose and vent the handling of dusty materials;

   4.e. Adequate containment during sandblasting or other similar operations;

   4.f. The covering of moving, open bodied trucks transporting materials likely to become airborne ; and

   4.g. The prompt removal from paved streets of earth or other material which does or may become airborne.

5. Monitoring Requirement: At least once each quarter for a minimum period of 30 minutes, the permittee must visually survey the facility using EPA Method 22 for any sources of excess fugitive emissions. For purposes of this condition, excess fugitive emissions are visible emissions that leave the plant site boundary for a period or periods totaling more than 18 seconds in a six-minute period. The minimum observation time must be at least six (6) minutes. The person conducting the observation must follow EPA Method 22. If sources of excess fugitive emissions are identified, the permittee must: [LRAPA 34-016(1), LRAPA 48-

015(2)&(3) and OAR 340-218-0050(3)(a)]

5.a. Immediately take corrective action to minimize the fugitive emissions, including but not limited to those actions identified in Condition 4; and

5.b. Develop an LRAPA-approved Fugitive Emission Control Plan upon request by LRAPA and implement the plan whenever fugitive emissions leave the property for more than 18 seconds in a six-minute period.

6. Recordkeeping Requirement: The permittee must maintain records of the fugitive emissions surveys and corrective actions, as applicable. The record must be maintained onsite for a period of a least five (5) years and must be provided to LRAPA personnel on request. [LRAPA 34-016 and OAR 340-218-0050(3)(b)]

Nuisance Conditions

7. Applicable Requirement: The permittee must not cause or allow air contaminants from any source subject to regulation by LRAPA to cause a nuisance. [LRAPA 49-010(1)] This condition is enforceable only by LRAPA.

8. Applicable Requirement: The permittee must not cause or permit the emission of any particulate matter larger than 250 microns in size at such duration and quantity as to create an observable deposition upon the real property of another person. [LRAPA 32-055] This condition is enforceable only by LRAPA.

9. Applicable Requirement: The permittee must not discharge from any source whatsoever such quantities of air contaminants which cause injury or damage to any persons, the public, business or property; such determination to be made by LRAPA. [LRAPA 32-090(1)]

10. Monitoring and Recordkeeping Requirement: To demonstrate compliance with Conditions 7 through 9, the permittee must maintain a log of each nuisance complaint received by the permittee during the operation of the facility. Documentation must include the date of complaint, time of observed nuisance condition, description of nuisance condition, location of receptor, status of plant operation during the observed period, and date and time of response to complainant. A facility representative must immediately investigate the condition following the receipt of a nuisance complaint and a facility representative must provide a response to the complainant, if possible, within 24 hours, but not longer than five (5) working days. [LRAPA 34-016(1) and OAR 340-218-0050(3)(a)] This condition is enforceable only by LRAPA.

Air Pollution Emergencies

11. Applicable Requirement: In the event that an Air Pollution Alert, Warning, or Emergency Episode is declared in the Eugene-Springfield area by LRAPA, the permittee must take the action appropriate to the episode condition as required by LRAPA 51-015 and as detailed in Attachment A to this permit. The permittee must take action when the permittee first becomes aware of such declaration whether through news media or direct contact with LRAPA.

12. Monitoring and Recordkeeping Requirement: The permittee must maintain a record (log) of air pollution episodes and emission reduction actions taken and must provide the log to LRAPA upon request. [LRAPA 34-016(1) and OAR 340-218-0050(3)(a)]

Fuel Conditions

13. Applicable Requirement: The permittee must only burn fuel oils that meet the following specifications: [LRAPA 32-065]

13.a. Distillate fuel oil or on-specification used oil (as defined in 40 CFR 279.11) must not contain more than:

13.a.i. 0.3% sulfur by weight for ASTM Grade 1 fuel oil; [LRAPA 32-065(2)(a)]

13.a.ii. 0.5% sulfur by weight for ASTM Grade 2 fuel oil. [LRAPA 32-065(2)(b)]

13.b. Residual fuel oils must not contain more than 1.75% sulfur by weight. [LRAPA 32-065(1)]

14. Monitoring and Recordkeeping Requirement: The permittee must monitor the sulfur content of each shipment of fuel oil (ASTM Grade 1 or ASTM Grade 2) that will be used in auxiliary equipment other than exempt equipment such as forklifts and motor vehicles by: [LRAPA 34-016(1) and OAR 340-218-0050(3)(a)]

    14.a. Obtaining a certification of sulfur content from each vendor for each shipment of fuel oil received; or

    14.b. Secure a SDS from the fuel supplier and a certification stating that the supplier will provide only fuel oil that meets the specifications in Condition 13 for use in non-exempt or auxiliary equipment such as stationary fire water pump motors.

Accidental Release Prevention

15. Applicable Requirement: The permittee must submit a risk management plan (RMP) by the date specified in 40 CFR 68.10 and comply with the plan and all other applicable Part 68 requirements. [40 CFR Part 68]

INDIVIDUAL EMISSION-UNIT-SPECIFIC EMISSION LIMITS AND STANDARDS

Emissions Unit EU: LDAR (Component Leaks) Specific Emission Limits and Standards

Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard	Monitoring Requirements	
				Method	Condition Number
40 CFR Part 63, Subpart W	16	HAP	Compliance with 40 CFR 63 subpart H for leak detection	Recordkeeping	17, 18
40 CFR Part 63, Subpart H	19 through 25	HAP	General standards	Recordkeeping	42, 43
	26	HAP	Pumps in light liquid service standards	Periodic testing, Recordkeeping	41, 42, 43
	27	HAP	Compressor standards	Sensor installation, Testing, Recordkeeping	27.d, 41, 42, 43
	28	HAP	Pressure relief devices in gas/vapor service standards	Testing, Recordkeeping	41, 42, 43
	29	HAP	Sampling connection systems standards	Recordkeeping	42, 43
	30	HAP	Open-ended valves or lines standards	Recordkeeping	30.a
	31	HAP	Valves in gas/vapor service and in light liquid service standards	Testing, Recordkeeping	41, 42, 43
	32	HAP	Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service standards	Testing, Recordkeeping	41, 42, 43
	33	HAP	Surge control vessels and bottoms receivers standards	Testing, Recordkeeping	39, 42, 45, 46
	34	HAP	Delay of repair standards	Recordkeeping	42, 43
	35	HAP	Closed-vent systems and control devices standards	Testing, Recordkeeping	41, 42, 43
	36	HAP	Agitators in gas/vapor service and in light liquid service standards	Testing, Recordkeeping	41, 42, 43
	37	HAP	Connectors in gas/vapor service and in light liquid service standards	Testing, Recordkeeping	41, 42, 43
	38	HAP	Alternative means of emission limitation – General	Work practices demonstration	38.b, 38.c, 38.d, 38.e, 44
	39	HAP	Alternative means of emission limitation – Batch processes	Work practices demonstration	39.b, 39.c
	40	HAP	Alternative means of emission limitation – Enclosed-vented process units	Work practices demonstration	35, 40

40 CFR 63 Subpart W – National Emission Standards for Hazardous Air Pollutants for Epoxy Resins Production and Non-Nylon Polyamides Production [LRAPA 44-150(5)(p)]

16. Applicable Requirement: The permittee must comply with the requirements of 40 CFR 63, Subpart H – National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks, detailed in Conditions 19 through 46, to control emissions from equipment leaks for EU: LDAR. [40 CFR 63.524(a)(2)]

17. Recordkeeping Requirement: The permittee electing to implement the leak detection and repair program specified in subpart H of 40 CFR Part 63, must implement the recordkeeping requirements outlined in Condition 42. All records must be retained for a period of 5 years, in accordance with the requirements of 40 CFR 63.10(b)(1). [40 CFR 63.527(d)]

18. Reporting Requirement: The permittee electing to implement the leak detection and repair program specified in subpart H of 40 CFR Part 63, must implement the reporting requirements outlined in Condition 43. Copies of all reports must be retained as records for a period of 5 years, in accordance with the requirements of 40 CFR 63.10(b)(1). [40 CFR 63.528(b)]

40 CFR 63 Subpart H – National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks [LRAPA 44-150(5)(d)]

19. Applicable Requirements: [40 CFR 63.162(b)]

    19.a. The permittee may request a determination of alternative means of emission limitation to the requirements of Conditions 26 through 33, and Conditions 35 through 37 as provided in Condition 38. [40 CFR 63.162(b)(1)]

    19.b. If the Administrator makes a determination that a means of emission limitation is a permissible alternative to the requirements of Conditions 26 through 33, and Conditions 35 through 37, the permittee must comply with the alternative. [40 CFR 63.162(b)(2)]

20. Applicable Requirement: Each piece of equipment in a process unit to which 40 CFR 63 subpart H applies must be identified such that it can be distinguished readily from equipment that is not subject to 40 CFR 63 subpart H. 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, or by designation of process unit boundaries by some form of weatherproof identification. [40 CFR 63.162(c)]

21. Applicable Requirement: Equipment that is in vacuum service is excluded from the requirements of 40 CFR 63 subpart H. [40 CFR 63.162(d)]

22. Applicable Requirement: Equipment that is in organic HAP service less than 300 hours per calendar year is excluded from the requirements of Conditions 26 through 37and Condition 39 if it is identified as required in Condition 42.i. [40 CFR 63.162(e)]

23. Applicable Requirement: When each leak is detected as specified in Conditions 26 and 27; Conditions 31 and 32; and Conditions 35 through 37, the following requirements apply: [40 CFR 63.162(f)]

    23.a. Clearly identify the leaking equipment. [40 CFR 63.162(f)(1)]

    23.b. The identification on a valve may be removed after it has been monitored as specified in Condition 31.d.iii, and no leak has been detected during the follow-up monitoring. If the permittee elects to comply using the provisions of Condition 37.c, the identification on a connector may be removed after it is monitored as specified in Condition 37.c and no leak is detected during that monitoring. [40 CFR 63.162(f)(2)]

    23.c. The identification which has been placed on equipment determined to have a leak, except for a valve or for a connector that is subject to the provisions of Condition 37.c, may be removed after it is repaired. [40 CFR 63.162(f)(3)]

24. Applicable Requirement: Except as provided in Condition 24.a, all terms in 40 CFR 63 subpart H that define a period of time for completion of required tasks (e.g., weekly, monthly, quarterly, annual), refer to the standard calendar periods unless specified otherwise in the condition that imposes the requirement. [40 CFR 63.162(g)]

    24.a. If the initial compliance date does not coincide with the beginning of the standard calendar period, the permittee may elect to utilize a period beginning on the compliance date, or may elect to comply in accordance with the provisions of Conditions 24.b or 24.c. [40 CFR 63.162(g)(1)]

    24.b. Time periods specified in 40 CFR 63 subpart H for completion of required tasks may be changed

by mutual agreement between the permittee and LRAPA, as specified in 40 CFR 63 subpart A. For each time period that is changed by agreement, the revised period must remain in effect until it is changed. A new request is not necessary for each recurring period. [40 CFR 63.162(g)(2)]

24.c. Except as provided in Conditions 24.a or 24.b, where the period specified for compliance is a standard calendar period, if the initial compliance date does not coincide with the beginning of the calendar period, compliance must be required according to the schedule specified in Conditions 24.c.i or 24.c.ii, as appropriate. [40 CFR 63.162(g)(3)]

24.c.i. Compliance must be required before the end of the standard calendar period within which the compliance deadline occurs, if there remain at least 3 days for tasks that must be performed weekly, at least 2 weeks for tasks that must be performed monthly, at least 1 month for tasks that must be performed each quarter, or at least 3 months for tasks that must be performed annually; or [40 CFR 63.162(g)(3)(i)]

24.c.ii. In all other cases, compliance must be required before the end of the first full standard calendar period after the period within which the initial compliance deadline occurs. [40 CFR 63.162(g)(3)(ii)]

25. Applicable Requirement: In all cases where the provisions of 40 CFR 63 subpart H require the permittee to repair leaks by a specified time after the leak is detected, it is a violation of 40 CFR 63 subpart H to fail to take action to repair the leaks within the specified time. If action is taken to repair the leaks within the specified time, failure of that action to successfully repair the leak is not a violation of 40 CFR 63 subpart H. However, if the repairs are unsuccessful, a leak is detected and the permittee must take further action as required by applicable provisions of 40 CFR 63 subpart H. [40 CFR 63.162(h)]

26. Applicable Requirement: *Pumps in light liquid service* – The provisions of Conditions 26.a through 26.j apply to each pump that is in light liquid service. [40 CFR 63.163(a)]

26.a. The provisions are to be implemented on the dates specified in 40 CFR 63 subpart W that references 40 CFR 63 subpart H as specified below: [40 CFR 63.163(a)(1)]

26.a.i. In accordance with 40 CFR 63.521(a), the permittee of an existing affected WSR source must comply with the applicable provisions of 40 CFR 63 subpart W within 3 years of the promulgation date. [40 CFR 63.163(a)(3)]

26.b. [40 CFR 63.163(b)]

26.b.i. The permittee of a process unit subject to 40 CFR 63 subpart H must monitor each pump monthly to detect leaks by the method specified in Condition 41.b and must comply with the requirements of Conditions 26.a through 26.d, except as provided in Condition 19 and Conditions 26.e through 26.j; [40 CFR 63.163(b)(1)]

26.b.ii. Each pump must be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected. [40 CFR 63.163(b)(3)]

26.c. [40 CFR 63.163(c)]

26.c.i. When a leak is detected, it must be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Condition 34. [40 CFR 63.163(c)(1)]

26.c.ii. A first attempt at repair must be made no later than 5 calendar days after the leak is detected. First attempts at repair include, but are not limited to, the following practices where practicable: [40 CFR 63.163(c)(2)]

26.c.ii.1. Tightening of packing gland nuts. [40 CFR 63.163(c)(2)(i)]

26.c.ii.2. Ensuring that the seal flush is operating at design pressure and temperature. [40 CFR 63.163(c)(2)(ii)]

26.d. [40 CFR 63.163(d)]

26.d.i. The permittee must decide no later than the first monitoring period whether to calculate percent leaking pumps on a process unit basis or on a source-wide basis. Once the permittee has decided, all subsequent percent calculations must be made on the same basis. [40 CFR 63.163(d)(1)]

26.d.ii. The number of pumps at a process unit must be the sum of all the pumps in organic HAP service, except that pumps found leaking in a continuous process unit within 1 month after start-up of the pump must not count in the percent leaking pumps calculation for that one monitoring period only. [40 CFR 63.163(d)(3)]

26.d.iii. Percent leaking pumps must be determined by the following equation: [40 CFR 63.163(d)(4)]

$\%P_L = ((P_L - P_S)/(P_T - P_S)) \times 100$

where:

$\%P_L$ = Percent leaking pumps

P_L = Number of pumps found leaking as determined through monthly monitoring as required in Conditions 26.b.i.

P_T = Total pumps in organic HAP service, including those meeting the criteria in Conditions 26.e and 26.f.

P_S = Number of pumps leaking within 1 month of start-up during the current monitoring period.

26.e. Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of Conditions 26.a through 26.d, provided the following requirements are met: [40 CFR 63.163(e)]

26.e.i. Each dual mechanical seal system is: [40 CFR 63.163(e)(1)]

26.e.i.1. Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or [40 CFR 63.163(e)(1)(i)]

26.e.i.2. 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 Condition 35; or [40 CFR 63.163(e)(1)(ii)]

26.e.i.3. Equipped with a closed-loop system that purges the barrier fluid into a process stream. [40 CFR 63.163(e)(1)(iii)]

26.e.ii. The barrier fluid is not in light liquid service. [40 CFR 63.163(e)(2)]

26.e.iii. 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 63.163(e)(3)]

26.e.iv. Each pump is checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. [40 CFR 63.163(e)(4)]

26.e.iv.1. If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the pump must be monitored as specified in Condition 41.b to determine if there is a leak of organic HAP in the barrier fluid. [40 CFR 63.163(e)(4)(i)]

26.e.iv.2. If an instrument reading of 1,000 parts per million or greater is measured, a leak is detected. [40 CFR 63.163(e)(4)(ii)]

26.e.v. Each sensor as described in Condition 26.e.iii is observed daily or is equipped with an alarm unless the pump is located within the boundary of an unmanned plant site. [40 CFR 63.163(e)(5)]

26.e.vi. [40 CFR 63.163(e)(6)]

26.e.vi.1. The permittee 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. [40 CFR 63.163(e)(6)(i)]

26.e.vi.2. If indications of liquids dripping from the pump seal exceed the criteria established in Condition 26.e.vi.1, or if, based on the criteria established in Condition 26.e.vi.1, the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected. [40 CFR 63.163(e)(6)(ii)]

26.e.vi.3. When a leak is detected, it must be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Condition 34. [40 CFR 63.163(e)(6)(iii)]

26.e.vi.4. A first attempt at repair must be made no later than 5 calendar days after each leak is detected. [40 CFR 63.163(e)(6)(iv)]

26.f. Any pump that is designed with no externally actuated shaft penetrating the pump housing is exempt from the requirements of Condition 26.a through 26.c. [40 CFR 63.163(f)]

26.g. Any pump equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of Condition 35 is exempt from the requirements of Conditions 26.b through 26.e. [40 CFR 63.163(g)]

26.h. Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of Conditions 26.b.ii and 26.e.iv, and the daily requirements of Condition 26.e.iv.1, provided that each pump is visually inspected as often as practicable and at least monthly. [40 CFR 63.163(h)]

26.i. If more than 90 percent of the pumps at a process unit meet the criteria in either Condition 26.e or 26.f, the process unit is exempt from the requirements of Condition 26.d. [40 CFR 63.163(i)]

26.j. Any pump that is designated, as described in Condition 42.b.vii.1, as an unsafe-to-monitor pump is exempt from the requirements of Conditions 26.b through 26.e if: [40 CFR 63.163(j)]

26.j.i. The permittee of the pump determines that the pump is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with Conditions 26.b through 26.d; and [40 CFR 63.163(j)(1)]

26.j.ii. The permittee of the pump has a written plan that requires monitoring of the pump as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. [40 CFR 63.163(j)(2)]

27. Applicable Requirement: *Compressors* – [40 CFR 63.164]

27.a. Each compressor must 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 Condition 19 and 27.h and 27.i. [40 CFR 63.164(a)]

27.b. Each compressor seal system as required in Condition 27.a must be: [40 CFR 63.164(b)]

27.b.i. Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or [40 CFR 63.164(b)(1)]

27.b.ii. 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 complies with the requirements of Condition 35; or [40 CFR 63.164(b)(2)]

27.b.iii. Equipped with a closed-loop system that purges the barrier fluid directly into a process stream. [40 CFR 63.164(b)(3)]

27.c. The barrier fluid must not be in light liquid service. [40 CFR 63.164(c)]

27.d. Each barrier fluid system as described in Condition 27.a through 27.c must be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both. [40 CFR 63.164(d)]

27.e. [40 CFR 63.164(e)]

27.e.i. Each sensor as required in Condition 27.d must be observed daily or must be equipped with an alarm unless the compressor is located within the boundary of an unmanned plant site. [40 CFR 63.164(e)(1)]

27.e.ii. The permittee must determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. [40 CFR 63.164(e)(2)]

27.f. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under Condition 27.e.ii, a leak is detected. [40 CFR 63.164(f)]

27.g. [40 CFR 63.164(g)]

27.g.i. When a leak is detected, it must be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Condition 34. [40 CFR 63.164(g)(1)]

27.g.ii. A first attempt at repair must be made no later than 5 calendar days after each leak is detected. [40 CFR 63.164(g)(2)]

27.h. A compressor is exempt from the requirements of Conditions 27.a through 27.g if it is equipped with a closed-vent system to capture and transport leakage from the compressor drive shaft seal back to a process or a fuel gas system or to a control device that complies with the requirements of Condition 35. [40 CFR 63.164(h)]

27.i. Any compressor that is designated, as described in Condition 42.b.ii.2, to operate with an instrument reading of less than 500 parts per million above background, is exempt from the requirements of Conditions 27.a through 27.h if the compressor: [40 CFR 63.164(i)]

27.i.i. Is demonstrated to be operating with an instrument reading of less than 500 parts per million above background, as measured by the method specified in Condition 41.c; and [40 CFR 63.164(i)(1)]

27.i.ii. Is tested for compliance with Condition 27.i.i initially upon designation, annually, and at other times requested by LRAPA. [40 CFR 63.164(i)(2)]

28. Applicable Requirement: *Pressure relief devices in gas/vapor service* – [40 CFR 63.165]

28.a. Except during pressure releases, each pressure relief device in gas/vapor service must be operated with an instrument reading of less than 500 parts per million above background except as provided in Condition 28.b, as measured by the method specified in Condition 41.c. [40 CFR 63.165(a)]

28.b. [40 CFR 63.165(b)]

28.b.i. After each pressure release, the pressure relief device must be returned to a condition indicated by an instrument reading of less than 500 parts per million above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in Condition 34. [40 CFR 63.165(b)(1)]

28.b.ii. No later than 5 calendar days after the pressure release and being returned to organic HAP service, the pressure relief device must be monitored to confirm the condition indicated by an instrument reading of less than 500 parts per million above background, as measured by the method specified in Condition 41.c. [40 CFR 63.165(b)(2)]

28.c. Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in Condition 35 is exempt from the requirements of Conditions 28.a and 28.b. [40 CFR 63.165(c)]

28.d. [40 CFR 63.165(d)]

28.d.i. Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of Conditions 28.a and 28.b, provided the permittee complies with the requirements in Condition 28.d.ii. [40 CFR 63.165(d)(1)]

28.d.ii. After each pressure release, a rupture disk must be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in Condition 34. [40 CFR 63.165(d)(2)]

29. Applicable Requirement: *Sampling connection systems* – [40 CFR 63.166]

29.a. Each sampling connection system must be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in Condition 19. Gases displaced during filling of the sample container are not required to be collected or captured. [40 CFR 63.166(a)]

29.b. Each closed-purge, closed-loop, or closed-vent system as required in Condition 29.a must: [40 CFR 63.166(b)]

29.b.i. Return the purged process fluid directly to the process line; or [40 CFR 63.166(b)(1)]

29.b.ii. Collect and recycle the purged process fluid to a process; or [40 CFR 63.166(b)(2)]

29.b.iii. Be designed and operated to capture and transport the purged process fluid to a control device that complies with the requirements of Condition 35; or [40 CFR 63.166(b)(3)]

29.b.iv. Collect, store, and transport the purged process fluid to a system or facility identified in Condition 29.b.iv.1, 29.b.iv.2, or 29.b.iv.3. [40 CFR 63.166(b)(4)]

29.b.iv.1. A waste management unit as defined in 40 CFR 63.111, if the waste management unit is subject to, and operated in compliance with the provisions of 40 CFR 63 subpart G applicable to group 1 wastewater streams. If the purged process fluid does not contain any organic HAP listed in Table 9 of 40 CFR 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 streams provided the facility has an NPDES permit or sends the wastewater to an NPDES permitted facility. [40 CFR 63.166(b)(4)(i)]

29.b.iv.2. A treatment, storage, or disposal facility subject to regulation under 40 CFR part 262, 264, 265, or 266; or [40 CFR 63.166(b)(4)(ii)]

29.b.iv.3. 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 63.166(b)(4)(iii)]

29.c. In-situ sampling systems and sampling systems without purges are exempt from the requirements of Conditions 29.a and 29.b. [40 CFR 63.166(c)]

30. Applicable Requirement: *Open-ended valves or lines* – [40 CFR 63.167]

30.a. [40 CFR 63.167(a)]

30.a.i. Each open-ended valve or line must be equipped with a cap, blind flange, plug, or a second valve, except as provided in Condition 19 and Conditions 30.d and 30.e. [40 CFR 63.167(a)(1)]

30.a.ii. The cap, blind flange, plug, or second valve must seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance or repair. [40 CFR 63.167(a)(2)]

30.b. Each open-ended valve or line equipped with a second valve must be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 63.167(b)]

30.c. 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 must comply with Condition 30.a at all other times. [40 CFR 63.167(c)]

30.d. Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of Conditions 30.a, 30.b, and 30.c. [40 CFR 63.167(d)]

30.e. Open-ended valves or lines containing materials which 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 Conditions 30.a through 30.c are exempt from the requirements of Conditions 30.a through 30.c. [40 CFR 63.167(e)]

31. Applicable Requirement: *Valves in gas/vapor service and in light liquid service* – The provisions of Conditions 31.a through 31.h apply to valves that are either in gas service or in light liquid service. [40 CFR 63.168(a)]

31.a. The provisions are to be implemented on the dates set forth in the specific subpart in 40 CFR part 63 that references 40 CFR 63 subpart H as specified in Conditions 31.a.i. [40 CFR 63.168(a)(1)]

31.a.i. In accordance with 40 CFR 63.521(a), the permittee of an existing affected WSR source must comply with the applicable provisions of 40 CFR 63 subpart W within 3 years of the promulgation date. [40 CFR 63.168(a)(1)(iii)]

31.b. The permittee of a source subject to 40 CFR 63 subpart H must monitor all valves, except as provided in Condition 19 and Conditions 31.f and 31.g, and must comply with all other provisions of this section, except as provided in Conditions 34, 38, 39, and 40. [40 CFR 63.168(b)]

31.b.i. The valves must be monitored to detect leaks by the method specified in Condition 41.b. [40 CFR 63.168(b)(1)]

31.c. [40 CFR 63.168(e)]

31.c.i. Percent leaking valves at a process unit must be determined by the following equation: [40 CFR 63.168(e)(1)]

$\%V_L = (V_L/V_T) \times 100$

where:

$\%V_L$ = Percent leaking valves as determined through periodic monitoring required in Conditions 31.b.

V_L = Number of valves found leaking excluding nonrepairables as provided in Condition 31.c.iii.

V_T = Total valves monitored, in a monitoring period excluding valves monitored as required by Condition 31.d.iii.

31.c.ii. For use in determining monitoring frequency the percent leaking valves must be calculated as a rolling average of two consecutive monitoring periods for monthly, quarterly, or semiannual monitoring programs; and as an average of any three out of four consecutive monitoring periods for annual monitoring programs. [40 CFR 63.168(e)(2)]

31.c.iii. [40 CFR 63.168(e)(3)]

31.c.iii.1. Nonrepairable valves must 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 Condition 31.c.iii.2. Otherwise, a number of nonrepairable valves (identified and included in the percent leaking calculation in a previous period) up to a maximum of 1 percent of the total number of valves in organic HAP service at a process unit may be excluded from calculation of percent leaking valves for subsequent monitoring periods.

[40 CFR 63.168(e)(3)(i)]

31.c.iii.2. If the number of nonrepairable valves exceeds 1 percent of the total number of valves in organic HAP service at a process unit, the number of nonrepairable valves exceeding 1 percent of the total number of valves in organic HAP service must be included in the calculation of percent leaking valves. [40 CFR 63.168(e)(3)(ii)]

31.d. [40 CFR 63.168(f)]

31.d.i. When a leak is detected, it must be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in Condition 34. [40 CFR 63.168(f)(1)]

31.d.ii. A first attempt at repair must be made no later than 5 calendar days after each leak is detected. [40 CFR 63.168(f)(2)]

31.d.iii. When a leak has been repaired, the valve must be monitored at least once within the first 3 months after its repair. [40 CFR 63.168(f)(3)]

31.d.iii.1. The monitoring must be conducted as specified in Conditions 41.b and 41.c, as appropriate, to determine whether the valve has resumed leaking. [40 CFR 63.168(f)(3)(i)]

31.d.iii.2. If a leak is detected by monitoring that is conducted pursuant to Condition 31.d.iii, the permittee must follow the provisions of Condition 31.d.iii.2.A, to determine whether that valve must be counted as a leaking valve for purposes of Condition 31.c. [40 CFR 63.168(f)(3)(iii)]

31.d.iii.2.A. To satisfy the requirements of Condition 31.d.iii, the valve must be counted as a leaking valve unless it is repaired and shown by periodic monitoring not to be leaking. [40 CFR 63.168(f)(3)(iii)(B)]

31.e. First attempts at repair include, but are not limited to, the following practices where practicable: [40 CFR 63.168(g)]

31.e.i. Tightening of bonnet bolts, [40 CFR 63.168(g)(1)]

31.e.ii. Replacement of bonnet bolts, [40 CFR 63.168(g)(2)]

31.e.iii. Tightening of packing gland nuts, and [40 CFR 63.168(g)(3)]

31.e.iv. Injection of lubricant into lubricated packing. [40 CFR 63.168(g)(4)]

31.f. Any valve that is designated, as described in Condition 42.b.vii.1, as an unsafe-to-monitor valve is exempt from the requirements of Conditions 31.b through 31.d if: [40 CFR 63.168(h)]

31.f.i. The permittee of the valve determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with Conditions 31.b; and [40 CFR 63.168(h)(1)]

31.f.ii. The permittee of the valve has a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. [40 CFR 63.168(h)(2)]

31.g. Any valve that is designated, as described in Condition 42.b.vii.2, as a difficult-to-monitor valve is exempt from the requirements of Conditions 31.b if: [40 CFR 63.168(i)]

31.g.i. The permittee determines that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface or it is not accessible at anytime in a safe manner; [40 CFR 63.168(i)(1)]

31.g.ii. The process unit within which the valve is located is an existing source or the permittee

designates less than 3 percent of the total number of valves in a new source as difficult-to-monitor; and [40 CFR 63.168(i)(2)]

31.g.iii. The permittee follows a written plan that requires monitoring of the valve at least once per calendar year. [40 CFR 63.168(i)(3)]

31.h. Any equipment located at a plant site with fewer than 250 valves in organic HAP service is exempt from the requirements for monthly monitoring and a quality improvement program specified in 40 CFR 63.168(d)(1). Instead, the permittee must monitor each valve in organic HAP service for leaks once each quarter except as provided in Conditions 31.f and 31.g. [40 CFR 63.168(j)]

32. Applicable Requirement: *Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service* – [40 CFR 63.169]

32.a. Pumps, valves, connectors, and agitators in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and instrumentation systems must be monitored within 5 calendar days by the method specified in Condition 41.b if evidence of a potential leak to the atmosphere is found by visual, audible, olfactory, or any other detection method. If such a potential leak is repaired as required in 32.c and 32.d, it is not necessary to monitor the system for leaks by the method specified in Condition 41.b. [40 CFR 63.169(a)]

32.b. 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 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, a leak is detected. [40 CFR 63.169(b)]

32.c. [40 CFR 63.169(c)]

32.c.i. When a leak is detected, it must be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Condition 34. [40 CFR 63.169(c)(1)]

32.c.ii. The first attempt at repair must be made no later than 5 calendar days after each leak is detected. [40 CFR 63.169(c)(2)]

32.c.iii. For equipment identified in Condition 32.a that is not monitored by the method specified in Condition 41.b, repaired must 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 63.169(c)(3)]

32.d. First attempts at repair include, but are not limited to, the practices described under Condition 26.c.ii and 31.e, for pumps and valves, respectively. [40 CFR 63.169(d)]

33. Applicable Requirement: *Surge control vessels and bottoms receivers* – Each surge control vessel or bottoms receiver that is not routed back to the process and that meets the conditions specified in Table 2 in Condition 45 or Table 3 in Condition 46 must be equipped with a closed-vent system that routes the organic vapors vented from the surge control vessel or bottoms receiver back to the process or to a control device that complies with the requirements in Condition 35, except as provided in Condition 19. [40 CFR 63.170]

34. Applicable Requirement: *Delay of repair* – [40 CFR 63.171]

34.a. Delay of repair of equipment for which leaks have been detected is allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment must occur by the end of the next process unit shutdown. [40 CFR 63.171(a)]

34.b. 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 organic HAP service. [40 CFR 63.171(b)]

34.c. Delay of repair for valves, connectors, and agitators is also allowed if: [40 CFR 63.171(c)]

34.c.i. The permittee 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 63.171(c)(1)]

34.c.ii. When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with Condition 35. [40 CFR 63.171(c)(2)]

34.d. Delay of repair for pumps is also allowed if: [40 CFR 63.171(d)]

34.d.i. Repair is completed as soon as practicable, but not later than 6 months after the leak was detected. [40 CFR 63.171(d)(2)]

34.e. Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, 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 shutdown will not be allowed unless the third process unit shutdown occurs sooner than 6 months after the first process unit shutdown. [40 CFR 63.171(e)]

35. Applicable Requirement: *Closed-vent systems and control devices* – [40 CFR 63.172]

35.a. Permittees of closed-vent systems and control devices used to comply with provisions of 40 CFR 63 subpart H must comply with the provisions of Condition 35, except as provided in Condition 19. [40 CFR 63.172(a)]

35.b. Recovery or recapture devices (e.g., condensers and absorbers) must be designed and operated to recover the organic hazardous air pollutant emissions or volatile organic compounds emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. The 20 parts per million by volume performance standard is not applicable to the provisions of Condition 32. [40 CFR 63.172(b)]

35.c. Enclosed combustion devices must be designed and operated to reduce the organic hazardous air pollutant emissions or volatile organic compounds emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent, or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760 °C. [40 CFR 63.172(c)]

35.d. Permittees of control devices that are used to comply with the provisions of 40 CFR 63 subpart H must monitor these control devices to ensure that they are operated and maintained in conformance with their design. [40 CFR 63.172(e)]

35.e. Except as provided in Conditions 35.j and 35.k, each closed-vent system must be inspected according to the procedures and schedule specified in Conditions 35.e.i and 35.e.ii. [40 CFR 63.172(f)]

35.e.i. If the closed-vent system is constructed of hard-piping, the permittee must: [40 CFR 63.172(f)(1)]

35.e.i.1. Conduct an initial inspection according to the procedures in Condition 35.f, and [40 CFR 63.172(f)(1)(i)]

35.e.i.2. Conduct annual visual inspections for visible, audible, or olfactory indications of leaks. [40 CFR 63.172(f)(1)(ii)]

35.e.ii. If the vapor collection system or closed-vent system is constructed of duct work, the permittee must: [40 CFR 63.172(f)(2)]

35.e.ii.1. Conduct an initial inspection according to the procedures in Condition 35.f, and [40 CFR 63.172(f)(2)(i)]

35.e.ii.2. Conduct annual inspections according to the procedures in Condition 35.f. [40

CFR 63.172(f)(2)(ii)]

35.f. Each closed-vent system must be inspected according to the procedures in Condition 41.b. [40 CFR 63.172(g)]

35.g. Leaks, as indicated by an instrument reading greater than 500 parts per million above background or by visual inspections, must be repaired as soon as practicable, except as provided in Condition 35.h. [40 CFR 63.172(h)]

35.g.i. A first attempt at repair must be made no later than 5 calendar days after the leak is detected. [40 CFR 63.172(h)(1)]

35.g.ii. Repair must be completed no later than 15 calendar days after the leak is detected, except as provided in Condition 35.h. [40 CFR 63.172(h)(2)]

35.h. Delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the permittee 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 must be complete by the end of the next process unit shutdown. [40 CFR 63.172(i)]

35.i. 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 permittee must comply with the provisions of either Condition 35.i.i or 35.i.ii, except as provided in Condition 35.i.iii. [40 CFR 63.172(j)]

35.i.i. Install, set or adjust, maintain, and operate a flow indicator that takes a reading at least once every 15 minutes. Hourly records must be generated of whether the flow indicator was operating and whether a diversion was detected at any time during the hour, as well as records of the times and durations of all periods when the gas stream is diverted to the atmosphere or the monitor is not operating. The flow indicator must be installed at the entrance to any bypass line; or [40 CFR 63.172(j)(1) and 40 CFR 63.118(a)(3)]

35.i.ii. Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism must be performed at least once every month to ensure the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line. [40 CFR 63.172(j)(2)]

35.i.iii. Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to this paragraph. [40 CFR 63.172(j)(3)]

35.j. Any parts of the closed-vent system that are designated, as described in Condition 42.b.viii.1, as unsafe to inspect are exempt from the inspection requirements of Conditions 35.e.i and 35.e.ii if: [40 CFR 63.172(k)]

35.j.i. The permittee 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 Conditions 35.e.i and 35.e.ii; and [40 CFR 63.172(k)(1)]

35.j.ii. The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times, but not more frequently than annually. [40 CFR 63.172(k)(2)]

35.k. Any parts of the closed-vent system that are designated, as described in Condition 42.b.vii.1, as difficult to inspect are exempt from the inspection requirements of Conditions 35.e.i and 35.e.ii if: [40 CFR 63.172(l)]

35.k.i. The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and [40 CFR 63.172(l)(1)]

35.k.ii. The permittee has a written plan that requires inspection of the equipment at least once every 5 years. [40 CFR 63.172(l)(2)]

35.l. Whenever organic HAP emissions are vented to a closed-vent system or control device used to comply with the provisions of 40 CFR 63 subpart H, such system or control device must be operating. [40 CFR 63.172(m)]

36. Applicable Requirement: *Agitators in gas/vapor service and in light liquid service* – [40 CFR 63.173]

36.a. [40 CFR 63.173(a)]

36.a.i. Each agitator must be monitored monthly to detect leaks by the methods specified in Condition 41.b, except as provided in Condition 19. [40 CFR 63.173(a)(1)]

36.a.ii. If an instrument reading of 10,000 parts per million or greater is measured, a leak is detected. [40 CFR 63.173(a)(2)]

36.b. [40 CFR 63.173(b)]

36.b.i. Each agitator must be checked by visual inspection each calendar week for indications of liquids dripping from the agitator. [40 CFR 63.173(b)(1)]

36.b.ii. If there are indications of liquids dripping from the agitator, a leak is detected. [40 CFR 63.173(b)(2)]

36.c. [40 CFR 63.173(c)]

36.c.i. When a leak is detected, it must be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Condition 34. [40 CFR 63.173(c)(1)]

36.c.ii. A first attempt at repair must be made no later than 5 calendar days after each leak is detected. [40 CFR 63.173(c)(2)]

36.d. Each agitator equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of Condition 36.a, provided the requirements specified in Conditions 36.d.i through 36.d.vi are met: [40 CFR 63.173(d)]

36.d.i. Each dual mechanical seal system is: [40 CFR 63.173(d)(1)]

36.d.i.1. Operated with the barrier fluid at a pressure that is at all times greater than the agitator stuffing box pressure; or [40 CFR 63.173(d)(1)(i)]

36.d.i.2. 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 Condition 35; or [40 CFR 63.173(d)(1)(ii)]

36.d.i.3. Equipped with a closed-loop system that purges the barrier fluid into a process stream. [40 CFR 63.173(d)(1)(iii)]

36.d.ii. The barrier fluid is not in light liquid organic HAP service. [40 CFR 63.173(d)(2)]

36.d.iii. 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 63.173(d)(3)]

36.d.iv. Each agitator is checked by visual inspection each calendar week for indications of liquids dripping from the agitator seal. [40 CFR 63.173(d)(4)]

36.d.iv.1. If there are indications of liquids dripping from the agitator seal at the time of the weekly inspection, the agitator must be monitored as specified in Condition 41.b to determine the presence of organic HAP in the barrier fluid. [40 CFR 63.173(d)(4)(i)]

36.d.iv.2. If an instrument reading of 10,000 parts per million or greater is measured, a leak is detected. [40 CFR 63.173(d)(4)(ii)]

36.d.v. Each sensor as described in Condition 36.d.iii is observed daily or is equipped with an alarm unless the agitator is located within the boundary of an unmanned plant site. [40 CFR 63.173(d)(5)]

36.d.vi. [40 CFR 63.173(d)(6)]

36.d.vi.1. The permittee 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. [40 CFR 63.173(d)(6)(i)]

36.d.vi.2. If indications of liquids dripping from the agitator seal exceed the criteria established in Condition 36.d.vi.1, or if, based on the criteria established in Condition 36.d.vi.1, the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected. [40 CFR 63.173(d)(6)(ii)]

36.d.vi.3. When a leak is detected, it must be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Condition 34. [40 CFR 63.173(d)(6)(iii)]

36.d.vi.4. A first attempt at repair must be made no later than 5 calendar days after each leak is detected. [40 CFR 63.173(d)(6)(iv)]

36.e. Any agitator that is designed with no externally actuated shaft penetrating the agitator housing is exempt from Conditions 36.a through 36.c. [40 CFR 63.173(e)]

36.f. Any agitator equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals to a process or fuel gas system or to a control device that complies with the requirements of Condition 35 is exempt from the requirements of Conditions 36.a through 36.c. [40 CFR 63.173(f)]

36.g. Any agitator that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of Conditions 36.b and 36.d.iv, and the daily requirements of Condition 35, provided that each agitator is visually inspected as often as practical and at least monthly. [40 CFR 63.173(g)]

36.h. Any agitator that is difficult-to-monitor is exempt from the requirements of Conditions 36.a through 36.d if: [40 CFR 63.173(h)]

36.h.i. The permittee determines that the agitator cannot be monitored without elevating the monitoring personnel more than two meters above a support surface or it is not accessible at anytime in a safe manner; [40 CFR 63.173(h)(1)]

36.h.ii. The process unit within which the agitator is located is an existing source or the permittee designates less than three percent of the total number of agitators in a new source as difficult-to-monitor; and [40 CFR 63.173(h)(2)]

36.h.iii. The permittee follows a written plan that requires monitoring of the agitator at least once per calendar year. [40 CFR 63.173(h)(3)]

36.i. Any agitator that is obstructed by equipment or piping that prevents access to the agitator by a monitor probe is exempt from the monitoring requirements of Conditions 36.a through 36.d. [40 CFR 63.173(i)]

36.j. Any agitator that is designated, as described in Condition 42.b.vii.1, as an unsafe-to-monitor agitator is exempt from the requirements of Conditions 36.a through 36.d if: [40 CFR 63.173(j)]

36.j.i. The permittee of the agitator determines that the agitator is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with Conditions 36.a through 36.d; and [40 CFR 63.173(j)(1)]

36.j.ii. The permittee of the agitator has a written plan that requires monitoring of the agitator as frequently as practical during safe-to-monitor times, but not more frequently than the

periodic monitoring schedule otherwise applicable. [40 CFR 63.173(j)(2)]

37. Applicable Requirement: *Connectors in gas/vapor service and in light liquid service* – [40 CFR 63.174]

37.a. The permittee of a process unit subject to 40 CFR 63 subpart H must monitor all connectors in gas/vapor and light liquid service, except as provided in Condition 19, and in Conditions 37.e through 37.g, at the intervals specified in Condition 37.b. [40 CFR 63.174(a)]

37.a.i. The connectors must be monitored to detect leaks by the method specified in Condition 41.b. [40 CFR 63.174(a)(1)]

37.a.ii. If an instrument reading greater than or equal to 500 parts per million is measured, a leak is detected. [40 CFR 63.174(a)(2)]

37.b. The permittee must monitor for leaks at the intervals specified in either Conditions 37.b.i or 37.b.ii and in Condition 37.b.iii. [40 CFR 63.174(b)]

37.b.i. For each group of existing process units within an existing source, by no later than 12 months after the compliance date, the permittee must monitor all connectors, except as provided in Conditions 37.e through 37.g. [40 CFR 63.174(b)(1)]

37.b.ii. For new sources, within the first 12 months after initial start-up or by no later than 12 months after the date of promulgation of a specific subpart that references 40 CFR 63 subpart H, whichever is later, the permittee must monitor all connectors, except as provided in Conditions 37.e through 37.g. [40 CFR 63.174(b)(2)]

37.b.iii. After conducting the initial survey required in Conditions 37.b.i or 37.b.ii, the permittee must perform all subsequent monitoring of connectors at the frequencies specified in Conditions 37.b.iii.1 through 37.b.iii.5, except as provided in Condition 37.c.ii: [40 CFR 63.174(b)(3)]

37.b.iii.1. Once per year (i.e., 12-month period), if the percent leaking connectors in the process unit was 0.5 percent or greater during the last required annual or biennial monitoring period. [40 CFR 63.174(b)(3)(i)]

37.b.iii.2. Once every 2 years, if the percent leaking connectors was less than 0.5 percent during the last required monitoring period. The permittee may comply with this paragraph by monitoring at least 40 percent of the connectors in the first year and the remainder of the connectors in the second year. The percent leaking connectors will be calculated for the total of all monitoring performed during the 2-year period. [40 CFR 63.174(b)(3)(ii)]

37.b.iii.3. If the permittee of a process unit in a biennial leak detection and repair program calculates less than 0.5 percent leaking connectors from the 2-year monitoring period, the permittee may monitor the connectors one time every 4 years. The permittee may comply with the requirements of this paragraph by monitoring at least 20 percent of the connectors each year until all connectors have been monitored within 4 years. [40 CFR 63.174(b)(3)(iii)]

37.b.iii.4. If a process unit complying with the requirements of Condition 37.b using a 4-year monitoring interval program has greater than or equal to 0.5 percent but less than 1 percent leaking connectors, the permittee must increase the monitoring frequency to one time every 2 years. The permittee may comply with the requirements of this paragraph by monitoring at least 40 percent of the connectors in the first year and the remainder of the connectors in the second year. The permittee may again elect to use the provisions of Condition 37.b.iii.3 when the percent leaking connectors decreases to less than 0.5 percent. [40 CFR 63.174(b)(3)(iv)]

37.b.iii.5. If a process unit complying with requirements of Condition 37.b.iii.3 using a 4-year monitoring interval program has 1 percent or greater leaking

connectors, the permittee must increase the monitoring frequency to one time per year. The permittee may again elect to use the provisions of Condition 37.b.iii.3 when the percent leaking connectors decreases to less than 0.5 percent. [40 CFR 63.174(b)(3)(v)]

37.b.iv. The use of monitoring data generated before April 22, 1994 to qualify for less frequent monitoring is governed by the provisions of Condition 41.b.vi. [40 CFR 63.174(b)(4)]

37.c. [40 CFR 63.174(c)]

37.c.i. [40 CFR 63.174(c)(1)]

37.c.i.1. Except as provided in Condition 37.c.i.2, each connector that has been opened or has otherwise had the seal broken must be monitored for leaks when it is reconnected or within the first 3 months after being returned to organic hazardous air pollutants service. If the monitoring detects a leak, it must be repaired according to the provisions of Condition 37.d, unless it is determined to be nonrepairable, in which case it is counted as a nonrepairable connector for the purposes of Condition 37.h.ii. [40 CFR 63.174(c)(1)(i)]

37.c.i.2. As an alternative to the requirements in Condition 37.c, the permittee may choose not to monitor connectors that have been opened or otherwise had the seal broken. In this case, the permittee may not count nonrepairable connectors for the purposes of Condition 37.h.ii. The permittee must calculate the percent leaking connectors for the monitoring periods described in Condition 37.b, by setting the nonrepairable component, C_{AN}, in the equation in Condition 37.h.ii to zero for all monitoring periods. [40 CFR 63.174(c)(1)(ii)]

37.c.i.3. The permittee may switch alternatives described in Conditions 37.c.i.1and 37.c.i.2 at the end of the current monitoring period they are in, provided that it is reported as required in Condition 43 and begin the new alternative in annual monitoring. The initial monitoring in the new alternative must be completed no later than 12 months after reporting the switch. [40 CFR 63.174(c)(1)(iii)]

37.c.ii. As an alternative to the requirements of Condition 37.b.iii, each screwed connector 2 inches or less in nominal inside diameter installed in a process unit before the dates specified in Condition 37.c.ii.3 may: [40 CFR 63.174(c)(2)]

37.c.ii.1. Comply with the requirements of Condition 32, and [40 CFR 63.174(c)(2)(i)]

37.c.ii.2. Be monitored for leaks within the first 3 months after being returned to organic hazardous air pollutants service after having been opened or otherwise had the seal broken. If that monitoring detects a leak, it must be repaired according to the provisions of Condition 37.d. [40 CFR 63.174(c)(2)(ii)]

37.c.ii.3. The provisions of Condition 37.c.ii apply to screwed connectors installed before May 16, 1994. [40 CFR 63.174(c)(2)(iv)]

37.d. When a leak is detected, it must be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in Condition 37.f and in Condition 34.a first attempt at repair must be made no later than 5 calendar days after the leak is detected. [40 CFR 63.174(d)]

37.e. Any connector that is designated, as described in Condition 42.b.vii.1, as an unsafe-to-monitor connector is exempt from the requirements of Condition 37.a if: [40 CFR 63.174(f)]

37.e.i. The permittee determines that the connector is unsafe to monitor because personnel would be exposed to an immediate danger as a result of complying with Conditions 37.a through 37.d; and [40 CFR 63.174(f)(1)]

37.e.ii. The permittee has a written plan that requires monitoring of the connector as frequently

as practicable during safe to monitor periods, but not more frequently than the periodic schedule otherwise applicable. [40 CFR 63.174(f)(2)]

37.f. Any connector that is designated, as described in Condition 42.b.vii.3, as an unsafe-to-repair connector is exempt from the requirements of Conditions 37.a and 37.d if: [40 CFR 63.174(g)]

37.f.i. The permittee determines that repair personnel would be exposed to an immediate danger as a consequence of complying with Condition 37.d; and [40 CFR 63.174(g)(1)]

37.f.ii. The connector will be repaired before the end of the next scheduled process unit shutdown. [40 CFR 63.174(g)(2)]

37.g. [40 CFR 63.174(h)]

37.g.i. Any connector that is inaccessible or is ceramic or ceramic-lined (e.g., porcelain, glass, or glass-lined), is exempt from the monitoring requirements of Condition 37.a and 37.c and from the recordkeeping and reporting requirements of Conditions 42 and 43. An inaccessible connector is one that is: [40 CFR 63.174(h)(1)]

37.g.i.1. Buried; [40 CFR 63.174(h)(1)(i)]

37.g.i.2. Insulated in a manner that prevents access to the connector by a monitor probe; [40 CFR 63.174(h)(1)(ii)]

37.g.i.3. Obstructed by equipment or piping that prevents access to the connector by a monitor probe; [40 CFR 63.174(h)(1)(iii)]

37.g.i.4. Unable to be reached from a wheeled scissor-lift or hydraulic-type scaffold which would allow access to connectors up to 7.6 meters (25 feet) above the ground; [40 CFR 63.174(h)(1)(iv)]

37.g.i.5. Inaccessible because it would require elevating the monitoring personnel more than 2 meters above a permanent support surface or would require the erection of scaffold; or [40 CFR 63.174(h)(1)(v)]

37.g.i.6. Not able to be accessed at any time in a safe manner to perform monitoring. Unsafe access includes, but is not limited to, the use of a wheeled scissor-lift on unstable or uneven terrain, the use of a motorized man-lift basket in areas where an ignition potential exists, or access would require near proximity to hazards such as electrical lines, or would risk damage to equipment. [40 CFR 63.174(h)(1)(vi)]

37.g.ii. If any inaccessible or ceramic or ceramic-lined connector is observed by visual, audible, olfactory, or other means to be leaking, the leak must be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in Condition 34 and Condition 37.f. [40 CFR 63.174(h)(2)]

37.g.iii. A first attempt at repair must be made no later than 5 calendar days after the leak is detected. [40 CFR 63.174(h)(3)]

37.h. For use in determining the monitoring frequency, as specified in Condition 37.b, the percent leaking connectors must be calculated as specified in Condition 37.h.i and 37.h.ii. [40 CFR 63.174(i)]

37.h.i. For the first monitoring period, use the following equation: [40 CFR 63.174(i)(1)]

$\% C_L = C_L/(C_t + C_C) \times 100$

where:

$\% C_L$ = Percent leaking connectors as determined through periodic monitoring required in Conditions 37.a and 37.b.

C_L = Number of connectors measured at 500 parts per million or greater, by the method specified

in Condition 41.b.

C_t = Total number of monitored connectors in the process unit.

C_C = Optional credit for removed connectors = 0.67 × net (i.e., total removed—total added) number of connectors in organic hazardous air pollutants service removed from the process unit after the compliance date set forth in the applicable subpart for existing process units, and after the date of initial start-up for new process units. If credits are not taken, then $C_C = 0$.

37.h.ii. For subsequent monitoring periods, use the following equation: [40 CFR 63.174(i)(2)]

$\% C_L = [(C_L - C_{AN})/(C_t + C_C)] \times 100$

where:

$\% C_L$ = Percent leaking connectors as determined through periodic monitoring required in Conditions 37.a and 37.b.

C_L = Number of connectors, including nonrepairables, measured at 500 parts per million or greater, by the method specified in Condition 41.b.

C_{AN} = Number of allowable nonrepairable connectors, as determined by monitoring required in Conditions 37.b.iii and 37.c, not to exceed 2 percent of the total connector population, C_t.

C_t = Total number of monitored connectors, including nonrepairables, in the process unit.

C_C = Optional credit for removed connectors = 0.67 × net number (i.e., total removed—total added) of connectors in organic hazardous air pollutants service removed from the process unit after the compliance date set forth in the applicable subpart for existing process units, and after the date of initial start-up for new process units. If credits are not taken, then $C_C = 0$.

37.i. Optional credit for removed connectors. If the permittee eliminates a connector subject to monitoring under Condition 37.b, the permittee may receive credit for elimination of the connector, as described in Condition 37.h, provided the requirements in Conditions 37.i.i through 37.i.iv are met. [40 CFR 63.174(j)]

37.i.i. The connector was welded after the date of proposal (May 16, 1994) of 40 CFR 63 subpart W which references 40 CFR 63 subpart H. [40 CFR 63.174(j)(1)]

37.i.ii. The integrity of the weld is demonstrated by monitoring it according to the procedures in Condition 41.b or by testing using X-ray, acoustic monitoring, hydrotesting, or other applicable method. [40 CFR 63.174(j)(2)]

37.i.iii. Welds created after the date of proposal but before the date of promulgation (March 8, 1995) of 40 CFR 63 subpart W which references 40 CFR 63 subpart H are monitored or tested by 3 months after the compliance date specified in the applicable subpart. [40 CFR 63.174(j)(3)]

37.i.iv. Welds created after promulgation of 40 CFR 63 subpart W which references 40 CFR 63 subpart H are monitored or tested within 3 months after being welded. [40 CFR 63.174(j)(4)]

37.i.v. If an inadequate weld is found or the connector is not welded completely around the circumference, the connector is not considered a welded connector and is therefore not exempt from the provisions of 40 CFR 63 subpart H. [40 CFR 63.174(j)(5)]

38. Applicable Requirement: *Alternative means of emission limitation: General* – [40 CFR 63.177]

38.a. Permission to use an alternative means of emission limitation under Clean Air Act section 112(h)(3) must be governed by the following procedures in Conditions 38.b through 38.e. [40 CFR 63.177(a)]

38.b. Where the standard is an equipment, design, or operational requirement: [40 CFR 63.177(b)]

38.b.i. Each permittee applying for permission to use an alternative means of emission limitation

under 40 CFR §63.6(g) of subpart A must be responsible for collecting and verifying emission performance test data for an alternative means of emission limitation. [40 CFR 63.177(b)(1)]

38.b.ii. The Administrator will compare test data for the means of emission limitation to test data for the equipment, design, and operational requirements. [40 CFR 63.177(b)(2)]

38.b.iii. The Administrator may condition the permission on requirements that may be necessary to ensure operation and maintenance to achieve the same emission reduction as the equipment, design, and operational requirements. [40 CFR 63.177(b)(3)]

38.c. Where the standard is a work practice: [40 CFR 63.177(c)]

38.c.i. Each permittee applying for permission must be responsible for collecting and verifying test data for an alternative means of emission limitation. [40 CFR 63.177(c)(1)]

38.c.ii. For each kind of equipment for which permission is requested, the emission reduction achieved by the required work practices must be demonstrated for a minimum period of 12 months. [40 CFR 63.177(c)(2)]

38.c.iii. For each kind of equipment for which permission is requested, the emission reduction achieved by the alternative means of emission limitation must be demonstrated. [40 CFR 63.177(c)(3)]

38.c.iv. Each permittee applying for permission must commit, in writing, for each kind of equipment to work practices that provide for emission reductions equal to or greater than the emission reductions achieved by the required work practices. [40 CFR 63.177(c)(4)]

38.c.v. The Administrator will compare the demonstrated emission reduction for the alternative means of emission limitation to the demonstrated emission reduction for the required work practices and will consider the commitment in Condition 38.c.iv. [40 CFR 63.177(c)(5)]

38.c.vi. The Administrator may condition the permission on requirements that may be necessary to ensure operation and maintenance to achieve the same or greater emission reduction as the required work practices of 40 CFR 63 subpart H. [40 CFR 63.177(c)(6)]

38.d. The permittee may offer a unique approach to demonstrate the alternative means of emission limitation. [40 CFR 63.177(d)]

38.e. [40 CFR 63.177(e)]

38.e.i. Manufacturers of equipment used to control equipment leaks of an organic HAP may apply to the Administrator for permission for an alternative means of emission limitation that achieves a reduction in emissions of the organic HAP achieved by the equipment, design, and operational requirements of 40 CFR 63 subpart H. [40 CFR 63.177(e)(1)]

38.e.ii. The Administrator will grant permission according to the provisions of Conditions 38.b, 38.c, and 38.d. [40 CFR 63.177(e)(2)]

39. Applicable Requirement: *Alternative means of emission limitation: Batch processes* – [40 CFR 63.178]

39.a. As an alternative to complying with the requirements of Conditions 26 through 34 and Condition 36 through 37, a permittee of a batch process that operates in organic HAP service during the calendar year may comply with one of the standards specified in Conditions 39.b and 39.c, or the permittee may petition for approval of an alternative standard under the provisions of Condition 38. The alternative standards of this section provide the options of pressure testing or monitoring the equipment for leaks. The permittee may switch among the alternatives provided the change is documented as specified in Condition 42. [40 CFR 63.178(a)]

39.b. The following requirements must be met if the permittee elects to use pressure testing of batch product-process equipment to demonstrate compliance with 40 CFR 63 subpart H. The permittee who complies with the provisions of this paragraph is exempt from the monitoring provisions of

Condition 26, Conditions 31 and 32, and Conditions 36 through 37. [40 CFR 63.178(b)]

39.b.i. Each time equipment is reconfigured for production of a different product or intermediate, the batch product-process equipment train must be pressure-tested for leaks before organic HAP is first fed to the equipment and the equipment is placed in organic HAP service. [40 CFR 63.178(b)(1)]

39.b.i.1. When the batch product-process train is reconfigured to produce a different product, pressure testing is required only for the new or disturbed equipment. [40 CFR 63.178(b)(1)(i)]

39.b.i.2. Each batch product process that operates in organic HAP service during a calendar year must be pressure tested at least once during that calendar year. [40 CFR 63.178(b)(1)(ii)]

39.b.i.3. Pressure testing is not required for routine seal breaks, such as changing hoses or filters, which are not part of the reconfiguration to produce a different product or intermediate. [40 CFR 63.178(b)(1)(iii)]

39.b.ii. The batch product process equipment must be tested either using the procedures specified in Condition 41.e. for pressure or vacuum loss or with a liquid using the procedures specified in Condition 41.f. [40 CFR 63.178(b)(2)]

39.b.iii. [40 CFR 63.178(b)(3)]

39.b.iii.1. For pressure or vacuum tests, a leak is detected if the rate of change in pressure is greater than 6.9 kilopascals (1 psig) in 1 hour or if there is visible, audible, or olfactory evidence of fluid loss. [40 CFR 63.178(b)(3)(i)]

39.b.iii.2. For pressure tests using a liquid, a leak is detected if there are indications of liquids dripping or if there is other evidence of fluid loss. [40 CFR 63.178(b)(3)(ii)]

39.b.iv. [40 CFR 63.178(b)(4)]

39.b.iv.1. If a leak is detected, it must be repaired and the batch product-process equipment must be retested before start-up of the process. [40 CFR 63.178(b)(4)(i)]

39.b.iv.2. If a batch product-process fails the retest or the second of two consecutive pressure tests, it must be repaired as soon as practicable, but not later than 30 calendar days after the second pressure test, provided the conditions specified in Condition 39.d are met. [40 CFR 63.178(b)(4)(ii)]

39.c. The following requirements must be met if the permittee elects to monitor the equipment to detect leaks by the method specified in Condition 41.b to demonstrate compliance with 40 CFR 63 subpart H. [40 CFR 63.178(c)]

39.c.i. The permittee must comply with the requirements of Condition 26 through 33, and Condition 35 through 37. [40 CFR 63.178(c)(1)]

39.c.ii. The equipment must be monitored for leaks by the method specified in Condition 41.b when the equipment is in organic HAP service, in use with an acceptable surrogate volatile organic compound which is not an organic HAP, or is in use with any other detectable gas or vapor. [40 CFR 63.178(c)(2)]

39.c.iii. The equipment must be monitored for leaks as specified below: [40 CFR 63.178(c)(3)]

39.c.iii.1. Each time the equipment is reconfigured for the production of a new product, the reconfigured equipment must be monitored for leaks within 30 days of start-up of the process. This initial monitoring of reconfigured equipment must not be included in determining percent leaking equipment in the process unit. [40 CFR 63.178(c)(3)(i)]

39.c.iii.2. Connectors must be monitored in accordance with the requirements in Condition 37. [40 CFR 63.178(c)(3)(ii)]

39.c.iii.3. Equipment other than connectors must be monitored at the frequencies specified in Table 1 in Condition 44. The operating time must be determined as the proportion of the year the batch product-process that is subject to the provisions of 40 CFR 63 subpart H is operating. [40 CFR 63.178(c)(3)(iii)]

39.c.iii.4. The monitoring frequencies specified in Table 1 in Condition 44 are not requirements for monitoring at specific intervals and can be adjusted to accommodate process operations. The permittee may monitor anytime during the specified monitoring period (e.g., month, quarter, year), provided the monitoring is conducted at a reasonable interval after completion of the last monitoring campaign. For example, if the equipment is not operating during the scheduled monitoring period, the monitoring can be done during the next period when the process is operating. [40 CFR 63.178(c)(3)(iv)]

39.c.iv. If a leak is detected, it must be repaired as soon as practicable but not later than 15 calendar days after it is detected, except as provided in Condition 39.d. [40 CFR 63.178(c)(4)]

39.d. Delay of repair of equipment for which leaks have been detected is allowed if the replacement equipment is not available providing the following conditions are met: [40 CFR 63.178(d)]

39.d.i. Equipment supplies have been depleted and supplies had been sufficiently stocked before the supplies were depleted. [40 CFR 63.178(d)(1)]

39.d.ii. The repair is made no later than 10 calendar days after delivery of the replacement equipment. [40 CFR 63.178(d)(2)]

40. Applicable Requirement: *Alternative means of emission limitation: Enclosed-vented process units* – Process units enclosed in such a manner that all emissions from equipment leaks are vented through a closed-vent system to a control device meeting the requirements of Condition 35 are exempt from the requirements of Conditions 26 through 34, and Conditions 36 and 37. The enclosure must be maintained under a negative pressure at all times while the process unit is in operation to ensure that all emissions are routed to a control device. [40 CFR 63.179]

41. Testing Requirement: *Test methods and procedures* – [40 CFR 63.180]

41.a. Each permittee subject to the provisions of 40 CFR 63 subpart H must comply with the test methods and procedures requirements provided in this section. [40 CFR 63.180(a)]

41.b. Monitoring, as required under 40 CFR 63 subpart H, must comply with the following requirements: [40 CFR 63.180(b)]

41.b.i. Monitoring must comply with Method 21 of 40 CFR part 60, appendix A. [40 CFR 63.180(b)(1)]

41.b.ii. [40 CFR 63.180(b)(2)]

41.b.ii.1. Except as provided for in Condition 41.b.ii.2, the detection instrument must 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(a) of Method 21 must be for the average composition of the process fluid not each individual VOC in the stream. For process streams that contain nitrogen, water, air, or other inerts which are not organic HAP's or VOC's, the average stream response factor may be calculated on an inert-free basis. The response factor may be determined at any concentration for which monitoring for leaks will be conducted. [40 CFR 63.180(b)(2)(i)]

41.b.ii.2. If no instrument is available at the plant site that will meet the performance criteria specified in Condition 41.b.ii.1, the instrument readings may be

adjusted by multiplying by the average response factor of the process fluid, calculated on an inert-free basis as described in Condition 41.b.ii.1. [40 CFR 63.180(b)(2)(ii)]

41.b.iii. The instrument must 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 63.180(b)(3)]

41.b.iv. Calibration gases must be: [40 CFR 63.180(b)(4)]

41.b.iv.1. Zero air (less than 10 parts per million of hydrocarbon in air); and [40 CFR 63.180(b)(4)(i)]

41.b.iv.2. The instrument may be calibrated at a higher methane concentration than the concentration specified for that piece of equipment. The concentration of the calibration gas may exceed the concentration specified as a leak by no more than 2,000 parts per million. If the monitoring instrument's design allows for multiple calibration scales, then the lower scale must 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 must 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 permittee need not calibrate the scales that will not be used during that day's monitoring. [40 CFR 63.180(b)(4)(iii)]

41.b.v. Monitoring must be performed when the equipment is in organic HAP service, in use with an acceptable surrogate volatile organic compound which is not an organic HAP, or is in use with any other detectable gas or vapor. [40 CFR 63.180(b)(5)]

41.b.vi. Monitoring data that do not meet the criteria specified in Conditions 41.b.i through 41.b.v may be used to qualify for less frequent monitoring under the provisions in Condition 37.b.iii.2 or 37.b.iii.3 provided the data meet the conditions specified in Conditions 41.b.vi.1 and 41.b.vi.2. [40 CFR 63.180(b)(6)]

41.b.vi.1. The data were obtained before April 22, 1994. [40 CFR 63.180(b)(6)(i)]

41.b.vi.2. The departures from the criteria specified in Conditions 41.b.i through 41.b.v 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 six weeks instead of monthly or quarterly), following the performance criteria of section 3.1.2(a) of Method 21 of appendix A of 40 CFR part 60 instead of Condition 41.b.ii, or monitoring at 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 H. Failure to use a calibrated instrument is not considered a minor departure. [40 CFR 63.180(b)(6)(ii)]

41.c. When equipment is monitored for compliance as required in Condition 27.i, Condition 28.a, and Condition 35.f or when equipment subject to a leak definition of 500 ppm is monitored for leaks as required by 40 CFR 63 subpart H, the permittee may elect to adjust or not to adjust the instrument readings for background. If the permittee elects to not adjust instrument readings for background, the permittee must monitor the equipment according to the procedures specified in Conditions 41.b.i through 41.b.iv. In such case, all instrument readings must be compared directly to the applicable leak definition to determine whether there is a leak. If the permittee elects to adjust instrument readings for background, the permittee must monitor the equipment according to the procedures specified in Conditions 41.c.i through 41.c.iv. [40 CFR 63.180(c)]

41.c.i. The requirements of Conditions 41.b.i through 41.b.iv must apply. [40 CFR 63.180(c)(1)]

41.c.ii. The background level must be determined, using the same procedures that will be used to determine whether the equipment is leaking. [40 CFR 63.180(c)(2)]

41.c.iii. The instrument probe must 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 63.180(c)(3)]

41.c.iv. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 parts per million for determining compliance. [40 CFR 63.180(c)(4)]

41.d. [40 CFR 63.180(d)]

41.d.i. Each piece of equipment within a process unit that can reasonably be expected to contain equipment in organic HAP service is presumed to be in organic HAP service unless the permittee demonstrates that the piece of equipment is not in organic HAP service. For a piece of equipment to be considered not in organic HAP service, it must be determined that the percent organic HAP content can be reasonably expected not to exceed 5 percent by weight on an annual average basis. For purposes of determining the percent organic HAP content of the process fluid that is contained in or contacts equipment, Method 18 of 40 CFR part 60, appendix A must be used. [40 CFR 63.180(d)(1)]

41.d.ii. [40 CFR 63.180(d)(2)]

41.d.ii.1. The permittee may use good engineering judgment rather than the procedures in Condition 41.d.i to determine that the percent organic HAP content does not exceed 5 percent by weight. When the permittee and the Administrator do not agree on whether a piece of equipment is not in organic HAP service, however, the procedures in Condition 41.d.i must be used to resolve the disagreement. [40 CFR 63.180(d)(2)(i)]

41.d.ii.2. Conversely, the permittee may determine that the organic HAP content of the process fluid does not exceed 5 percent by weight by, for example, accounting for 98 percent of the content and showing that organic HAP is less than 3 percent. [40 CFR 63.180(d)(2)(ii)]

41.d.iii. If the permittee determines that a piece of equipment is in organic HAP service, the determination can be revised after following the procedures in Condition 41.d.ii, or by documenting that a change in the process or raw materials no longer causes the equipment to be in organic HAP service. [40 CFR 63.180(d)(3)]

41.d.iv. Samples used in determining the percent organic HAP content must be representative of the process fluid that is contained in or contacts the equipment. [40 CFR 63.180(d)(4)]

41.e. The following procedures must be used to pressure test batch product-process equipment for pressure or vacuum loss to demonstrate compliance with the requirements of Condition 39.b.iii.1. [40 CFR 63.180(f)]

41.e.i. The batch product-process equipment train must be pressurized with a gas to a pressure less than the set pressure of any safety relief devices or valves or to a pressure slightly above the operating pressure of the equipment, or alternatively, the equipment must be placed under a vacuum. [40 CFR 63.180(f)(1)]

41.e.ii. Once the test pressure is obtained, the gas source or vacuum source must be shut off. [40 CFR 63.180(f)(2)]

41.e.iii. The test must continue for not less than 15 minutes unless it can be determined in a shorter period of time that the allowable rate of pressure drop or of pressure rise was exceeded. The pressure in the batch product-process equipment must be measured after the gas or vacuum source is shut off and at the end of the test period. The rate of change in pressure in the batch product-process equipment must be calculated using the following equation: [40 CFR 63.180(f)(3)]

$$\Delta\frac{P}{t} = \frac{(|P_f - P_i|)}{(t_f - t_i)}$$

where:

$\Delta P/t$ = Change in pressure, psig/hr.

P_f = Final pressure, psig.

P_i = Initial pressure, psig.

$t_f - t_i$ = Elapsed time, hours.

41.e.iv. The pressure must be measured using a pressure measurement device (gauge, manometer, or equivalent) which has a precision of ±2.5 millimeter mercury in the range of test pressure and is capable of measuring pressures up to the relief set pressure of the pressure relief device. If such a pressure measurement device is not reasonably available, the permittee must use a pressure measurement device with a precision of at least +10 percent of the test pressure of the equipment and must extend the duration of the test for the time necessary to detect a pressure loss or rise that equals a rate of one psig per hour. [40 CFR 63.180(f)(4)]

41.e.v. An alternative procedure may be used for leak testing the equipment if the permittee demonstrates the alternative procedure is capable of detecting a pressure loss or rise. [40 CFR 63.180(f)(5)]

41.f. The following procedures must be used to pressure-test batch product-process equipment using a liquid to demonstrate compliance with the requirements of Condition 39.b.iii.2. [40 CFR 63.180(g)]

41.f.i. The batch product-process equipment train, or section of the train, must be filled with the test liquid (e.g., water, alcohol) until normal operating pressure is obtained. Once the equipment is filled, the liquid source must be shut off. [40 CFR 63.180(g)(1)]

41.f.ii. The test must be conducted for a period of at least 60 minutes, unless it can be determined in a shorter period of time that the test is a failure. [40 CFR 63.180(g)(2)]

41.f.iii. Each seal in the equipment being tested must be inspected for indications of liquid dripping or other indications of fluid loss. If there are any indications of liquids dripping or of fluid loss, a leak is detected. [40 CFR 63.180(g)(3)]

41.f.iv. An alternative procedure may be used for leak testing the equipment, if the permittee demonstrates the alternative procedure is capable of detecting losses of fluid. [40 CFR 63.180(g)(4)]

42. Recordkeeping requirements: [40 CFR 63.181]

42.a. A permittee owning or operating more than one process unit subject to the provisions of 40 CFR 63 subpart H may comply with the recordkeeping requirements for these process units in one recordkeeping system if the system identifies each record by process unit and the program being implemented (e.g., quarterly monitoring, quality improvement) for each type of equipment. All records and information required by this section must be maintained in a manner that can be readily accessed at the plant site. This could include physically locating the records at the plant site or accessing the records from a central location by computer at the plant site. [40 CFR 63.181(a)]

42.b. Except as provided in Condition 42.e, the following information pertaining to all equipment in each process unit subject to the requirements in Conditions 19 through 37 must be recorded: [40 CFR 63.181(b)]

42.b.i. [40 CFR63.181(b)(1)]

42.b.i.1. A list of identification numbers for equipment (except connectors exempt from monitoring and recordkeeping identified in Condition 37 and instrumentation systems) subject to the requirements of 40 CFR 63 subpart H. Connectors need not be individually identified if all connectors in a

designated area or length of pipe subject to the provisions of 40 CFR 63 subpart H are identified as a group, and the number of connectors subject is indicated. With respect to connectors, the list must be complete no later than the completion of the initial survey required by Conditions 37.b.i or 37.b.ii. [40 CFR 63.181(b)(1)(i)]

42.b.i.2. A schedule by process unit for monitoring connectors subject to the provisions of Condition 37.a. [40 CFR 63.181(b)(1)(ii)]

42.b.i.3. Physical tagging of the equipment to indicate that it is in organic HAP service is not required. Equipment subject to the provisions of 40 CFR 63 subpart H may be identified on a plant site plan, in log entries, or by other appropriate methods. [40 CFR 63.181(b)(1)(iii)]

42.b.ii. [40 CFR 63.181(b)(2)]

42.b.ii.1. A list of identification numbers for equipment that the permittee elects to equip with a closed-vent system and control device, under the provisions of Conditions 26.g, 27.h, 28.c, or 36.f. [40 CFR 63.181(b)(2)(i)]

42.b.ii.2. A list of identification numbers for compressors that the permittee elects to designate as operating with an instrument reading of less than 500 parts per million above background, under the provisions of Condition 27.i. [40 CFR 63.181(b)(2)(ii)]

42.b.ii.3. Identification of surge control vessels or bottoms receivers subject to the provisions of 40 CFR 63 subpart H that the permittee elects to equip with a closed-vent system and control device, under the provisions of Condition 33. [40 CFR 63.181(b)(2)(iii)]

42.b.iii. [40 CFR 63.181(b)(3)]

42.b.iii.1. A list of identification numbers for pressure relief devices subject to the provisions in Condition 28.a. [40 CFR 63.181(b)(3)(i)]

42.b.iii.2. A list of identification numbers for pressure relief devices equipped with rupture disks, under the provisions of Condition 28.d. [40 CFR 63.181(b)(3)(ii)]

42.b.iv. Identification of instrumentation systems subject to the provisions of 40 CFR 63 subpart H. Individual components in an instrumentation system need not be identified. [40 CFR 63.181(b)(4)]

42.b.v. Identification of screwed connectors subject to the requirements of Condition 37.c.ii. Identification can be by area or grouping as long as the total number within each group or area is recorded. [40 CFR 63.181(b)(5)]

42.b.vi. The following information must be recorded for each dual mechanical seal system: [40 CFR 63.181(b)(6)]

42.b.vi.1. Design criteria required in Conditions 26.e.vi.1, 27.e.ii, and 36.d.vi.1and an explanation of the design criteria; and [40 CFR 63.181(b)(6)(i)]

42.b.vi.2. Any changes to these criteria and the reasons for the changes. [40 CFR 63.181(b)(6)(ii)]

42.b.vii. The following information pertaining to all pumps subject to Condition 26.j valves subject to Condition 31.f. and 31.h, agitators subject to the provisions of Condition 36.h through 36.j, and connectors subject to the provisions of Condition 37.e and 37.f must be recorded: [40 CFR 63.181(b)(7)]

42.b.vii.1. Identification of equipment designated as unsafe to monitor, difficult to monitor, or unsafe to inspect and the plan for monitoring or inspecting this

equipment. [40 CFR 63.181(b)(7)(i)]

42.b.vii.2. A list of identification numbers for the equipment that is designated as difficult to monitor, an explanation of why the equipment is difficult to monitor, and the planned schedule for monitoring this equipment. [40 CFR 63.181(b)(7)(ii)]

42.b.vii.3. A list of identification numbers for connectors that are designated as unsafe to repair and an explanation why the connector is unsafe to repair. [40 CFR 63.181(b)(7)(iii)]

42.b.viii. [40 CFR 63.181(b)(8)]

42.b.viii.1. A list of valves removed from and added to the process unit, as described in Condition 31.c.i, if the net credits for removed valves is expected to be used. [40 CFR 63.181(b)(8)(i)]

42.b.viii.2. A list of connectors removed from and added to the process unit, as described in Condition 37.i.i, and documentation of the integrity of the weld for any removed connectors, as required in Condition 37.i. This is not required unless the net credits for removed connectors is expected to be used. [40 CFR 63.181(b)(8)(ii)]

42.b.ix. [40 CFR 63.181(b)(9)]

42.b.ix.1. For batch process units that the permittee elects to monitor as provided under Condition 39.c, a list of equipment added to batch product process units since the last monitoring period required in Condition 39.c.ii and 39.c.iii. [40 CFR 63.181(b)(9)(i)]

42.b.ix.2. Records demonstrating the proportion of the time during the calendar year the equipment is in use in a batch process that is subject to the provisions of 40 CFR 63 subpart H. Examples of suitable documentation are records of time in use for individual pieces of equipment or average time in use for the process unit. These records are not required if the permittee does not adjust monitoring frequency by the time in use, as provided in Condition 39.c.iii.3. [40 CFR 63.181(b)(9)(ii)]

42.b.x. For any leaks detected as specified in Conditions 26 and 27, Conditions 31 and 32; and Conditions 35 through 37, a weatherproof and readily visible identification, marked with the equipment identification number, must be attached to the leaking equipment. [40 CFR 63.181(b)(10)]

42.c. For visual inspections of equipment subject to the provisions of 40 CFR 63 subpart H (e.g., Conditions 26.b.ii, 26.e.iv.1), the permittee must document that the inspection was conducted and the date of the inspection. The permittee must maintain records as specified in Condition 42.d for leaking equipment identified in this inspection, except as provided in Condition 42.e. These records must be retained for 2 years. [40 CFR 63.181(c)]

42.d. When each leak is detected as specified in Conditions 26 and 27, Conditions 31 and 32; and Conditions 35 through 37, the following information must be recorded and kept for 2 years: [40 CFR 63.181(d)]

42.d.i. The instrument and the equipment identification number and the operator name, initials, or identification number. [40 CFR 63.181(d)(1)]

42.d.ii. The date the leak was detected and the date of first attempt to repair the leak. [40 CFR 63.181(d)(2)]

42.d.iii. The date of successful repair of the leak. [40 CFR 63.181(d)(3)]

42.d.iv. Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A

after it is successfully repaired or determined to be nonrepairable. [40 CFR 63.181(d)(4)]

42.d.v. "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 63.181(d)(5)]

42.d.v.1. The permittee may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the startup/shutdown/malfunction plan, required by 40 CFR § 63.6(e)(3), for the source or 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 63.181(d)(5)(i)]

42.d.v.2. 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 63.181(d)(5)(ii)]

42.d.vi. Dates of process unit shutdowns that occur while the equipment is unrepaired. [40 CFR 63.181(d)(6)]

42.d.vii. [40 CFR 63.181(d)(7)]

42.d.vii.1. Identification, either by list, location (area or grouping), or tagging of connectors that have been opened or otherwise had the seal broken since the last monitoring period required in Condition 37.b, as described in Condition 37.c.i, unless the permittee elects to comply with Condition 37.c.i.2. [40 CFR 63.181(d)(7)(i)]

42.d.vii.2. The date and results of monitoring as required in Condition 37.c. If identification of connectors that have been opened or otherwise had the seal broken is made by location under Condition 42.d.vii.1, then all connectors within the designated location must be monitored. [40 CFR 63.181(d)(7)(ii)]

42.d.viii. The date and results of the monitoring required in Condition 39.c.iii.1. for equipment added to a batch process unit since the last monitoring period required in Condition 39.c.iii.2 and 39.c.iii.3. If no leaking equipment is found in this monitoring, the permittee must record that the inspection was performed. Records of the actual monitoring results are not required. [40 CFR 63.181(d)(8)]

42.d.ix. Copies of the periodic reports as specified in Condition 43.a, if records are not maintained on a computerized database capable of generating summary reports from the records. [40 CFR 63.181(d)(9)]

42.e. The permittee who elects to pressure test the batch product process equipment train to demonstrate compliance with 40 CFR 63 subpart H is exempt from the requirements of Conditions 42.b, 42.c, 42.d, and 42.f. Instead, the permittee must maintain records of the following information: [40 CFR 63.181(e)]

42.e.i. The identification of each product, or product code, produced during the calendar year. It is not necessary to identify individual items of equipment in a batch product process equipment train. [40 CFR 63.181(e)(1)]

42.e.ii. Physical tagging of the equipment to identify that it is in organic HAP service and subject to the provisions of 40 CFR 63 subpart H is not required. Equipment in a batch product process subject to the provisions of 40 CFR 63 subpart H may be identified on a plant site plan, in log entries, or by other appropriate methods. [40 CFR 63.181(e)(3)]

42.e.iii. The dates of each pressure test required in Condition 39.b, the test pressure, and the pressure drop observed during the test. [40 CFR 63.181(e)(4)]

42.e.iv. Records of any visible, audible, or olfactory evidence of fluid loss. [40 CFR 63.181(e)(5)]

42.e.v. When a batch product process equipment train does not pass two consecutive pressure tests, the following information must be recorded in a log and kept for 2 years: [40 CFR 63.181(e)(6)]

42.e.v.1. The date of each pressure test and the date of each leak repair attempt. [40 CFR 63.181(e)(6)(i)]

42.e.v.2. Repair methods applied in each attempt to repair the leak. [40 CFR 63.181(e)(6)(ii)]

42.e.v.3. The reason for the delay of repair. [40 CFR 63.181(e)(6)(iii)]

42.e.v.4. The expected date for delivery of the replacement equipment and the actual date of delivery of the replacement equipment. [40 CFR 63.181(e)(6)(iv)]

42.e.v.5. The date of successful repair. [40 CFR 63.181(e)(6)(v)]

42.f. The dates and results of each compliance test required for compressors subject to Condition 27.i and the dates and results of the monitoring following a pressure release for each pressure relief device subject to Conditions 28.a and 28.b. The results must include: [40 CFR 63.181(f)]

42.f.i. The background level measured during each compliance test. [40 CFR 63.181(f)(1)]

42.f.ii. The maximum instrument reading measured at each piece of equipment during each compliance test. [40 CFR 63.181(f)(2)]

42.g. The permittee must maintain records of the information specified in Conditions 42.g.i through 42.g.iii for closed-vent systems and control devices subject to Condition 35. The records specified in Condition 42.g.i must be retained for the life of the equipment. The records specified in Condition 42.g.ii and 42.g.iii must be retained for 5 years. [40 CFR 63.181(g)]

42.g.i. The design specifications and performance demonstrations specified in Conditions 42.g.i.1 through 42.g.i.4. [40 CFR 63.181(g)(1)]

42.g.i.1. Detailed schematics, design specifications of the control device, and piping and instrumentation diagrams. [40 CFR 63.181(g)(1)(i)]

42.g.i.2. The dates and descriptions of any changes in the design specifications. [40 CFR 63.181(g)(1)(ii)]

42.g.i.3. The flare design (i.e., steam-assisted, air-assisted, or non-assisted) and the results of the compliance demonstration required by 40 CFR § 63.11(b) of 40 CFR 63 subpart A. [40 CFR 63.181(g)(1)(iii)]

42.g.i.4. A description of the parameter or parameters monitored, as required in Condition 35.d, to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring. [40 CFR 63.181(g)(1)(iv)]

42.g.ii. Records of operation of closed-vent systems and control devices, as specified in Conditions 42.g.ii.1 through 42.g.ii.3. [40 CFR 63.181(g)(2)]

42.g.ii.1. Dates and durations when the closed-vent systems and control devices required in Conditions 26 through 29, and Condition 33 are not operated as designed as indicated by the monitored parameters, including periods when a flare pilot light system does not have a flame. [40 CFR 63.181(g)(2)(i)]

42.g.ii.2. Dates and durations during which the monitoring system or monitoring device is inoperative. [40 CFR 63.181(g)(2)(ii)]

42.g.ii.3. Dates and durations of start-ups and shutdowns of control devices required in Conditions 26 through 29, and Condition 33. [40 CFR 63.181(g)(2)(iii)]

42.g.iii. Records of inspections of closed-vent systems subject to the provisions of Condition 35,

as specified in Conditions 42.g.iii.1 and 42.g.iii.2. [40 CFR 63.181(g)(3)]

42.g.iii.1. For each inspection conducted in accordance with the provisions of Conditions 35.e.i or 35.e.ii during which no leaks were detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 63.181(g)(3)(i)]

42.g.iii.2. For each inspection conducted in accordance with the provisions of Conditions 35.e.i or 35.e.ii during which leaks were detected, the information specified in Condition 42.d must be recorded. [40 CFR 63.181(g)(3)(ii)]

42.h. The permittee must comply with the requirements for equipment in heavy liquid service listed in either Condition 42.h.i or 42.h.ii, as provided in 42.h.iii. [40 CFR 63.181(i)]

42.h.i. Retain information, data, and analyses used to determine that a piece of equipment is in heavy liquid service. [40 CFR 63.181(i)(1)]

42.h.ii. When requested by LRAPA, demonstrate that the piece of equipment or process is in heavy liquid service. [40 CFR 63.181(i)(2)]

42.h.iii. A determination or demonstration that a piece of equipment or process is in heavy liquid service must 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 63.181(i)(3)]

42.i. Identification, either by list, location (area or group) of equipment in organic HAP service less than 300 hours per year within a process unit subject to the provisions of 40 CFR 63 subpart H under 40 CFR 63.160. [40 CFR 63.181(j)]

42.j. Permittees choosing to comply with the requirements of Condition 40 must maintain the following records: [40 CFR 63.181(k)]

42.j.i. Identification of the process unit(s) and the organic HAP's they handle. [40 CFR 63.181(k)(1)]

42.j.ii. A schematic of the process unit, enclosure, and closed-vent system. [40 CFR 63.181(k)(2)]

42.j.iii. A description of the system used to create a negative pressure in the enclosure to ensure that all emissions are routed to the control device. [40 CFR 63.181(k)(3)]

43. Reporting Requirements: [40 CFR 63.182]

43.a. The permittee must submit semiannually Periodic Reports containing the following information. [40 CFR 63.182(d)]

43.a.i. For each process unit complying with the provisions of Conditions 26 through 37, the summary information listed in Conditions 43.a.i.1 through 43.a.i.14. [40 CFR 63.182(d)(2)]

43.a.i.1. The number of valves for which leaks were detected as described in Condition 31.b, the percent leakers, and the total number of valves monitored; [40 CFR 63.182(d)(2)(i)]

43.a.i.2. The number of valves for which leaks were not repaired as required in Condition 31.d, identifying the number of those that are determined nonrepairable; [40 CFR 63.182(d)(2)(ii)]

43.a.i.3. The number of pumps for which leaks were detected as described in Condition 26.b, the percent leakers, and the total number of pumps monitored; [40 CFR 63.182(d)(2)(iii)]

43.a.i.4. The number of pumps for which leaks were not repaired as required in Condition 26.c; [40 CFR 63.182(d)(2)(iv)]

43.a.i.5. The number of compressors for which leaks were detected as described in Condition 27.f; [40 CFR 63.182(d)(2)(v)]

43.a.i.6. The number of compressors for which leaks were not repaired as required in Condition 27.g; [40 CFR 63.182(d)(2)(vi)]

43.a.i.7. The number of agitators for which leaks were detected as described in Conditions 36.a and 36.b; [40 CFR 63.182(d)(2)(vii)]

43.a.i.8. The number of agitators for which leaks were not repaired as required in Condition 36.c; [40 CFR 63.182(d)(2)(viii)]

43.a.i.9. The number of connectors for which leaks were detected as described in Condition 37.a, the percent of connectors leaking, and the total number of connectors monitored; [40 CFR 63.182(d)(2)(ix)]

43.a.i.10. The number of connectors for which leaks were not repaired as required in Condition 37.d, identifying the number of those that are determined nonrepairable; [40 CFR 63.182(d)(2)(xi)]

43.a.i.11. The facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible. [40 CFR 63.182(d)(2)(xiii)]

43.a.i.12. The results of all monitoring to show compliance with Conditions 27.i, 28.a, and 35.e conducted within the semiannual reporting period. [40 CFR 63.182(d)(2)(iv)]

43.a.i.13. If applicable, the initiation of a monthly monitoring program under Condition 37.c.i. [40 CFR 63.182(d)(2)(xv)]

43.a.i.14. If applicable, notification of a change in connector monitoring alternatives as described in Condition 37.c.i. [40 CFR 63.182(d)(2)(xvi)]

43.a.ii. For permittees electing to meet the requirements of Condition 39.b, the report must include the information listed in Conditions 43.a.ii.1 through 43.a.ii.5 for each process unit. [40 CFR 63.182(d)(3)]

43.a.ii.1. Batch product process equipment train identification; [40 CFR 63.182(d)(3)(i)]

43.a.ii.2. The number of pressure tests conducted; [40 CFR 63.182(d)(3)(ii)]

43.a.ii.3. The number of pressure tests where the equipment train failed the pressure test; [40 CFR 63.182(d)(3)(iii)]

43.a.ii.4. The facts that explain any delay of repairs; and [40 CFR 63.182(d)(3)(iv)]

43.a.ii.5. The results of all monitoring to determine compliance with Condition 35.e. [40 CFR 63.182(d)(3)(v)]

43.a.iii. The information listed in 40 CFR 63.182(c) for the Notification of Compliance Status for process units with later compliance dates. Any revisions to items reported in earlier Notification of Compliance Status, if the method of compliance has changed since the last report. [40 CFR 63.182(d)(4)]

44. Table 1 to Subpart H of Part 63—Batch Processes: Monitoring Frequency for Equipment Other than Connectors

Operating time (% of year)	Equivalent continuous process monitoring frequency time in use		
	Monthly	Quarterly	Semiannually
0 to <25	Quarterly	Annually	Annually.
25 to <50	Quarterly	Semiannually	Annually.
50 to <75	Bimonthly	Three times	Semiannually.
75 to 100	Monthly	Quarterly	Semiannually.

45. Table 2 to Subpart H of Part 63—Surge Control Vessels and Bottoms Receivers at Existing Sources

Vessel capacity (cubic meters)	Vapor pressure[1] (kilopascals)
75≤ capacity <151	≥13.1
151≤ capacity	≥5.2

[1]Maximum true vapor pressure of total organic HAP at operating temperature as defined in 40 CFR 63 subpart G.

46. Table 3 to Subpart H of Part 63—Surge Control Vessels and Bottoms Receivers at New Sources

Vessel capacity (cubic meters)	Vapor pressure[1] (kilopascals)
38≤ capacity <151	≥13.1
151≤ capacity	≥0.7

[1]Maximum true vapor pressure of total organic HAP at operating temperature as defined in 40 CFR 63 subpart G.

Emissions Unit EU: LOAD-1 (Transfer Racks) Specific Emission Limits and Standards

Applicable Requirement	Condition Number	Pollutant/ Parameter	Limit/Standard	Monitoring Requirements	
				Method	Condition Number
40 CFR 63 Subpart EEEE, Table 2, items 7 and 8	47	HAP	800,000 gallons/year limitation of ≥ 98% methanol content and 10 million gallon/year limitation of ≥ 5% methanol content	Recordkeeping, and Reporting	50
40 CFR 63.2343(c)	48	HAP	Compliance Notification Requirements	Recordkeeping, and Reporting	50
40 CFR 63.2346(b)	49	HAP	Requirements if loading volume criteria met for control	Recordkeeping, and Reporting	50

40 CFR 63 Subpart EEEE – National Emission Standards for Organic Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline) [LRAPA 44-150(5)(ll)]

47. Applicable Requirements: The permittee must limit the total throughput of organic liquids loading volume through the transfer racks, with an organic HAP content of at least 98 percent by weight, to less than 800,000 gallons and the total throughput of organic liquids loading volume through the transfer racks, with organic HAP content of at least 5 percent by weight, to less than 10 million gallons per 12-month rolling period. [40 CFR 63 subpart EEEE, Table 2, items 7 and 8]

48. Applicable Requirements: 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 Conditions 48.a through 48.c of this section. [40 CFR 63.2343(c)]

48.a. [40 CFR 63.2343(c)(1)]

48.a.i. The permittee must submit the information in 40 CFR 63.2386(c)(1), (2), (3), and (10)(i) in either the Notification of Compliance Status, according to the schedule specified in Table 12 of 40 CFR 63 subpart EEEE, or a first Compliance report, according to the schedule specified in 40 CFR 63.2386(b), whichever occurs first. [40 CFR 63.2343(c)(1)(i)]

48.b. [40 CFR 63.2343(c)(2)]

48.b.i. The permittee must submit a subsequent Compliance report according to the schedule in 40 CFR 63.2386(b) whenever any of the events in Condition 49 occur, as applicable. [40 CFR 63.2343(c)(2)(i)]

48.b.ii. The subsequent Compliance reports must contain the information in 40 CFR 63.2386(c)(1), (2), (3) and, as applicable, in 40 CFR 63.2386(d)(3) and (4). If the permittee is already submitting a subsequent Compliance report under 40 CFR 63.2386(d), the permittee does not need to submit a separate subsequent Compliance report for each transfer rack that meets the conditions identified in Condition 48 (i.e., a single subsequent Compliance report should be submitted). [40 CFR 63.2343(c)(2)(ii)]

48.c. For each transfer rack that meets the conditions identified in Condition 48, the permittee must keep documentation, including the records specified in Condition 50, that verifies the transfer rack is not required to be controlled under 40 CFR 63 subpart EEEE. The documentation must be kept up-to-date 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. [40 CFR 63.2343(c)(3)]

49. Applicable Requirements: If one or more of the events identified in Conditions 49.a through 49.d 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 Condition 48.b. [40 CFR 63.2343(d)]

49.a. Any storage tank or transfer rack became subject to control under 40 CFR 63 subpart EEEE; or [40 CFR 63.2343(d)(1)]

49.b. 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 this subpart; or [40 CFR 63.2343(d)(2)]

49.c. Any transfer rack (except those racks at which only unloading of organic liquids occurs) became part of the affected source; or [40 CFR 63.2343(d)(3)]

49.d. Any of the information required in the First Compliance Report submitted in accordance with 40 CFR 63.2386(c)(1), 40 CFR 63.2386(c)(2), or 40 CFR 63.2386(c)(3) has changed. [40 CFR 63.2343(d)(4)]

50. Recordkeeping and Reporting Requirements: The permittee must keep records of the total actual annual facility-level organic liquid loading volume as defined in 40 CFR 63.2406 through transfer racks to document the applicability, or lack thereof, of the emission limitations in Table 2 of 40 CFR 63 subpart EEEE, items 7 through 10. The permittee must record and report the total 12-month rolling throughput of organic liquids semi-annually as follows: [40 CFR 63.2390(d) and LRAPA 34-016 (1)]

50.a. ***By the 15th day of each month***, the permittee must record the total 12-month throughput of organic liquids with organic HAP content of at least 98 percent by weight and report each of the 12-month rolling values semi-annually; and [LRAPA 34-016(1)]

50.b. ***By the 15th day of each month***, the permittee must record the total 12-month throughput of organic liquids with organic HAP content of at least 5% (five percent) by weight and report each of the 12-month rolling values semi-annually. [LRAPA 34-016(1)]

Emissions Units EU: OX-1 (Resin Reactors) and EU: CT-1 (Cooling Tower) Specific Emission Limits and Standards

Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard	Monitoring Requirements	
				Method	Condition Number
40 CFR Part 63, Subpart OOO	51	HAP	Applicability and general standards	Recordkeeping	63, 64
	52	HAP	Combined emission streams standards	Monitoring, Recordkeeping, and Reporting	62, 63, 64
	53	HAP	Storage vessel provisions	Recordkeeping and Reporting	63, 64
	54	HAP	Reactor batch process vent provisions	Recordkeeping and Reporting	63, 64
	55	HAP	Non-reactor batch process vent provisions	Monitoring, Recordkeeping, and Reporting	62, 63, 64
	56	HAP	Aggregate batch vent stream provisions	Monitoring, Recordkeeping, and Reporting	62, 63, 64
	57	HAP	Heat exchange system provisions	Monitoring, Testing, Recordkeeping, and Reporting	57.b, 57.c, 62, 63, 64
	58	HAP	Equipment Leaks – Control Level 2 Standards	Monitoring, Testing, Recordkeeping, and Reporting	62, 63, 64, 79 through 93
	59	HAP	Pressure relief device standards	Monitoring, Testing, Recordkeeping, and Reporting	59.a, 59.b, 59.c, 70, 71, 72
	60	HAP	Compliance demonstration procedures	Recordkeeping and Reporting	63, 64
	61	HAP	Test Methods	Recordkeeping and Reporting	63, 64
40 CFR Part 63, Subpart SS	65 through 70	HAP	Closed vent system equipment and operating requirements	Monitoring, Recordkeeping, and Reporting	66, 67, 69, 70
40 CFR Part 63, Subpart UU	71 through 85	HAP	Equipment Leaks – Control Level 2 Standards	Monitoring, Testing, Recordkeeping, and Reporting	72, 84, 85

40 CFR 63 Subpart OOO – National Emission Standards for Organic Hazardous Air Pollutants: Manufacture of Amino/Phenolic Resins [LRAPA 44-150(5)(aaa)]

51. Applicable Requirement: The permittee must comply with the provisions of Conditions 53 through 58, as appropriate. When emissions are vented to a control device or control technology as part of complying with 40 CFR 63 subpart OOO, emissions must be vented through a closed vent system meeting the requirements of 40 CFR 63 subpart SS (National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process) as detailed in Conditions 65 through 70. [40 CFR 63.1403(a)]

52. Applicable Requirements: *Combined emission streams* – When emissions of different kinds (e.g., emissions from continuous process vents, storage vessels, etc.) are combined, and at least one of the emission streams would be required by 40 CFR 63 subpart OOO to apply controls in the absence of combination with other emission streams, the permittee must comply with the requirements of Condition 52.a or 52.a, as appropriate. [40 CFR 63.1403(b)]

52.a. For any combined vent stream that includes one or more aggregate batch vent streams, comply with the provisions for aggregate batch vent streams. [40 CFR 63.1403(b)(1)]

52.b. For any combined vent stream that does not include one or more aggregate batch vent streams: [40 CFR 63.1403(b)(2)]

52.b.i. Reactor batch process vents and non-reactor batch process vents must comply with the provisions in Conditions 54 and 55 for reactor batch process vents and non-reactor batch process vents, respectively, as appropriate. [40 CFR 63.1403(b)(2)(i)]

52.b.ii. The remaining emissions (i.e., storage vessel and/or continuous process vent emissions) included in the combined vent stream must comply the provisions in Condition 53 for storage vessels when storage vessel emissions are included and must comply with the provisions for continuous process vents in the absence of storage vessel emissions (i.e., when only continuous process vents are included). [40 CFR 63.1403(b)(2)(ii)]

53. Applicable Requirement: *Storage vessel provisions* – [40 CFR 63.1404]

53.a. *Emission standards* – For each storage vessel that has a capacity of greater than or equal to 20,000 gallons, but less than 40,000 gallons, and vapor pressure of 1.9 pounds per square inch absolute (psia) or greater; has a capacity of greater than or equal to 40,000 gallons, but less than 90,000 gallons, and vapor pressure of 0.75 psia or greater; or has a capacity of 90,000 gallons or greater and vapor pressure of 0.15 psia or greater, the permittee must comply with either Condition 53.a.i or 53.a.ii. As an alternative to complying with Condition 53.a, the permittee may comply with Condition 53.b. [40 CFR 63.1404(a)]

53.a.i. Reduce emissions of total organic HAP by 95 weight-percent. Control must be achieved by venting emissions through a closed vent system to any combination of control devices meeting the requirements of 40 CFR 63 subpart SS. When complying with the requirements of 40 CFR 63 subpart SS, the following apply for purposes of 40 CFR 63 subpart OOO: [40 CFR 63.1404(a)(1)]

53.a.i.1. Design evaluations are allowed for control devices that control emission points with total emissions less than 10 tons of organic HAP per year before control (i.e., small control devices). [40 CFR 63.1404(a)(1)(i)]

53.a.i.2. When 40 CFR 63 subpart SS refers to specific test methods for the measurement of organic HAP concentration, the test methods presented in Condition 61.a must be used. [40 CFR 63.1404(a)(1)(ii)]

53.a.i.3. The option to measure TOC instead of organic HAP, as a basis for demonstrating compliance, is not allowed. [40 CFR 63.1404(a)(1)(iii)]

53.a.i.4. Excused excursions are not allowed. [40 CFR 63.1404(a)(1)(iv)]

53.a.i.5. The provisions in Condition 52, rather than the provisions in 40 CFR 63.982(f), are to be followed for combined vent streams. [40 CFR 63.1404(a)(1)(v)]

53.a.i.6. When there are conflicts between the due dates for reports presented in 40 CFR 63 subpart SS and 40 CFR 63 subpart OOO, reports must be submitted according to the due dates presented in Condition 64. [40 CFR 63.1404(a)(1)(vii)]

53.a.i.7. When there are conflicts between the recordkeeping and reporting requirements presented in 40 CFR 63 subpart SS and 40 CFR 63 subpart OOO, the permittee must either follow both sets of requirements (i.e., follow the requirements in 40 CFR 63 subpart SS for emission points covered by 40 CFR 63 subpart SS and follow the requirements of 40 CFR 63 subpart OOO for emission points covered 40 CFR 63 subpart OOO) or must follow the set of requirements preferred by the permittee. If the permittee chooses to follow just one set of requirements, the permittee must identify which set of requirements are being followed and which

set of requirements are being disregarded in the appropriate report. [40 CFR 63.1404(a)(1)(viii)]

53.a.ii. Comply with the requirements of 40 CFR 63 subpart WW (National Emission Standards for Storage Vessels (Control Level 2)). When complying with the requirements of 40 CFR 63 subpart WW, the following apply for purposes of 40 CFR 63 subpart OOO: [40 CFR 63.1404(a)(2)]

53.a.ii.1. When there are conflicts between the due dates for reports presented in 40 CFR 63 subpart WW and 40 CFR 63 subpart OOO, reports must be submitted according to the due dates presented in 40 CFR 63 subpart OOO. [40 CFR 63.1404(a)(2)(i)]

53.a.ii.2. When there are conflicts between the recordkeeping and reporting requirements presented in 40 CFR 63 subpart WW and 40 CFR 63 subpart OOO, the permittee must either follow both sets of requirements (i.e., follow the requirements in 40 CFR 63 subpart WW for emission points covered by 40 CFR 63 subpart WW and follow the requirements of 40 CFR 63 subpart OOO for emission points covered by 40 CFR 63 subpart OOO) or must follow the set of requirements preferred by the permittee. If the permittee chooses to follow just one set of requirements, the permittee must identify which set of requirements are being followed and which set of requirements are being disregarded in the appropriate report. [40 CFR 63.1404(a)(2)(ii)]

53.b. *Alternative standard* – Vent all organic HAP emissions from a storage vessel meeting either of the capacity and vapor pressure criteria specified in Condition 53.a to a combustion control device achieving an outlet organic HAP concentration of 20 ppmv or less or to a non-combustion control device achieving an outlet organic HAP concentration of 50 ppmv or less. Any storage vessels that are not vented to a control device meeting these conditions must be controlled in accordance with the provisions of Conditions 53.a.i or 53.a.ii. [40 CFR 63.1404(b)]

53.c. Whenever gases or vapors containing HAP are routed from a storage vessel through a closed-vent system connected to a control device used to comply with the requirements of Conditions 53.a or 53.b, the control device must be operating except as provided for in Condition 53.c.i or 53.c.ii. [40 CFR 63.1404(c)]

53.c.i. The control device may only be bypassed for the purpose of performing planned routine maintenance of the control device. When the control device is bypassed, the permittee must comply with Conditions 53.c.i.1 through 53.c.i.3. [40 CFR 63.1404(c)(1)]

53.c.i.1. The control device may only be bypassed when the planned routine maintenance cannot be performed during periods that storage vessel emissions are vented to the control device. [40 CFR 63.1404(c)(1)(i)]

53.c.i.2. On an annual basis, the total time that the closed-vent system or control device is bypassed to perform routine maintenance must not exceed 240 hours per each calendar year. [40 CFR 63.1404(c)(1)(ii)]

53.c.i.3. The level of material in the storage vessel must not be increased during periods that the closed-vent system or control device is bypassed to perform planned routine maintenance. [40 CFR 63.1404(c)(1)(iii)]

53.c.ii. The gases or vapors containing HAP are routed from the storage vessel through a closed-vent system connected to an alternate control device meeting the requirements of Condition 53.a.i or the alternative standard in Condition 53.b. [40 CFR 63.1404(c)(2)]

54. Applicable Requirement: *Reactor batch process vent provisions* – [40 CFR 63.1406]-

54.a. *Emission standards* – The permittee of reactor batch process vents must comply with Condition 54.a.i, as appropriate. As an alternative to complying with Condition 54.a, the permittee may comply with Condition 54.b. [40 CFR 63.1406(a)]

54.a.i. The permittee of a reactor batch process vent must control organic HAP emissions by complying with either Condition 54.a.i.1, 54.a.i.2, or 54.a.i.3. [40 CFR 63.1406(a)(2)]

54.a.i.1. Vent all emissions of organic HAP to a flare. [40 CFR 63.1406(a)(2)(i)]

54.a.i.2. Reduce organic HAP emissions for the batch cycle by 83 weight percent using a control device or control technology. [40 CFR 63.1406(a)(2)(ii)]

54.a.i.3. Reduce organic HAP emissions from the collection of all reactor batch process vents within the affected source, as a whole, to 0.0567 kilogram of organic HAP per megagram of product or less for solvent-based resin production, or to 0.0057 kilogram of organic HAP per megagram of product or less for non-solvent-based resin production. [40 CFR 63.1406(a)(2)(iii)]

54.b. *Alternative standard* – Vent all organic HAP emissions from a reactor batch process vent to a combustion control device achieving an outlet organic HAP concentration of 20 ppmv or less or to a non-combustion control device achieving an outlet organic HAP concentration of 50 ppmv or less. Any reactor batch process vents that are not vented to a control device meeting these conditions must be controlled in accordance with the provisions of Condition 54.a.i.2. [40 CFR 63.1406(b)]

55. Applicable Requirement: *Non-reactor batch process vent provisions* – [40 CFR 63.1407]

55.a. *Emission standards* [40 CFR 63.1407(a)]

55.a.i. The permittee of non-reactor batch process vents with 0.25 tons per year (0.23 megagrams per year) of uncontrolled organic HAP emissions or greater from the collection of non-reactor batch process vents within the affected source must comply with the requirements in Condition 55.a.ii, as appropriate. As an alternative to complying with Condition 55.a.ii, the permittee may comply with Condition 55.b. The permittee must determine uncontrolled organic HAP emissions from the collection of non-reactor batch process vents within the affected source as specified in Condition 55.c. If the permittee finds that uncontrolled organic HAP emissions from the collection of non-reactor batch process vents within the affected source are less than 0.25 tons per year (0.23 megagrams per year), non-reactor batch process vents are not subject to the control requirements of Condition 55.a. Further, the permittee must, when requested by LRAPA, demonstrate that organic HAP emissions for the collection of non-reactor batch process vents within the affected source are less than 0.25 tons per year (0.23 megagrams per year). [40 CFR 63.1407(a)(1)]

55.a.ii. The permittee of a non-reactor batch process vent must: [40 CFR 63.1407(a)(3)]

55.a.ii.1. Vent all emissions of organic HAP to a flare; or [40 CFR 63.1407(a)(3)(i)]

55.a.ii.2. For the collection of non-reactor batch process vents within the affected source, reduce organic HAP emissions for the batch cycle by 62 weight percent using a control device or control technology. [40 CFR 63.1407(a)(3)(ii)]

55.b. *Alternative standard* – Comply with either Condition 55.b.i or 55.b.ii. [40 CFR 63.1407(b)]

55.b.i. *Control device outlet concentration* – Vent all organic HAP emissions from a non-reactor batch process vent to a combustion control device achieving an outlet organic HAP concentration of 20 ppmv or less or to a non-combustion control device achieving an outlet organic HAP concentration or 50 ppmv or less. Any reactor batch process vents that are not vented to a control device meeting these conditions must be controlled in accordance with the provisions of Condition 55.a.ii. [40 CFR 63.1407(b)(1)]

55.b.ii. *Mass emission limit* – Include the emissions from all non-reactor batch process vents in the compliance demonstration required for reactor batch process vents complying with the mass emission limits specified in Condition 54.a.i.3, as appropriate. This compliance option may only be used when the permittee has elected to comply with the mass

emission limit for reactor batch process vents. [40 CFR 63.1407(b)(2)]

55.c. *Determining uncontrolled organic HAP emissions* – The permittee must determine uncontrolled organic HAP emissions from the collection of non-reactor batch process vents within the affected source based on engineering assessment as described in 40 CFR 63.1414(d)(6). [40 CFR 63.1407(d)]

56. Applicable Requirement: *Aggregate batch vent stream provisions* – [40 CFR 63.1408]

56.a. *Emission standards* – The permittee of aggregate batch vent streams must comply with Condition 56.a.i, as appropriate. As an alternative to complying with Condition 56.a.i, the permittee may comply with Condition 56.b. [40 CFR 63.1408(a)]

56.a.i. The permittee of an aggregate batch vent stream located at an existing affected source must: [40 CFR 63.1408(a)(2)]

56.a.i.1. Vent all emissions of organic HAP to a flare; or [40 CFR 63.1408(a)(2)(i)]

56.a.i.2. Reduce organic HAP emissions by 83 weight percent or to a concentration of 20 ppmv when using a combustion control device or to a concentration of 50 ppmv when using a non-combustion control device, whichever is less stringent, on a continuous basis. [40 CFR 63.1408(a)(2)(ii)]

56.b. *Alternative standard* – Comply with either Condition 56.b.i or 56.b.ii. [40 CFR 63.1408(b)]

56.b.i. *Control device outlet concentration* – Vent all organic HAP emissions from an aggregate batch vent stream to a combustion control device achieving an outlet organic HAP concentration of 20 ppmv or less or to a non-combustion control device achieving an outlet organic HAP concentration of 50 ppmv or less. Any aggregate batch vent streams that are not vented to a control device meeting these conditions must be controlled in accordance with the provisions of Condition 56.a.i. [40 CFR 63.1408(b)(1)]

56.b.ii. *Mass emission limit* – Include the emissions from all aggregate batch vent streams in the compliance demonstration required for reactor batch process vents complying with the mass emission limits specified in Condition 54.a.i.3, as appropriate. This compliance option may only be used when the permittee has elected to comply with the mass emission limit for reactor batch process vents. [40 CFR 63.1408(b)(2)]

57. Applicable Requirement: *Heat exchange system provisions* – [40 CFR 63.1409]

57.a. Unless one or more of the conditions specified in Conditions 57.a.i through 57.a.vi are met, the permittee must monitor each heat exchange system used to cool process equipment in an affected source, according to the provisions in either Condition 57.b or 57.c. Whenever a leak is detected, the permittee must comply with the requirements in Condition 57.d. [40 CFR 63.1409(a)]

57.a.i. The heat exchange system is operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side. [40 CFR 63.1409(a)(1)]

57.a.ii. There is an intervening cooling fluid, containing less than 5 percent by weight of total HAP listed in column A of Table 2 to Subpart OOO of 40 CFR 63, between the process and the cooling water. This intervening fluid serves to isolate the cooling water from the process fluid, and the intervening fluid is not sent through a cooling tower or discharged. For purposes of Condition 57, discharge does not include emptying for maintenance purposes. [40 CFR 63.1409(a)(2)]

57.a.iii. The once-through heat exchange system is subject to a National Pollution Discharge Elimination System (NPDES) permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration, whichever is greater. [40 CFR 63.1409(a)(3)]

57.a.iv. The once-through heat exchange system is subject to an NPDES permit that: [40 CFR

63.1409(a)(4)]

57.a.iv.1. Requires monitoring of a parameter(s) or condition(s) to detect a leak of process fluids into cooling water; [40 CFR 63.1409(a)(4)(i)]

57.a.iv.2. Specifies or includes the normal range of the parameter or condition; [40 CFR 63.1409(a)(4)(ii)]

57.a.iv.3. Requires monitoring for the parameters selected as leak indicators no less frequently than monthly for the first 6 months and quarterly thereafter; and [40 CFR 63.1409(a)(4)(iii)]

57.a.iv.4. Requires the permittee to report and correct leaks to the cooling water when the parameter or condition exceeds the normal range. [40 CFR 63.1409(a)(4)(iv)]

57.a.v. The recirculating heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total HAP listed in column A of Table 2 to Subpart OOO of 40 CFR 63. [40 CFR 63.1409(a)(5)]

57.a.vi. The once-through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total HAP listed in column B of Table 2 to Subpart OOO of 40 CFR 63. [40 CFR 63.1409(a)(6)]

57.b. The permittee who elects to comply with the requirements of Condition 57.a by monitoring the cooling water for the presence of one or more organic HAP or other representative substances whose presence in cooling water indicate a leak must comply with the requirements specified in Conditions 57.b.i through 57.b.vi. The cooling water must be monitored for total HAP, total volatile organic compounds, total organic carbon, one or more speciated HAP compounds, or other representative substances that would indicate the presence of a leak in the heat exchange system. [40 CFR 63.1409(b)]

57.b.i. The cooling water must be monitored monthly for the first 6 months and quarterly thereafter to detect leaks. [40 CFR 63.1409(b)(1)]

57.b.ii. [40 CFR 63.1409(b)(2)]

57.b.ii.1. For recirculating heat exchange systems (cooling tower systems), the monitoring of speciated HAP or total HAP refers to the HAP listed in column A of Table 2 to Subpart OOO of 40 CFR 63. [40 CFR 63.1409(b)(2)(i)]

57.b.ii.2. For once-through heat exchange systems, the monitoring of speciated HAP or total HAP refers to the HAP listed in column B of Table 2 to Subpart OOO of 40 CFR 63. [40 CFR 63.1409(b)(2)(ii)]

57.b.iii. The concentration of the monitored substance(s) in the cooling water must be determined using any EPA-approved method listed in 40 CFR 136, as long as the method is sensitive to concentrations as low as 10 parts per million and the same method is used for both entrance and exit samples. Alternative methods may be used upon approval by LRAPA. [40 CFR 63.1409(b)(3)]

57.b.iv. The samples must be collected either at the entrance and exit of each heat exchange system or at locations where the cooling water enters and exits each heat exchanger or any combination of heat exchangers. [40 CFR 63.1409(b)(4)]

57.b.iv.1. For samples taken at the entrance and exit of recirculating heat exchange systems, the entrance is the point at which the cooling water leaves the cooling tower prior to being returned to the process equipment, and the exit is the point at which the cooling water is introduced to the cooling tower after being used to cool the process fluid. [40 CFR 63.1409(b)(4)(i)]

57.b.iv.2. For samples taken at the entrance and exit of once-through heat exchange

systems, the entrance is the point at which the cooling water enters, and the exit is the point at which the cooling water exits the plant site or chemical manufacturing process units. [40 CFR 63.1409(b)(4)(ii)]

57.b.iv.3. For samples taken at the entrance and exit of each heat exchanger or any combination of heat exchangers, the entrance is the point at which the cooling water enters the individual heat exchanger or group of heat exchangers, and the exit is the point at which the cooling water exits the heat exchanger or group of heat exchangers. [40 CFR 63.1409(b)(4)(iii)]

57.b.v. A minimum of three sets of samples must be taken at each entrance and exit as defined in Condition 57.b.iv. The average entrance and exit concentrations must then be calculated. The concentration must be corrected for the addition of any makeup water or for any evaporative losses, as applicable. [40 CFR 63.1409(b)(5)]

57.b.vi. A leak is detected if the exit mean concentration is found to be greater than the entrance mean concentration using a one-sided statistical procedure at the 0.05 level of significance, and the amount by which it is greater is at least 1 part per million or 10 percent of the entrance mean, whichever is greater. [40 CFR 63.1409(b)(6)]

57.c. The permittee who elects to comply with the requirement of Condition 57.a by monitoring using a surrogate indicator of heat exchange system leaks must comply with the requirements specified in Conditions 57.c.i through 57.c.iii. Surrogate indicators that could be used to develop an acceptable monitoring program are ion specific electrode monitoring, pH, conductivity or other representative indicators. [40 CFR 63.1409(c)]

57.c.i. The permittee must prepare and implement a monitoring plan that documents the procedures that will be used to detect leaks of process fluids into cooling water. The plan must require monitoring of one or more surrogate indicators or monitoring of one or more process parameters or other conditions that indicate a leak. Monitoring that is already being conducted for other purposes may be used to satisfy the requirements of this section. The plan must include the information specified in Conditions 57.c.i.1 and 57.c.i.2. [40 CFR 63.1409(c)(1)]

57.c.i.1. A description of the parameter or condition to be monitored and an explanation of how the selected parameter or condition will reliably indicate the presence of a leak. [40 CFR 63.1409(c)(1)(i)]

57.c.i.2. The parameter level(s) or conditions(s) that constitute a leak. This must be documented by data or calculations showing that the selected levels or conditions will reliably identify leaks. The monitoring must be sufficiently sensitive to determine the range of parameter levels or conditions when the system is not leaking. When the selected parameter level or condition is outside that range, a leak is indicated. [40 CFR 63.1409(c)(1)(ii)]

57.c.i.3. The monitoring frequency which must be no less frequent than monthly for the first 6 months and quarterly thereafter to detect leaks. [40 CFR 63.1409(c)(1)(iii)]

57.c.i.4. The records that will be maintained to document compliance with the requirements of this section. [40 CFR 63.1409(c)(1)(iv)]

57.c.ii. If a substantial leak is identified by methods other than those described in the monitoring plan and the method(s) specified in the plan could not detect the leak, the permittee must revise the plan and document the basis for the changes. The permittee must complete the revisions to the plan no later than 180 days after discovery of the leak. [40 CFR 63.1409(c)(2)]

57.c.iii. The permittee must maintain, at all times, the monitoring plan that is currently in use. The current plan must be maintained on-site, or must be accessible from a central location by computer or other means that provides access within 2 hours after a request. If the

monitoring plan is superseded, the permittee must retain the most recent superseded plan at least until 5 years from the date of its creation. The superseded plan must be retained on-site (or accessible from a central location by computer or other means that provides access within 2 hours after a request) for at least 6 months after its creation. [40 CFR 63.1409(c)(3)]

57.d. If a leak is detected according to the criteria of Condition 57.b or 57.c, the permittee must comply with the requirements in Conditions 57.d.i and 57.d.ii, except as provided in Condition 57.e. [40 CFR 63.1409(d)]

57.d.i. The leak must be repaired as soon as practical but not later than 45 calendar days after the permittee receives results of monitoring tests indicating a leak. The leak must be repaired unless the permittee demonstrates that the results are due to a condition other than a leak. [40 CFR 63.1409(d)(1)]

57.d.ii. Once the leak has been repaired, the permittee must confirm that the heat exchange system has been repaired within 7 calendar days of the repair or startup, whichever is later. [40 CFR 63.1409(d)(2)]

57.e. Delay of repair of heat exchange systems for which leaks have been detected is allowed if the equipment is isolated from the process. Delay of repair is also allowed if repair is technically infeasible without a shutdown and any one of the conditions in Conditions 57.e.i or 57.e.ii. All time periods in Conditions 57.e.i and 57.e.ii must be determined from the date when the permittee determines that delay of repair is necessary. [40 CFR 63.1409(e)]

57.e.i. If a shutdown is expected within the next 2 months, a special shutdown before that planned shutdown is not required. [40 CFR 63.1409(e)(1)]

57.e.ii. If a shutdown is not expected within the next 2 months, the permittee may delay repair as provided in Condition 57.e.ii.1 or 57.e.ii.2. Documentation of a decision to delay repair must state the reasons repair was delayed and must specify a schedule for completing the repair as soon as practical. [40 CFR 63.1409(e)(2)]

57.e.ii.1. If a shutdown for repair would cause greater emissions than the potential emissions from delaying repair, the permittee may delay repair until the next shutdown of the process equipment associated with the leaking heat exchanger. The permittee must document the basis for the determination that a shutdown for repair would cause greater emissions than the emissions likely to result from delaying repair as specified in Conditions 57.e.ii.1.A and 57.e.ii.1.B. [40 CFR 63.1409(e)(2)(i)]

57.e.ii.1.A. The permittee must calculate the potential emissions from the leaking heat exchanger by multiplying the concentration of total HAP listed in column A of Table 2 to Subpart OOO of 40 CFR 63 in the cooling water from the leaking heat exchanger by the flowrate of the cooling water from the leaking heat exchanger by the expected duration of the delay. The permittee may calculate potential emissions using total organic carbon concentration instead of total HAP listed in column A of Table 2 to Subpart OOO of 40 CFR 63. [40 CFR 63.1409(e)(2)(i)(A)]

57.e.ii.1.B. The permittee must determine emissions from purging and depressurizing the equipment that will result from the unscheduled shutdown for the repair. [40 CFR 63.1409(e)(2)(i)(B)]

57.e.ii.2. If repair is delayed for reasons other than those specified in Condition 57.e.ii.1, the permittee may delay repair up to a maximum of 120 calendar days. The permittee must demonstrate that the necessary parts or personnel were not available. [40 CFR 63.1409(e)(2)(ii)]

58. Applicable Requirement: The permittee must comply with the requirements of 40 CFR 63 subpart UU (NESHAP: Equipment Leaks – Control Level 2 Standards) as detailed in Conditions 71 through 85 for all equipment, as defined under 40 CFR 63.1402, that contains or contacts 5 weight-percent HAP or greater and operates 300 hours per year or more. The weight-percent HAP is determined for equipment using the organic HAP concentration measurement methods specified in Condition 61.a. When complying with the requirements of 40 CFR 63 subpart SS, as referred to by 40 CFR 63 subpart UU, Conditions 58.a through 58.h apply for purposes of 40 CFR 63 subpart OOO. [40 CFR 63.1410]

58.a. Design evaluations are allowed for control devices that control emission points with total emissions less than 10 tons of organic HAP per year before control (i.e., small control devices). [40 CFR 63.1410(a)]

58.b. When 40 CFR 63 subpart SS refers to specific test methods for the measurement of organic HAP concentration, the test methods presented in Condition 61.a must be used. [40 CFR 63.1410(b)]

58.c. The option to measure TOC instead of organic HAP, as a basis for demonstrating compliance, is not allowed. [40 CFR 63.1410(c)]

58.d. Excused excursions are not allowed. [40 CFR 63.1410(d)]

58.e. The provisions in Condition 52, rather than the provisions in 40 CFR 63.982(f), are to be followed for combined vent streams. [40 CFR 63.1410(e)]

58.f. When a scrubber is used as a control device, the permittee must follow the guidance provided in 40 CFR 63 subpart OOO for design evaluations or performance tests, as appropriate, and for monitoring, recordkeeping, and reporting. [40 CFR 63.1410(f)]

58.g. When there are conflicts between the due dates for reports presented in 40 CFR 63 subpart SS and 40 CFR 63 subpart OOO, reports must be submitted according to the due dates present in 40 CFR 63 subpart OOO. [40 CFR 63.1410(g)]

58.h. When there are conflicts between the recordkeeping and reporting requirements presented in 40 CFR 63 subpart SS (Conditions 69 and 70) and 40 CFR 63 subpart OOO (Conditions 63 and 64), the permittee must either follow both sets of requirements (i.e., follow the requirements in 40 CFR 63 subpart SS for emission points covered by 40 CFR 63 subpart SS and follow the requirements of 40 CFR 63 subpart OOO for emission points covered by 40 CFR 63 subpart OOO) or must follow the set of requirements preferred by the permittee. If the permittee chooses to follow just one set of requirements, the permittee must identify which set of requirements are being followed and which set of requirements are being disregarded in the appropriate report. [40 CFR 63.1410(h)]

59. Applicable Requirements: *Requirements for pressure relief devices* – Except as specified in Condition 59.d, the permittee must comply with the requirements specified in Conditions 59.a and 59.b for pressure relief devices in organic HAP gas or vapor service. Except as specified in Condition 59.d, the permittee must also comply with the requirements specified in Condition 59.c for all pressure relief devices in organic HAP service. [40 CFR 63.1411]

59.a. *Operating requirements* – Except during a pressure release event, operate each pressure relief device in organic HAP gas or vapor service with an instrument reading of less than 500 ppm above background as described in Method 21 of 40 CFR part 60, Appendix A. [40 CFR 63.1411(a)]

59.b. *Pressure release requirements* – For pressure relief devices in organic HAP gas or vapor service, the permittee must comply with either Condition 59.b.i or 59.b.ii following a pressure release, as applicable. [40 CFR 63.1411(b)]

59.b.i. If the pressure relief device does not consist of or include a rupture disk, conduct instrument monitoring, as described in Method 21 of 40 CFR part 60, appendix A, no later than 5 calendar days after the pressure relief device returns to organic HAP service following a pressure release to verify that the pressure relief device is operating with an instrument reading of less than 500 ppm above background, except as provided in

Condition 73.c. [40 CFR 63.1411(b)(1)]

59.b.ii. If the pressure relief device consists of or includes 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, except as provided in Condition 73.c. [40 CFR 63.1411(b)(2)]

59.c. *Pressure release management* – Except as specified in Condition 59.d, emissions of organic HAP to the atmosphere from pressure relief devices in organic HAP service are prohibited, and the permittee must comply with the requirements specified in Conditions 59.c.i and 59.c.ii for all pressure relief devices in organic HAP service. [40 CFR 63.1411(c)]

59.c.i. The permittee must equip each pressure relief device in organic HAP service with a device(s) or parameter monitoring system that is capable of: [40 CFR 63.1411(c)(1)]

59.c.i.1. Identifying the pressure release; [40 CFR 63.1411(c)(1)(i)]

59.c.i.2. Recording the time and duration of each pressure release; and [40 CFR 63.1411(c)(1)(ii)]

59.c.i.3. Notifying operators immediately that a pressure release is occurring. The device or monitoring system may be either specific to the pressure relief device itself or may 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. [40 CFR 63.1411(c)(1)(iii)]

59.c.ii. If any pressure relief device in organic HAP service releases to atmosphere as a result of a pressure release event, the permittee must calculate the quantity of organic HAP released during each pressure release event and report this quantity as required in Condition 64.a.xiii.3. Calculations may be based on data from the pressure relief device monitoring alone or in combination with process parameter monitoring data and process knowledge. [40 CFR 63.1411(c)(2)]

59.d. *Pressure relief devices routed to a control device, process, fuel gas system, or drain system* – If a pressure relief device in organic HAP service is designed and operated to route all HAP emissions from pressure releases through a closed vent system to a control device or to a process, fuel gas system, or drain system, the permittee is not required to comply with Conditions 59.a, 59.b, or 59.c (if applicable) of Condition 59 for that pressure relief device. The fuel gas system or closed vent system and control device (if applicable) must meet the requirements of Condition 83, as applicable (except that the term "pressure relief devices" must apply instead of the term "equipment leaks" in Condition 83). The drain system (if applicable) must meet the requirements of 40 CFR 63.136. [40 CFR 63.1411(d)]

60. Applicable Requirements: *Compliance demonstration procedures* – [40 CFR 63.1413]

60.a. *Initial and continuous compliance for storage vessels* – [40 CFR 63.1413(b)]

60.a.i. Initial compliance with the percent reduction standard specified in Condition 53.a.i must be demonstrated following the procedures in 40 CFR 63 subpart SS. [40 CFR 63.1413(b)(1)]

60.a.ii. Initial compliance with the work practice standard specified in Condition 53.a.ii must be demonstrated following the procedures in 40 CFR 63 subpart WW. [40 CFR 63.1413(b)(2)]

60.a.iii. Continuous compliance with the percent reduction standard specified in Condition 53.a.i must be demonstrated following the procedures in 40 CFR 63 subpart SS. [40 CFR 63.1413(b)(3)]

60.a.iv. Continuous compliance with the work practice standard specified in Condition 53.a.ii must be demonstrated following the procedures in 40 CFR 63 subpart WW. [40 CFR

63.1413(b)(4)]

60.a.v. Initial and continuous compliance with the alternative standard specified in Condition 53.b must be demonstrated following the procedures in 40 CFR 63.1413(f). [40 CFR 63.1413(b)(5)]

60.b. *Continuous compliance for aggregate batch vent streams* – [40 CFR 63.1413(d)]

60.b.i. Continuous compliance with the percent reduction standard specified in Condition 56.a.i.2 must be demonstrated following the procedures for continuous process vents specified in 40 CFR 63 subpart SS (Conditions 65 through 70). [40 CFR 63.1413(d)(3)]

60.c. *Continuous compliance for batch process vents* – [40 CFR 63.1413(e)]

60.c.i. *Continuous compliance with percent reduction standards* – Continuous compliance with the percent reduction standards specified in Conditions 54.a.i.2 and 55.a.ii.2 must be demonstrated following the continuous monitoring procedures specified in Condition 62. [40 CFR 63.1413(e)(1)(v)]

60.d. *Compliance with alternative standard* – Initial and continuous compliance with the alternative standards in Conditions 53.b, 54.b, 55.b.i, and 56.b.i are demonstrated when the daily average outlet organic HAP concentration is 20 ppmv or less when using a combustion control device or 50 ppmv or less when using a non-combustion control device. To demonstrate initial and continuous compliance, the permittee must follow the test method specified in Condition 61.a.vi and must be in compliance with the monitoring provisions in Condition 62.e no later than the initial compliance date and on each day thereafter. [40 CFR 63.1413(f)]

61. Testing Requirements: *Test Methods* – [40 CFR 63.1414]

61.a. When required to conduct a performance test, the permittee must use the test methods specified in Conditions 61.a.i through 61.a.vi, except where another section of 40 CFR 63 subpart OOO requires either the use of a specific test method or the use of requirements in another subpart of 40 CFR 63 containing specific test method requirements. [40 CFR 63.1414(a)]

61.a.i. Method 1 or 1A, 40 CFR part 60, appendix A, must be used for selection of the sampling sites if the flow measuring device is a pitot tube, except that references to particulate matter in Method 1A do not apply for the purposes of 40 CFR 63 subpart OOO. No traverse is necessary when Method 2A or 2D, 40 CFR part 60, appendix A is used to determine gas stream volumetric flow rate. [40 CFR 63.1414(a)(1)]

61.a.ii. Method 2, 2A, 2C, or 2D, 40 CFR part 60, appendix A, is used for velocity and volumetric flow rates. [40 CFR 63.1414(a)(2)]

61.a.iii. Method 3, 40 CFR part 60, appendix A, is used for gas analysis. [40 CFR 63.1414(a)(3)]

61.a.iv. Method 4, 40 CFR part 60, appendix A, is used for stack gas moisture. [40 CFR 63.1414(a)(4)]

61.a.v. The following methods must be used to determine the organic HAP concentration. [40 CFR 63.1414(a)(5)]

61.a.v.1. Method 316 or Method 320, 40 CFR part 60, appendix A, must be used to determine the concentration of formaldehyde. [40 CFR 63.1414(a)(5)(i)]

61.a.v.2. Method 18, 40 CFR part 60, appendix A, must be used to determine the concentration of all organic HAP other than formaldehyde. [40 CFR 63.1414(a)(5)(ii)]

61.a.v.3. Method 308, 40 CFR part 60, appendix A, may be used as an alternative to Method 18 to determine the concentration of methanol. [40 CFR 63.1414(a)(5)(iii)]

61.a.vi. When complying with the alternative standard, as specified in Condition 60.d, the

permittee must use a Fourier Transform Infrared Spectroscopy (FTIR) instrument following Method PS-15, 40 CFR 60 appendix B. [40 CFR 63.1414(a)(6)]

62. Monitoring Requirements: [40 CFR 63.1415]

62.a. *General requirements* – The permittee of an emission point located at an affected source that uses a control device to comply with the requirements of this subpart and has one or more parameter monitoring level requirement specified under 40 CFR 63 subpart OOO, must install the monitoring equipment specified in Condition 63.b in order to demonstrate continued compliance with the provisions of 40 CFR 63 subpart OOO. All monitoring equipment must 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 63.1415(a)]

62.a.i. This monitoring equipment must be in operation at all times when organic HAP emissions that are required to be controlled as part of complying with the emission limits specified in Conditions 53, 54, 55, and 56 are vented to the control device. [40 CFR 63.1415(a)(1)]

62.a.ii. Nothing in this section will be construed to allow a monitoring parameter excursion caused by an activity that violates other applicable provisions of 40 CFR 63 subpart A, F, or G. [40 CFR 63.1415(a)(3)]

62.b. *Monitoring equipment* – The monitoring equipment specified in Condition 62.b.i must be installed as specified in Condition 62.a. The parameters to be monitored are detailed in Conditions 62.b.i and 63.c, as specified in Table 3 to Subpart OOO of 40 CFR 63. [40 CFR 63.1415(b)]

62.b.i. Where an incinerator is used, a temperature monitoring device equipped with a continuous recorder is required. [40 CFR 63.1415(b)(5)]

62.b.i.1. Where an incinerator other than a catalytic incinerator is used, the temperature monitoring device must be installed in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs. [40 CFR 63.1415(b)(5)(i)]

62.c. *Alternative monitoring parameters* – The permittee may request approval to monitor parameters other than those specified in Table 3 to Subpart OOO of 40 CFR 63. The request must be submitted according to the procedures specified in Condition 64.b. Approval must be requested if the permittee: [40 CFR 63.1415(c)]

62.c.i. Uses a control device or control technology other than those included in 40 CFR 63.1415(b); or [40 CFR 63.1415(c)(1)]

62.c.ii. Uses one of the control devices included in 40 CFR 63.1415(b), but seeks to monitor a parameter other than those specified in Table 3 to Subpart OOO of 40 CFR 63. [40 CFR 63.1415(c)(2)]

62.d. *Monitoring of bypass lines* – The permittee using a vent system that contains bypass lines that could divert emissions away from a control device or control technology used to comply with the provisions of 40 CFR 63 subpart OOO must comply with either Condition 62.d.i or 62.d.ii. Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to Condition 62.d. [40 CFR 63.1415(d)]

62.d.i. Properly install, maintain, and operate a flow indicator that takes a reading at least once every 15 minutes. Records must be generated as specified in Condition 63.c.i. The flow indicator must be installed at the entrance to any bypass line that could divert emissions away from the control device or control technology and to the atmosphere; or [40 CFR 63.1415(d)(1)]

62.d.ii. Secure the bypass line damper or valve in the non-diverting position with a car-seal or a

lock-and-key type configuration. A visual inspection of the seal or closure mechanism must be performed at least once every month to ensure that the damper or valve is maintained in the non-diverting position and emissions are not diverted through the bypass line. Records must be generated as specified in Condition 63.c.i. [40 CFR 63.1415(d)(2)]

62.e. *Monitoring for the alternative standards* – For control devices that are used to comply with the provisions of Condition 53.b, 54.b, 55.b, or 56.b the permittee must conduct continuous monitoring of the outlet organic HAP concentration whenever emissions are vented to the control device. Continuous monitoring of outlet organic HAP concentration must be accomplished using an FTIR instrument following Method PS-15 of 40 CFR 60 appendix B. The permittee must calculate a daily average outlet organic HAP concentration. [40 CFR 63.1415(e)]

63. Recordkeeping Requirements: [40 CFR 63.1416]

63.a. *Malfunction records* – Records must be kept as specified in Conditions 63.a.i through 63.a.iii. [40 CFR 63.1416(b)]

63.a.i. In the event that an affected unit fails to meet an applicable standard, record the number of failures. For each failure record the date, time, and duration of each failure. [40 CFR 63.1416(b)(1)]

63.a.ii. For each failure to meet an applicable standard, record and retain a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions. [40 CFR 63.1416(b)(2)]

63.a.iii. Record actions taken to minimize emissions in accordance with 40 CFR 63.1400(k)(4), and any corrective actions taken to return the affected unit to its normal or usual manner of operation. [40 CFR 63.1416(b)(3)]

63.b. *Monitoring records* – The permittee required to comply with Condition 62 and, therefore, required to keep continuous records must keep records as specified in Conditions 63.b.i and 63.b.ii. [40 CFR 63.1416(c)]

63.b.i. If all recorded values for a monitored parameter during an operating day or block are above the minimum level or below the maximum level established in the Notification of Compliance Status or operating permit, the permittee may record that all values were above the minimum level or below the maximum level rather than calculating and recording a daily average, or block average, for that operating day. [40 CFR 63.1416(c)(3)]

63.b.ii. Monitoring data recorded during periods identified in Conditions 63.b.ii.1 and 63.b.ii.2 must not be included in any average computed under 40 CFR 63 subpart OOO. Records must be kept of the times and durations of all such periods and any other periods during process or control device or recovery device or control technology operation when monitors are not operating: [40 CFR 63.1416(c)(4)]

63.b.ii.1. Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments; and [40 CFR 63.1416(c)(4)(i)]

63.b.ii.2. Periods of non-operation of the affected source (or portion thereof) resulting in cessation of the emissions to which the monitoring applies. [40 CFR 63.1416(c)(4)(ii)]

63.c. *Batch process vent records* – [40 CFR 63.1416(d)]

63.c.i. *Controlled batch process vent continuous compliance records* – Continuous compliance records must be kept as follows: [40 CFR 63.1416(d)(3)]

63.c.i.1. Each permittee of a batch process vent that uses a control device or control technology to comply with Condition 54 or 55 must keep the following records,

as applicable, readily accessible: [40 CFR 63.1416(d)(3)(ii)]

63.c.i.1.A. Hourly records of whether the flow indicator for bypass lines specified in Condition 62.d was operating and whether a diversion was detected at any time during the hour. Also, records of the time and duration periods when the vent is diverted from the control device or control technology or the flow indicator specified in Condition 62.d is not operating. [40 CFR 63.1416(d)(3)(ii)(A)]

63.c.i.1.B. Where a seal or closure mechanism is used to comply with Condition 62.d, hourly records of whether a diversion was detected at any time are not required. The permittee must record whether the monthly visual inspection of the seals or closure mechanisms has been done and must record the occurrence of all periods when the seal mechanism is broken, the bypass line damper or valve position has changed, or the key for a lock-and-key type configuration has been checked out, and records of any car-seal that has broken. [40 CFR 63.1416(d)(3)(ii)(B)]

63.c.i.1.C. Records specifying the times and duration of periods of monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments. In addition, records specifying any other periods of process or control device operation or control technology operation when monitors are not operating. [40 CFR 63.1416(d)(3)(ii)(C)]

63.d. *Aggregate batch vent stream records* – [40 CFR 63.1416(e)]

63.d.i. *Compliance demonstration records* – The permittee of an aggregate batch vent stream complying with Condition 56.a.i must keep the following records, as applicable, readily accessible: [40 CFR 63.1416(e)(1)]

63.d.i.1. If an aggregate batch vent stream is in compliance with the percent reduction requirements of Condition 56.a.i.2, the permittee must comply with the recordkeeping requirements for continuous process vents specified in 40 CFR 63 subpart SS (Condition 69). [40 CFR 63.1416(e)(1)(i)]

63.d.ii. *Controlled aggregate batch vent streams continuous compliance records* – The following continuous compliance records must be kept, as applicable: [40 CFR 63.1416(e)(3)]

63.d.ii.1. The permittee of an aggregate batch vent stream that uses a control device to comply with the percent reduction requirement of Condition 56.a.i.2 must keep the following records, as applicable, readily accessible: [40 CFR 63.1416(e)(3)(i)]

63.d.ii.1.A. Continuous records of the equipment operating parameters specified to be monitored under Condition 62.b as applicable, and listed in Table 3 to Subpart OOO of 40 CFR 63, or specified by the Administrator in accordance with Condition 64.b as allowed under Condition 62.e. Records must be kept as specified under Condition 63.b. [40 CFR 63.1416(e)(3)(i)(A)]

63.d.ii.1.B. Records of the daily average value of each continuously monitored parameter, as specified in Condition 63.b. [40 CFR 63.1416(e)(3)(i)(B)]

63.d.ii.2. The permittee of an aggregate batch vent stream that uses a control device to comply with Condition 56.a.i must keep the following records, as applicable, readily accessible: [40 CFR 63.1416(e)(3)(ii)]

63.d.ii.2.A. Hourly records of whether the flow indicator for bypass lines

specified in Condition 62.d was operating and whether a diversion was detected at any time during the hour. Also, records of the times and durations of periods when the vent is diverted from the control device or the flow indicator specified in Condition 62.d is not operating. [40 CFR 63.1416(e)(3)(ii)(A)]

63.d.ii.2.B. Where a seal or closure mechanism is used to comply with Condition 62.d, hourly records of whether a diversion was detected at any time are not required. The permittee must record whether the monthly visual inspection of the seals or closure mechanisms has been done, and must record the occurrence of all periods when the seal mechanism is broken, the bypass line damper or valve position has changed, or the key for a lock-and-key type configuration has been checked out, and records of any car-seal that has broken. [40 CFR 63.1416(e)(3)(ii)(B)]

63.d.ii.2.C. Records specifying the times and duration of periods of monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments. In addition, records specifying any other periods of process or control device operation when monitors are not operating. [40 CFR 63.1416(e)(3)(ii)(C)]

63.e. *Other records or documentation* – [40 CFR 63.1416(g)]

63.e.i. For continuous monitoring systems used to comply with 40 CFR 63 subpart OOO, the permittee must keep records documenting the completion of calibration checks and records documenting the maintenance of continuous monitoring systems that are specified in the manufacturer's instructions or that are specified in other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately. [40 CFR 63.1416(g)(1)]

63.e.ii. The permittee of a heat exchange system located at an affected source must retain the following records: [40 CFR 63.1416(g)(4)]

63.e.ii.1. Monitoring data required by Condition 57 indicating a leak and the date when the leak was detected, and if demonstrated not to be a leak, the basis for that determination. [40 CFR 63.1416(g)(4)(i)]

63.e.ii.2. Records of any leaks detected by procedures subject to Condition 57.c.ii and the date the leak was detected. [40 CFR 63.1416(g)(4)(ii)]

63.e.ii.3. The dates of efforts to repair leaks. [40 CFR 63.1416(g)(4)(iii)]

63.e.ii.4. The method or procedure used to confirm repair of a leak and the date repair was confirmed. [40 CFR 63.1416(g)(4)(iv)]

63.e.iii. For pressure relief devices in organic HAP service, keep records of the information specified in Conditions 63.e.iii.1 through 63.e.iii.5, as applicable. [40 CFR 63.1416(g)(5)]

63.e.iii.1. A list of identification numbers for pressure relief devices that vent to a fuel gas system, process, drain system, or closed-vent system and control device, under the provisions in Condition 59.d. [40 CFR 63.1416(g)(5)(i)]

63.e.iii.2. A list of identification numbers for pressure relief devices subject to the provisions in Condition 59.a. [40 CFR 63.1416(g)(5)(ii)]

63.e.iii.3. A list of identification numbers for pressure relief devices equipped with rupture disks, under the provisions in Condition 59.b.ii. [40 CFR 63.1416(g)(5)(iii)]

63.e.iii.4. The dates and results of the monitoring following a pressure release for each

pressure relief device subject to the provisions in Condition 59.a and 59.b. The results must include: [40 CFR 63.1416(g)(5)(iv)]

63.e.iii.4.A. The background level measured during each compliance test. [40 CFR 63.1416(g)(5)(iv)(A)]

63.e.iii.4.B. The maximum instrument reading measured at each piece of equipment during each compliance test. [40 CFR 63.1416(g)(5)(iv)(B)]

63.e.iii.5. For pressure relief devices in organic HAP service subject to Condition 59.c, keep records of each pressure release to the atmosphere, including the following information: [40 CFR 63.1416(g)(5)(v)]

63.e.iii.5.A. The source, nature, and cause of the pressure release. [40 CFR 63.1416(g)(5)(v)(A)]

63.e.iii.5.B. The date, time, and duration of the pressure release. [40 CFR 63.1416(g)(5)(v)(B)]

63.e.iii.5.C. An estimate of the quantity of total HAP emitted during the pressure release and the calculations used for determining this quantity. [40 CFR 63.1416(g)(5)(v)(C)]

63.e.iii.5.D. The actions taken to prevent this pressure release. [40 CFR 63.1416(g)(5)(v)(D)]

63.e.iii.5.E. The measures adopted to prevent future such pressure releases. [40 CFR 63.1416(g)(5)(v)(E)]

63.e.iv. The permittee must record, on a semiannual basis, the information specified in Conditions 63.e.iv.1 through 63.e.iv.3, as applicable, for those planned routine maintenance operations that would require the control device not to meet the requirements of Condition 53.a or 53.b. [40 CFR 63.1416(g)(6)]

63.e.iv.1. A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6 months. This description must include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods. [40 CFR 63.1416(g)(6)(i)]

63.e.iv.2. A description of the planned routine maintenance that was performed for the control device during the previous 6 months. This description must include the type of maintenance performed and the total number of hours during these 6 months that the control device did not meet the requirement of Condition 53.a or 53.b, as applicable, due to planned routine maintenance. [40 CFR 63.1416(g)(6)(ii)]

63.e.iv.3. For each storage vessel for which planned routine maintenance was performed during the previous 6 months, record the height of the liquid in the storage vessel at the time the control device is bypassed to conduct the planned routine maintenance and at the time the control device is placed back in service after completing the routine maintenance. These records must include the date and time the liquid height was measured. [40 CFR 63.1416(g)(6)(iii)]

64. Reporting Requirements: [40 CFR 63.1417]

64.a. *Periodic Reports* – Except as specified in Condition 64.a.xii, a report containing the information in Condition 64.a.ii or containing the information in Conditions 64.a.iii through 64.a.xi and 64.a.xiii through 64.a.xiv, as appropriate, must be submitted semiannually as detailed in Condition 112. In addition, for equipment leaks subject to Condition 58, the permittee must submit the information specified in 40 CFR 63 subpart UU, and for heat exchange systems subject to Condition 57, the permittee must submit the information specified in Condition 57. Condition 62 will govern the use

of monitoring data to determine compliance for emissions points required to apply controls by the provisions of 40 CFR 63 subpart OOO. [40 CFR 63.1417(f)]

64.a.i. Except as specified in Condition 64.a.ii, a report containing the information in Condition 64.a.ii or containing the information in Conditions 64.a.iii through 64.a.xi and 64.a.xiii through 64.a.xiv, as appropriate, must be submitted semiannually as detailed in Condition 112. The first report must be submitted no later than 240 days after the date the Notification of Compliance Status is due and must cover the 6-month period beginning on the date the Notification of Compliance Status is due. Subsequent reports must cover each preceding 6-month period. [40 CFR 63.1417(f)(1)]

64.a.ii. If none of the compliance exceptions specified in Conditions 64.a.iii through 64.a.xi and 64.a.xiii through 64.a.xiv occurred during the 6-month period, the Periodic Report required by Condition 64.a.i must be a statement that the affected source was in compliance for the preceding 6-month period and no activities specified in Conditions 64.a.iii through 64.a.xi and 64.a.xiii through 64.a.xiv occurred during the preceding 6-month period. [40 CFR 63.1417(f)(2)]

64.a.iii. For the permittee of an affected source complying with the provisions of Conditions 53 through 57 for any emission point, Periodic Reports must include: [40 CFR 63.1417(f)(3)]

64.a.iii.1. All information specified in 40 CFR 63 subpart WW and subpart SS for storage vessels; 40 CFR 63 subpart SS for continuous process vents required to comply with subpart SS; 40 CFR 63.1416(d)(3)(ii) for batch process vents; and 40 CFR 63.1416(e) for aggregate batch vent stream. [40 CFR 63.1417(f)(3)(i)]

64.a.iii.2. The daily average values, batch cycle daily average values, or block average values of monitored parameters for deviations, as specified in Condition 60, of operating parameters. In addition, the periods and duration of periods when monitoring data were not collected must be specified. [40 CFR 63.1417(f)(3)(ii)]

64.a.iv. Notification if one or more emission point(s) or one or more APPU is added to an affected source. The permittee must submit the following information: [40 CFR 63.1417(f)(4)]

64.a.iv.1. A description of the addition to the affected source; [40 CFR 63.1417(f)(4)(i)]

64.a.iv.2. Notification of applicability status (i.e., does the emission point require control) of the additional emission point, if appropriate, or notification of all emission points in the added APPU. [40 CFR 63.1417(f)(4)(ii)]

64.a.v. If there is a deviation from the mass emission limit specified in Condition 54.a.i.3, Condition 55.b.ii, or Condition 56.b.ii, the following information, as appropriate, must be included: [40 CFR 63.1417(f)(5)]

64.a.v.1. The cumulative average monthly emission rate or the 12-month rolling average monthly emission rate, as appropriate. [40 CFR 63.1417(f)(5)(i)]

64.a.v.2. The individual monthly emission rate data points making up the cumulative average monthly emission rate or the 12-month rolling average monthly emission rate, as appropriate. [40 CFR 63.1417(f)(5)(ii)]

64.a.vi. If any performance tests are reported in a Periodic Report, the following information must be included: [40 CFR 63.1417(f)(6)]

64.a.vi.1. One complete test report must be submitted for each test method used for a particular kind of emission point tested. A complete test report must contain the information specified in 40 CFR 63.1417(e)(1)(ii). [40 CFR

63.1417(f)(6)(i)]

64.a.vi.2. For additional tests performed for the same kind of emission point using the same method, results and any other information required must be submitted, but a complete test report is not required. [40 CFR 63.1417(f)(6)(ii)]

64.a.vii. The Periodic Report must include the results for each change made to a primary product determination for amino/phenolic resins made under 40 CFR 63.1400(g). [40 CFR 63.1417(f)(7)]

64.a.viii. The Periodic Report must include the results for each change made to a predominant use determination for a storage vessel belonging to an affected source subject to this subpart that is made under 40 CFR 63.1400(h)(6). [40 CFR 63.1417(f)(8)]

64.a.ix. If the permittee invokes the delay of repair provisions for a heat exchange system, the following information must be submitted, as appropriate. If the leak remains unrepaired, the information must also be submitted in each subsequent periodic report until repair of the leak is reported. [40 CFR 63.1417(f)(9)]

64.a.ix.1. The presence of the leak and the date that the leak was detected. [40 CFR 63.1417(f)(9)(i)]

64.a.ix.2. Whether or not the leak has been repaired. If the leak is repaired, the date the leak was successfully repaired. If the leak remains unrepaired, the expected date of repair. [40 CFR 63.1417(f)(9)(ii)]

64.a.ix.3. The reason(s) for delay of repair. If delay of repair is invoked due to the reasons described in Condition 57.e.ii, documentation of emissions estimates must be included. [40 CFR 63.1417(f)(9)(iii)]

64.a.x. Notification that the permittee has elected to comply with 40 CFR 63.1416(h), Reduced Recordkeeping Program. [40 CFR 63.1417(f)(10)]

64.a.xi. Notification that the permittee has elected to not retain the daily average, batch cycle daily average, or block average values, as appropriate, as specified in 40 CFR 63.1416(h)(2)(i). [40 CFR 63.1417(f)(11)]

64.a.xii. The permittee of an affected source must submit quarterly reports for particular emission points as specified in Conditions 64.a.xii.1 through 64.a.xii.4. [40 CFR 63.1417(f)(12)]

64.a.xii.1. The permittee of an affected source must submit quarterly reports for a period of 1 year for an emission point if the Administrator requests the permittee to submit quarterly reports for the emission point. [40 CFR 63.1417(f)(12)(i)]

64.a.xii.2. The quarterly reports must include all information specified in Conditions 64.a.iii through 64.a.xi and 64.a.xiii through 64.a.xiv applicable to the emission point for which quarterly reporting is required under Condition 64.a.xii.1. Information applicable to other emission points within the affected source must be submitted in the semiannual reports required under Condition 64.a.i. [40 CFR 63.1417(f)(12)(ii)]

64.a.xii.3. Quarterly reports must be submitted no later than 60 days after the end of each quarter. [40 CFR 63.1417(f)(12)(iii)]

64.a.xii.4. After quarterly reports have been submitted for an emission point for 1 year, the permittee may return to semiannual reporting for the emission point unless the Administrator requests the permittee to continue to submit quarterly reports. [40 CFR 63.1417(f)(12)(iv)]

64.a.xiii. For pressure relief devices, Periodic Reports must include the information specified in Conditions 64.a.xiii.1 through 64.a.xiii.3. [40 CFR 63.1417(f)(13)]

64.a.xiii.1. For pressure relief devices in organic HAP service subject to Condition 59,

report confirmation that all monitoring to show compliance was conducted within the reporting period. [40 CFR 63.1417(f)(13)(i)]

64.a.xiii.2. For pressure relief devices in organic HAP gas or vapor service subject to Condition 59.b, report any instrument reading of 500 ppm above background or greater, more than 5 days after the relief device returns to organic HAP gas or vapor service after a pressure release. [40 CFR 63.1417(f)(13)(ii)]

64.a.xiii.3. For pressure relief devices in organic HAP service subject to Condition 59.c, report each pressure release to the atmosphere, including the following information: [40 CFR 63.1417(f)(13)(iii)]

64.a.xiii.3.A. The source, nature, and cause of the pressure release. [40 CFR 63.1417(f)(13)(iii)(A)]

64.a.xiii.3.B. The date, time, and duration of the pressure release. [40 CFR 63.1417(f)(13)(iii)(B)]

64.a.xiii.3.C. An estimate of the quantity of total HAP emitted during the pressure release and the method used for determining this quantity. [40 CFR 63.1417(f)(13)(iii)(B)]

64.a.xiii.3.D. The actions taken to prevent this pressure release. [40 CFR 63.1417(f)(13)(iii)(D)]

64.a.xiii.3.E. The measures adopted to prevent future such pressure releases. [40 CFR 63.1417(f)(13)(iii)(E)]

64.a.xiv. For periods of storage vessel routine maintenance in which a control device is bypassed, the permittee must submit the information specified in Condition 63.e.iv.1 through 63.e.iv.3. [40 CFR 63.1417(f)(16)]

64.b. *Alternative monitoring parameters* – The permittee who has been directed by any section of 40 CFR 63 subpart OOO or any section of another subpart referenced by 40 CFR 63 subpart OOO that expressly referenced Condition 64.b to set unique monitoring parameters, or who requests approval to monitor a different parameter than those specified in Condition 62.b.i, must submit the information specified in Conditions 64.b.i through 64.b.iii in the Precompliance Report, as required by 40 CFR 63.1417(d). [40 CFR 63.1417(j)]

64.b.i. The required information must include a description of the parameter(s) to be monitored to ensure the recovery device, control device, or control technology is operated in conformance with its design and achieves the specified emission limit or percent reduction and an explanation of the criteria used to select the parameter(s). [40 CFR 63.1417(j)(1)]

64.b.ii. The required information must include a description of the methods and procedures that will be used to demonstrate that the parameter indicates proper operation, the schedule for this demonstration, and a statement that the permittee will establish a level for the monitored parameter as part of the Notification of Compliance Status report required in Condition 64.a, unless this information has already been included in the operating permit application. [40 CFR 63.1417(j)(2)]

64.b.iii. The required information must include a description of the proposed monitoring, recordkeeping, and reporting system to include the frequency and content of monitoring, recordkeeping, and reporting. Further, the rationale for the proposed monitoring, recordkeeping, and reporting system must be included if either condition in Condition 64.b.iii.1 or 64.b.iii.2 is met:[40 CFR 63.1417(j)(3)]

64.b.iii.1. If monitoring and recordkeeping is not continuous; or [40 CFR 63.1417(j)(3)(i)]

64.b.iii.2. If reports of daily average values will not be included in Periodic Reports

when the monitored parameter value is above the maximum level or below the minimum level as established in the operating permit or the Notification of Compliance Status. [40 CFR 63.1417(j)(3)(i)]

40 CFR 63 Subpart SS – National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process [LRAPA 44-150(5)(jj)]

65. Applicable Requirements: *Closed vent system equipment and operating requirements* – Except for closed vent systems operated and maintained under negative pressure, the provisions of Condition 65 apply to closed vent systems collecting regulated material from a regulated source. [40 CFR 63.983(a)]

65.a. *Collection of emissions* – Each closed vent system must 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)]

65.b. *Period of operation* – Closed vent systems used to comply with the provisions of 40 CFR 63 subpart SS must be operated at all times when emissions are vented to, or collected by, them. [40 CFR 63.983(a)(2)]

65.c. *Bypass monitoring* – 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, the permittee must comply with the provisions of either Condition 65.c.i or 65.c.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)]

65.c.i. Properly install, maintain, and operate a flow indicator that is capable of taking periodic readings. Records must be generated as specified in Condition 69.a.ii.1. The flow indicator must be installed at the entrance to any bypass line. [40 CFR 63.983(a)(3)(i)]

65.c.ii. Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. Records must be generated as specified in Condition 69.a.ii.2. [40 CFR 63.983(a)(3)(ii)]

65.d. *Loading arms at transfer racks* – Each closed vent system collecting regulated material from a transfer rack must be designed and operated so that regulated material vapors collected at one loading arm will not pass through another loading arm in the rack to the atmosphere. [40 CFR 63.983(a)(4)]

65.e. *Pressure relief devices in a transfer rack's closed vent system* – The permittee of a transfer rack subject to 40 CFR 63 subpart SS must ensure that no pressure relief device in the transfer rack's closed vent system must open to the atmosphere during loading. Pressure relief devices needed for safety purposes are not subject to this paragraph. [40 CFR 63.983(a)(5)]

66. Monitoring Requirements: *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 must be generated as specified in Condition 69.a.iii and 69.a.iv. [40 CFR 63.983(b)]

66.a. Except for any closed vent systems that are designated as unsafe or difficult to inspect as provided in Conditions 66.b and 66.c, each closed vent system must be inspected as specified in Condition 66.a.i or 66.a.ii. [40 CFR 63.983(b)(1)]

66.a.i. If the closed vent system is constructed of hard-piping, the permittee must comply with the requirements specified Conditions 66.a.i.1 and 66.a.i.2. [40 CFR 63.983(b)(1)(i)]

66.a.i.1. Conduct an initial inspection according to the procedures in Condition 66.c; and [40 CFR 63.983(b)(1)(i)(A)]

66.a.i.2. Conduct annual inspections for visible, audible, or olfactory indications of leaks. [40 CFR 63.983(b)(1)(i)(B)]

66.a.ii. If the closed vent system is constructed of ductwork, the permittee must conduct an initial and annual inspection according to the procedures in Condition 66.c. [40 CFR

63.983(b)(1)(ii)]

66.b. Any parts of the closed vent system that are designated, as described in Condition 69.a.i, as unsafe to inspect are exempt from the inspection requirements of Condition 66.a if the conditions of Conditions 66.b.i and 66.b.ii are met. [40 CFR 63.983(b)(2)]

66.b.i. The permittee 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 Condition 66.a; and [40 CFR 63.983(b)(2)(i)]

66.b.ii. The permittee 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)]

66.c. Any parts of the closed vent system that are designated, as described in Condition 69.a.i, as difficult-to-inspect are exempt from the inspection requirements of Condition 66.a of this section if the provisions of Conditions 66.c.i and 66.c.ii apply. [40 CFR 63.983(b)(3)]

66.c.i. The permittee 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)]

66.c.ii. The permittee has a written plan that requires inspection of the equipment at least once every 5 years. [40 CFR 63.983(b)(3)(ii)]

66.d. For each bypass line, the permittee must comply with Condition 66.d.i or 66.d.ii. [40 CFR 63.983(b)(4)]

66.d.i. If a flow indicator is used, take a reading at least once every 15 minutes. [40 CFR 63.983(b)(4)(i)]

66.d.ii. 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)]

67. Monitoring Requirements: *Closed vent system inspection procedures* – The provisions of Condition 67 apply to closed vent systems collecting regulated material from a regulated source. [40 CFR 63.983(c)]

67.a. Each closed vent system subject to Condition 67 must be inspected according to the procedures specified in Conditions 67.a.i through 67.a.vii. [40 CFR 63.983(c)(1)]

67.a.i. Inspections must be conducted in accordance with Method 21 of 40 CFR part 60, appendix A, except as specified in in Conditions 67.a.i through 67.a.vii. [40 CFR 63.983(c)(1)(i)]

67.a.ii. Except as provided in Condition 67.a.iii, the detection instrument must 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(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)]

67.a.iii. If no instrument is available at the plant site that will meet the performance criteria of Method 21 specified in Condition 67.a.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 Condition 67.a.ii. [40 CFR 63.983(c)(1)(iii)]

67.a.iv. The detection instrument must 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)]

67.a.v. Calibration gases must be as specified in Conditions 67.a.v.1 through 67.a.v.3. [40 CFR 63.983(c)(1)(v)]

67.a.v.1. Zero air (less than 10 parts per million hydrocarbon in air); and [40 CFR 63.983(c)(1)(v)(A)]

67.a.v.2. 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 Condition 67.a.ii. In such cases, the 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)]

67.a.v.3. If the detection instrument's design allows for multiple calibration scales, then the lower scale must be calibrated with a calibration gas that is no higher than 2,500 parts per million. [40 CFR 63.983(c)(1)(v)(C)]

67.a.vi. The permittee may elect to adjust or not adjust instrument readings for background. If the permittee elects not to adjust readings for background, all such instrument readings must be compared directly to 500 parts per million to determine whether there is a leak. If the permittee elects to adjust instrument readings for background, the permittee must measure background concentration using the procedures in this section. The permittee must subtract the background reading from the maximum concentration indicated by the instrument. [40 CFR 63.983(c)(1)(vi)]

67.a.vii. If the permittee elects to adjust for background, the arithmetic difference between the maximum concentration indicated by the instrument and the background level must be compared with 500 parts per million for determining whether there is a leak. [40 CFR 63.983(c)(1)(vii)]

67.b. The instrument probe must 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)]

67.c. Except as provided in Condition 67.d, inspections must 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)]

67.d. Inspections of the closed vent system collecting regulated material from a transfer rack must be performed only while a tank truck or railcar is being loaded or is otherwise pressurized to normal operating conditions with regulated material or any other detectable gas or vapor. [40 CFR 63.983(c)(4)]

68. Applicable Requirements: *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)]

68.a. If there are visible, audible, or olfactory indications of leaks at the time of the annual visual inspections required by Condition 66.a.i.2, the permittee must follow the procedure specified in either Condition 68.a.i or 68.a.ii. [40 CFR 63.983(d)(1)]

68.a.i. The permittee must eliminate the leak. [40 CFR 63.983(d)(1)(i)]

68.a.ii. The permittee must monitor the equipment according to the procedures in Condition 67. [40 CFR 63.983(d)(1)(ii)]

68.b. Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, must be repaired as soon as practical, except as provided in Condition 68.c. Records must be generated as specified in Condition 69.a.iii when a leak is detected. [40 CFR 63.983(d)(2)]

68.b.i. A first attempt at repair must be made no later than 5 days after the leak is detected. [40 CFR 63.983(d)(2)(i)]

68.b.ii. Except as provided in Condition 68.c, repairs must 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)]

68.c. 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 permittee determines that emissions resulting from immediate repair would be greater than the emissions likely to result from delay of repair. Repair of such equipment must 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)]

69. Recordkeeping Requirements: [40 CFR 63.998(d)]

69.a. *Closed vent system records* – For closed vent systems the permittee must record the information specified in Conditions 69.a.i through 69.a.iv, as applicable. [40 CFR 63.998(d)(1)]

69.a.i. For closed vent systems collecting regulated material from a regulated source, the permittee must 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 Condition 66.b.i or 66.b.ii. [40 CFR 63.998(d)(1)(i)]

69.a.ii. 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 permittee must keep a record of the information specified in either Condition 69.a.ii.1 or 69.a.ii.2, as applicable. [40 CFR 63.998(d)(1)(ii)]

69.a.ii.1. Hourly records of whether the flow indicator specified under Condition 65.c.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)]

69.a.ii.2. Where a seal mechanism is used to comply with Condition 65.c.ii, hourly records of flow are not required. In such cases, the permittee must record that the monthly visual inspection of the seals or closure mechanisms has been done, and must 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)]

69.a.iii. For a closed vent system collecting regulated material from a regulated source, when a leak is detected as specified in Condition 68.b, the information specified in Conditions 69.a.iii.1 through 69.a.iii.6 must be recorded and kept for 5 years. [40 CFR 63.998(d)(1)(iii)]

69.a.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)]

69.a.iii.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)]

69.a.iii.3. The date of successful repair of the leak. [40 CFR 63.998(d)(1)(iii)(C)]

69.a.iii.4. The maximum instrument reading measured by the procedures in Condition 67 after the leak is successfully repaired or determined to be nonrepairable. [40 CFR 63.998(d)(1)(iii)(D)]

69.a.iii.5. "Repair delayed" and the reason for the delay if a leak is not repaired within 15 days after discovery of the leak. The permittee 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)]

69.a.iii.6. Copies of the Periodic Reports as specified in Condition 70, 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)]

69.a.iv. For each instrumental or visual inspection conducted in accordance with Condition 66.a for closed vent systems collecting regulated material from a regulated source during which no leaks are detected, the permittee must 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)]

70. Reporting Requirements: *Periodic reports* – [40 CFR 63.999(c)]

70.a. Periodic reports must include the reporting period dates, the total source operating time for the reporting period, and, as applicable, all information specified Condition 70 and 40 CFR 63 subpart OOO (Condition 64), including reports of periods when monitored parameters are outside their established ranges. [40 CFR 63.999(c)(1)]

70.b. For closed vent systems subject to the requirements of Conditions 65 through 68, the permittee must submit as part of the periodic report the information specified in Conditions 70.b.i through 70.b.iii, as applicable. [40 CFR 63.999(c)(2)]

70.b.i. The information recorded in Conditions 69.a.iii.2 through 69.a.iii.5; [40 CFR 63.999(c)(2)(i)]

70.b.ii. Reports of the times of all periods recorded under Condition 69.a.ii.1 when the vent stream is diverted from the control device through a bypass line; and [40 CFR 63.999(c)(2)(ii)]

70.b.iii. Reports of all times recorded under Condition 69.a.ii.2 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)]

40 CFR 63 Subpart UU – National Emission Standards for Equipment Leaks - Control Level 2 Standards [LRAPA 44-150(5)(ll)]

71. Applicable Requirements: *Equipment Identification* – [40 CFR 63.1022]

71.a. *General equipment identification* – Equipment subject to 40 CFR 63 subpart UU (Conditions 71 through 85) must 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)]

71.b. *Additional equipment identification* – In addition to the general identification required by Condition 71.a, equipment subject to any of the provisions in Conditions 72 through 83 must be specifically identified as required in Conditions 71.b.i through 71.b.v, as applicable. Condition 71.b does not apply to the permittee of a batch product process who elects to pressure test the batch product process equipment train pursuant to 40 CFR 63.1036. [40 CFR 63.1022(b)]

71.b.i. *Connectors* – Except for inaccessible, ceramic, or ceramic-lined connectors meeting the provision of Condition 76.e.ii and instrumentation systems identified pursuant to Condition 71.b.iv, identify the connectors subject to the requirements of 40 CFR 63 subpart UU. Connectors need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions of this subpart are identified as a group, and the number of connectors subject is indicated. With respect to connectors, the identification must be complete no later than the completion of the initial survey

required by Condition 71.a. [40 CFR 63.1022(b)(1)]

71.b.ii. *Routed to a process or fuel gas system or equipped with a closed vent system and control device* – Identify the equipment that the permittee elects to route to a process or fuel gas system or equip with a closed vent system and control device, under the provisions of Conditions 75.d.iii (pumps in light liquid service), 77.c.iii (agitators), 79.c (pressure relief devices in gas and vapor service), or 80.d (compressors). [40 CFR 63.1022(b)(2)]

71.b.iii. *Pressure relief devices* – Identify the pressure relief devices equipped with rupture disks, under the provisions of Condition 79.d. [40 CFR 63.1022(b)(3)]

71.b.iv. *Instrumentation systems* – Identify instrumentation systems subject to the provisions of Condition 78. Individual components in an instrumentation system need not be identified. [40 CFR 63.1022(b)(4)]

71.b.v. *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 this subpart must be recorded. [40 CFR 63.1022(b)(5)]

71.c. *Special equipment designations: Equipment that is unsafe or difficult-to-monitor* – [40 CFR 63.1022(c)]

71.c.i. *Designation and criteria for unsafe-to-monitor* – Valves meeting the provisions of Condition 74.d.i, pumps meeting the provisions of Condition 75.d.v, connectors meeting the provisions of Condition 76.e.i, and agitators meeting the provisions of Condition 77.c.vi may be designated unsafe-to-monitor if the permittee determines that monitoring personnel would be exposed to an immediate danger as a consequence of complying with the monitoring requirements of this subpart. Examples of unsafe-to-monitor equipment include, but is not limited to, equipment under extreme pressure or heat. [40 CFR 63.1022(c)(1)]

71.c.ii. *Designation and criteria for difficult-to-monitor* – Valves meeting the provisions of Condition 74.d.ii may be designated difficult-to-monitor if the provisions of Condition 71.c.ii.1 apply. Agitators meeting the provisions of Condition 77.c.iv may be designated difficult-to-monitor if the provisions of Condition 71.c.ii.2 apply. [40 CFR 63.1022(c)(2)]

71.c.ii.1. *Valves* – [40 CFR 63.1022(c)(2)(i)]

71.c.ii.1.A. The permittee 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)]

71.c.ii.1.B. The process unit or affected facility within which the valve is located is an existing source, or the permittee 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)]

71.c.ii.2. *Agitators* – The permittee 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)]

71.c.iii. *Identification of unsafe or difficult-to-monitor equipment* – The permittee must record the identity of equipment designated as unsafe-to-monitor according to the provisions of Condition 71.c.i and the planned schedule for monitoring this equipment. The permittee must record the identity of equipment designated as difficult-to-monitor according to the provisions of Condition 71.c.ii, 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)]

71.c.iv. *Written plan requirements* – [40 CFR 63.1022(c)(4)]

71.c.iv.1. The permittee of equipment designated as unsafe-to-monitor according to the provisions of Condition 71.c.i must 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 Condition 73 if a leak is detected. [40 CFR 63.1022(c)(4)(i)]

71.c.iv.2. The permittee of equipment designated as difficult-to-monitor according to the provisions of Condition 71.c.ii must 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 Condition 73 if a leak is detected. [40 CFR 63.1022(c)(4)(ii)]

71.d. *Special equipment designations: Equipment that is unsafe-to-repai*r – [40 CFR 63.1022(d)]

71.d.i. *Designation and criteria* – Connectors subject to the provisions of Condition 73.d may be designated unsafe-to-repair if the permittee determines that repair personnel would be exposed to an immediate danger as a consequence of complying with the repair requirements of this subpart, and if the connector will be repaired before the end of the next process unit or affected facility shutdown as specified in Condition 73.d. [40 CFR 63.1022(d)(1)]

71.d.ii. *Identification of equipment* – The identity of connectors designated as unsafe-to-repair and an explanation why the connector is unsafe-to-repair must be recorded. [40 CFR 63.1022(d)(2)]

71.e. *Special equipment designations: Compressors operating with an instrument reading of less than 500 parts per million above background* – Identify the compressors that the permittee 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)]

71.f. *Special equipment designations: Equipment in heavy liquid service* – The permittee of equipment in heavy liquid service must comply with the requirements of either Condition 71.f.i or 71.f.ii, as provided in Condition 71.f.iii. [40 CFR 63.1022(f)]

71.f.i. Retain information, data, and analyses used to determine that a piece of equipment is in heavy liquid service. [40 CFR 63.1022(f)(1)]

71.f.ii. When requested by LRAPA, demonstrate that the piece of equipment or process is in heavy liquid service. [40 CFR 63.1022(f)(2)]

71.f.iii. A determination or demonstration that a piece of equipment or process is in heavy liquid service must 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)]

72. Applicable Requirements: *Instrument and sensory monitoring for leaks* – [40 CFR 63.1023]

72.a. *Monitoring for leaks* – The permittee of a regulated source subject to 40 CFR 63 subpart UU must monitor regulated equipment as specified in Condition 72.a.i for instrument monitoring and Condition 72.a.ii for sensory monitoring. [40 CFR 63.1023(a)]

72.a.i. *Instrument monitoring for leaks* – [40 CFR 63.1023(a)(1)]

72.a.i.1. Valves in gas and vapor service and in light liquid service must be monitored pursuant to Condition 74.a. [40 CFR 63.1023(a)(1)(i)]

72.a.i.2. Pumps in light liquid service must be monitored pursuant to Condition 75.a. [40 CFR 63.1023(a)(1)(ii)]

72.a.i.3. Connectors in gas and vapor service and in light liquid service must be monitored pursuant to Condition 76.b. [40 CFR 63.1023(a)(1)(iii)]

72.a.i.4. Agitators in gas and vapor service and in light liquid service must be monitored pursuant to Condition 77.a. [40 CFR 63.1023(a)(1)(iv)]

72.a.i.5. Pressure relief devices in gas and vapor service must be monitored pursuant to Condition 79.b. [40 CFR 63.1023(a)(1)(v)]

72.a.i.6. Compressors designated to operate with an instrument reading less than 500 parts per million above background, as described in Condition 71.e, must be monitored pursuant to Condition 80.e. [40 CFR 63.1023(a)(1)(vi)]

72.a.ii. *Sensory monitoring for leaks* – [40 CFR 63.1023(a)(2)]

72.a.ii.1. Pumps in light liquid service must be observed pursuant to Conditions 75.a.iv and 75.d.i.5. [40 CFR 63.1023(a)(2)(i)]

72.a.ii.2. Agitators in gas and vapor service and in light liquid service must be observed pursuant to 77.a.iii or 77.c.i.4. [40 CFR 63.1023(a)(2)(iii)]

72.b. *Instrument monitoring methods* – Instrument monitoring, as required under 40 CFR 63 subpart UU, must comply with the requirements specified in Conditions 72.b.i through 72.b.v. [40 CFR 63.1023(b)]

72.b.i. *Monitoring method* – Monitoring must comply with Method 21 of 40 CFR part 60, appendix A, except as otherwise provided in Condition 72. [40 CFR 63.1023(b)(1)]

72.b.ii. *Detection instrument performance criteria* – [40 CFR 63.1023(b)(2)]

72.b.ii.1. Except as provided for in Condition 72.b.ii.2, the detection instrument must meet the performance criteria of Method 21 of 40 CFR 60 appendix A. Except for the instrument response factor definition specified in Section 3.6 of Method 21, the measured values will be representative of the composition of the process fluid and 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 must 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)]

72.b.ii.2. If there is no instrument commercially available that will meet the performance criteria specified in Condition 72.b.ii.1, 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 Condition 72.b.ii.1. [40 CFR 63.1023(b)(2)(ii)]

72.b.iii. *Detection instrument calibration procedure* – The detection instrument must be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR 60 appendix A. [40 CFR 63.1023(b)(3)]

72.b.iv. *Detection instrument calibration gas* – Calibration gases must be zero air (less than 10 parts per million of hydrocarbon in air); and the gases specified in Condition 72.b.iv.1 except as provided in Condition 72.b.iv.2. [40 CFR 63.1023(b)(4)]

72.b.iv.1. 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 must 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 must 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 permittee need not calibrate the scales that will not be used during that day's monitoring. [40 CFR 63.1023(b)(4)(i)]

72.b.iv.2. 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 Condition 72.b.ii.1. In such cases, the calibration gas may be a mixture of one or more of the compounds to be measured in air. [40 CFR 63.1023(b)(4)(ii)]

72.b.v. *Monitoring performance* – Monitoring must 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)]

72.c. *Instrument monitoring using background adjustments* – The permittee may elect to adjust or not to adjust the instrument readings for background. If the permittee elects not to adjust instrument readings for background, the permittee must monitor the equipment according to the procedures specified in Conditions 72.b.i through 72.b.v. In such cases, all instrument readings must be compared directly to the applicable leak definition for the monitored equipment to determine whether there is a leak or to determine compliance with Condition 79.a (pressure relief devices) or 80.e (alternative compressor standard). If the permittee elects to adjust instrument readings for background, the permittee must monitor the equipment according to the procedures specified in Conditions 72.c.i through 72.c.iv. [40 CFR 63.1023(c)]

72.c.i. The requirements of Conditions 72.b.i through 72.b.v must apply. [40 CFR 63.1023(c)(1)]

72.c.ii. The background level must be determined, using the procedures in Method 21 of 40 CFR 60 appendix A. [40 CFR 63.1023(c)(2)]

72.c.iii. The instrument probe must be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21 of 40 CFR 60 appendix A. [40 CFR 63.1023(c)(3)]

72.c.iv. The arithmetic difference between the maximum concentration indicated by the instrument and the background level must be compared to the applicable leak definition for the monitored equipment to determine whether there is a leak or to determine compliance with Condition 79.a (pressure relief devices) or 80.e (alternative compressor standard). [40 CFR 63.1023(c)(4)]

72.d. *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)]

72.e. *Leaking equipment identification and records* – [40 CFR 63.1023(e)]

72.e.i. When each leak is detected pursuant to the monitoring specified in Condition 72.a, a weatherproof and readily visible identification, must be attached to the leaking equipment. [40 CFR 63.1023(e)(1)]

72.e.ii. When each leak is detected, the information specified in Condition 73.e must be recorded and kept pursuant to the referencing subpart, except for the information for connectors complying with the 8 year monitoring period allowed under 76.b.iii.3 must be kept 5 years beyond the date of its last use. [40 CFR 63.1023(e)(2)]

73. Applicable Requirements: *Leak repair* – [40 CFR 63.1024]

73.a. *Leak repair schedule* – The permittee must repair each leak detected as soon as practical, but not later than 15 calendar days after it is detected, except as provided in Conditions 73.c and 73.d. A first attempt at repair as defined in this subpart must be made no later than 5 calendar days after

the leak is detected. First attempt at repair for pumps includes, but is not limited to, tightening the packing gland nuts and/or ensuring that the seal flush is operating at design pressure and temperature. 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)]

73.b. *Leak identification removal* – [40 CFR 63.1024(c)]

73.b.i. *Valves and connectors 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 Condition 74.c.ii, and no leak has been detected during that monitoring. The leak identification on a connector in gas/vapor or light liquid service may be removed after it has been monitored as specified in Condition 76.b.iii.4 and no leak has been detected during that monitoring. [40 CFR 63.1024(c)(1)]

73.b.ii. *Other equipment* – The identification that has been placed, pursuant to Condition 72.e.i, on equipment determined to have a leak, except for a valve or for a connector in gas/vapor or light liquid service that is subject to the provisions of Condition 76.b.iii.4, may be removed after it is repaired. [40 CFR 63.1024(c)(2)]

73.c. *Delay of repair* – Delay of repair is allowed for any of the conditions specified in Conditions 73.c.i through 73.c.v. The permittee must 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)]

73.c.i. 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 must occur as soon as practical, but no later than the end of the next process unit or affected facility shutdown, except as provided in Condition 73.c.v. [40 CFR 63.1024(d)(1)]

73.c.ii. 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)]

73.c.iii. Delay of repair for valves, connectors, and agitators is also allowed if the provisions of Conditions 73.c.iii.1 and 73.c.iii.2 are met. [40 CFR 63.1024(d)(3)]

73.c.iii.1. The permittee 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)]

73.c.iii.2. 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 Condition 83 or an alternative means of emissions limitation requested by the permittee pursuant to 40 CFR 63.1021(b). [40 CFR 63.1024(d)(3)(ii)]

73.c.iv. Delay of repair for pumps is also allowed if the provisions of Conditions 73.c.iv.1 and 73.c.iv.2 are met. [40 CFR 63.1024(d)(4)]

73.c.iv.1. Repair requires replacing the existing seal design with a new system that the permittee has determined that one of the specifications of Conditions 73.c.iv.1.A through 73.c.iv.1.C are met. [40 CFR 63.1024(d)(4)(i)]

73.c.iv.1.A. A dual mechanical seal system that meets the requirements of Condition 75.d.i will be installed; [40 CFR 63.1024(d)(4)(i)(A)]

73.c.iv.1.B. A pump that meets the requirements of Condition 75.d.ii will be installed; or [40 CFR 63.1024(d)(4)(i)(B)]

73.c.iv.1.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 Condition 75.d.iii will be installed; and [40 CFR 63.1024(d)(4)(i)(C)]

73.c.iv.2. 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)]

73.c.v. 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)]

73.d. *Unsafe-to-repair connectors* – Any connector that is designated, as described in Condition 71.d, as an unsafe-to-repair connector is exempt from the requirements of Condition 76.d, and Condition 73.a. [40 CFR 63.1024(e)]

73.e. *Leak repair records* – For each leak detected, the information specified in Conditions 73.e.i through 73.e.v must be recorded and maintained pursuant 40 CFR 63 subpart OOO. [40 CFR 63.1024(f)]

73.e.i. The date of first attempt to repair the leak. [40 CFR 63.1024(f)(1)]

73.e.ii. The date of successful repair of the leak. [40 CFR 63.1024(f)(2)]

73.e.iii. Maximum instrument reading measured by Method 21 of 40 CFR 60 appendix A at the time the leak is successfully repaired or determined to be nonrepairable. [40 CFR 63.1024(f)(3)]

73.e.iv. "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 Conditions 73.e.iv.1 and 73.e.iv.2. [40 CFR 63.1024(f)(4)]

73.e.iv.1. The permittee 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)]

73.e.iv.2. 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)]

73.e.v. Dates of process unit or affected facility shutdowns that occur while the equipment is unrepaired. [40 CFR 63.1024(f)(5)]

74. Applicable Requirements: *Valves in gas and vapor service and in light liquid service standards* – [40 CFR 63.1025]

74.a. *Leak detection* – Unless otherwise specified in a permittee-requested alternative means of emission limitation per 40 CFR 63.1021(b) or Condition 74.d, or in 40 CFR 63 subpart OOO (Conditions 51 through 64), the permittee must monitor all valves at the intervals specified in Conditions 74.a.iii and must comply with all other provisions Condition 74. [40 CFR 63.1025(b)]

74.a.i. *Monitoring method* – The valves must be monitored to detect leaks by the method specified in Condition 72.b and, as applicable, Condition 72.c. [40 CFR 63.1025(b)(1)]

74.a.ii. *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)]

74.a.iii. *Monitoring frequency* – The permittee must monitor valves for leaks at the intervals

specified in Conditions 74.a.iii.1 through 74.a.iii.5 and must keep the record specified in Condition 74.a.iii.6. [40 CFR 63.1025(b)(3)]

74.a.iii.1. If at least the greater of 2 valves or 2 percent of the valves in a process unit leak, as calculated according to Condition 74.b, the permittee must monitor each valve once per month. [40 CFR 63.1025(b)(3)(i)]

74.a.iii.2. At process units with less than the greater of 2 leaking valves or 2 percent leaking valves, the permittee must monitor each valve once each quarter, except as provided in Conditions 74.a.iii.3 through 74.a.iii.5. [40 CFR 63.1025(b)(3)(ii)]

74.a.iii.3. At process units with less than 1 percent leaking valves, the permittee may elect to monitor each valve once every two quarters. [40 CFR 63.1025(b)(3)(iii)]

74.a.iii.4. At process units with less than 0.5 percent leaking valves, the permittee may elect to monitor each valve once every four quarters. [40 CFR 63.1025(b)(3)(iv)]

74.a.iii.5. At process units with less than 0.25 percent leaking valves, the permittee may elect to monitor each valve once every 2 years. [40 CFR 63.1025(b)(3)(v)]

74.a.iii.6. The permittee must keep a record of the monitoring schedule for each process unit. [40 CFR 63.1025(b)(3)(vi)]

74.b. *Percent leaking valves calculation* – [40 CFR 63.1025(c)]

74.b.i. *Calculation basis and procedures* – [40 CFR 63.1025(c)(1)]

74.b.i.1. The permittee must 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 permittee has decided, all subsequent percentage calculations must be made on the same basis. [40 CFR 63.1025(c)(1)(i)]

74.b.i.2. The percent leaking valves for each monitoring period for each process unit must be calculated using the following equation: [40 CFR 63.1025(c)(1)(ii)]

$$\%V_L = \left({}^{V_L}/_{V_T}\right) \times 100$$

Where:

$\%V_L$ = Percent leaking valves.
V_L = Number of valves found leaking, excluding nonrepairable valves, as provided in Condition 74.b.iii, and including those valves found leaking pursuant to Conditions 74.c.ii.3.A and 74.c.ii.3.B.
V_T = The sum of the total number of valves monitored.

74.b.ii. *Calculation for monitoring frequency* – When determining monitoring frequency for each process unit subject to monthly, quarterly, or semiannual monitoring frequencies, the percent leaking valves must be the arithmetic average of the percent leaking valves from the last two monitoring periods. When determining monitoring frequency for each process unit subject to annual or biennial (once every 2 years) monitoring frequencies, the percent leaking valves must be the arithmetic average of the percent leaking valves from the last three monitoring periods. [40 CFR 63.1025(c)(2)]

74.b.iii. *Nonrepairable valves* – [40 CFR 63.1025(c)(3)]

74.b.iii.1. Nonrepairable valves must 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 Condition 74.b.iii.2. 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)]

74.b.iii.2. 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 must be included in the calculation of percent leaking valves. [40 CFR 63.1025(c)(3)(ii)]

74.c. *Leak repair* – [40 CFR 63.1025(d)]

74.c.i. If a leak is determined pursuant to Condition 74.a, 74.d.i, or 74.d.ii, then the leak must be repaired using the procedures in Condition 73, as applicable. [40 CFR 63.1025(d)(1)]

74.c.ii. After a leak has been repaired, the valve must be monitored at least once within the first 3 months after its repair. The monitoring required by Condition 74.c is in addition to the monitoring required to satisfy the definition of repaired and first attempt at repair. [40 CFR 63.1025(d)(2)]

74.c.ii.1. The monitoring must be conducted as specified in Conditions 72.b and 72.c, as appropriate, to determine whether the valve has resumed leaking. [40 CFR 63.1025(d)(2)(i)]

74.c.ii.2. Periodic monitoring required by Condition 74.a may be used to satisfy the requirements of Condition 74.c, if the timing of the monitoring period coincides with the time specified in Condition 74.c. Alternatively, other monitoring may be performed to satisfy the requirements of Condition 74.c, regardless of whether the timing of the monitoring period for periodic monitoring coincides with the time specified in Condition 74.c. [40 CFR 63.1025(d)(2)(ii)]

74.c.ii.3. If a leak is detected by monitoring that is conducted pursuant to Condition 74.c.ii, the permittee must follow the provisions of Conditions 74.c.ii.3.A and 74.c.ii.3.B, to determine whether that valve must be counted as a leaking valve for purposes of Condition 74.b.i.2. [40 CFR 63.1025(d)(2)(iii)]

74.c.ii.3.A. If the permittee elected to use periodic monitoring required by Condition 74.a to satisfy the requirements of Condition 74.c.ii, then the valve must be counted as a leaking valve. [40 CFR 63.1025(d)(2)(iii)(A)]

74.c.ii.3.B. If the permittee elected to use other monitoring, prior to the periodic monitoring required by Condition 74.a, to satisfy the requirements of Condition 74.c.ii, then the valve must 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)]

74.d. *Special provisions for valves* – [40 CFR 63.1025(e)]

74.d.i. *Unsafe-to-monitor valves* – Any valve that is designated, as described in Condition 71.c.i, as an unsafe-to-monitor valve is exempt from the requirements of Conditions 74.a and 74.c.ii and the permittee must monitor the valve according to the written plan specified in Condition 71.c.iv. [40 CFR 63.1025(e)(1)]

74.d.ii. *Difficult-to-monitor valves* – Any valve that is designated, as described in Condition 71.c.ii, as a difficult-to-monitor valve is exempt from the requirements of Condition 74.a and the permittee must monitor the valve according to the written plan specified in

Condition 71.c.iv. [40 CFR 63.1025(e)(2)]

74.d.iii. *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 Condition 74.a.iii.1. Instead, the permittee must monitor each valve in regulated material service for leaks once each quarter, as provided in Conditions 74.d.i and 74.d.ii. [40 CFR 63.1025(e)(3)]

75. Applicable Requirements: *Pumps in light liquid service standards* – [40 CFR 63.1026]

75.a. *Leak detection* – Unless otherwise specified in a permittee-requested alternative means of emission limitation per 40 CFR 63.1021(b), 40 CFR 63.1036, or 40 CFR 63.1037, or otherwise specified in Condition 75.d, the permittee must monitor each pump to detect leaks and must comply with all other provisions of Condition 75. [40 CFR 63.1026(b)]

75.a.i. *Monitoring method and frequency* – The pumps must be monitored monthly to detect leaks by the method specified in Condition 72.b and, as applicable, Condition 72.c. [40 CFR 63.1026(b)(1)]

75.a.ii. *Instrument reading that defines a leak* – The instrument reading that defines a leak is specified in Conditions 75.a.ii.1 through 75.a.ii.3. [40 CFR 63.1026(b)(2)]

75.a.ii.1. 5,000 parts per million or greater for pumps handling polymerizing monomers; [40 CFR 63.1026(b)(2)(i)]

75.a.ii.2. 2,000 parts per million or greater for pumps in food/medical service; and [40 CFR 63.1026(b)(2)(ii)]

75.a.ii.3. 1,000 parts per million or greater for all other pumps. [40 CFR 63.1026(b)(2)(iii)]

75.a.iii. *Leak repair exception* – For pumps to which a 1,000 parts per million leak definition applies, repair is not required unless an instrument reading of 2,000 parts per million or greater is detected. [40 CFR 63.1026(b)(3)]

75.a.iv. *Visual inspection* – Each pump must be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. The permittee must 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 permittee must follow the procedure specified in either Condition 75.a.iv.1 or 75.a.iv.2. [40 CFR 63.1026(b)(4)]

75.a.iv.1. The permittee must monitor the pump as specified in Condition 72.b and, as applicable, Condition 72.c. If the instrument reading indicates a leak as specified in Condition 75.a.ii, a leak is detected and it must be repaired using the procedures in Condition 73, except as specified in Condition 75.a.iii; or [40 CFR 63.1026(b)(4)(i)]

75.a.iv.2. The permittee must eliminate the visual indications of liquids dripping. [40 CFR 63.1026(b)(4)(ii)]

75.b. *Percent leaking pumps calculation* – [40 CFR 63.1026(c)]

75.b.i. 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 permittee must implement a quality improvement program for pumps that complies with the requirements of 40 CFR 63.1035. [40 CFR 63.1026(c)(2)]

75.b.ii. The number of pumps at a process unit or affected facility must 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 must not count in the percent leaking pumps calculation for that one monitoring period only. [40 CFR

63.1026(c)(3)]

75.b.iii. Percent leaking pumps must be determined by the following equation: [40 CFR 63.1026(c)(4)]

$$\%P_L = \left((P_L - P_S)/(P_T - P_S)\right) \times 100$$

Where:

$\%P_L$ = Percent leaking pumps
P_L = Number of pumps found leaking as determined through monthly monitoring as required in Condition 75.a.i. Do not include results from inspection of unsafe-to-monitor pumps pursuant to Condition 75.d.v.
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 Conditions 75.d.i, 75.d.ii, 75.d.iii, and 75.d.v.

75.c. *Leak repair* – If a leak is detected pursuant to Condition 75.a, then the leak must be repaired using the procedures in Condition 73, as applicable, unless otherwise specified in Condition 75.a.iv for leaks identified by visual indications of liquids dripping. [40 CFR 63.1026(d)]

75.d. *Special provisions for pumps* – [40 CFR 63.1026(e)]

75.d.i. *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 Condition 75.a, provided the requirements specified in Conditions 75.d.i.1 through 75.d.i.8 are met. [40 CFR 63.1026(e)(1)]

75.d.i.1. The permittee 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 permittee must 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)]

75.d.i.2. Each dual mechanical seal system must meet the requirements specified in Condition 75.d.i.2.A, 75.d.i.2.B, or 75.d.i.2.C. [40 CFR 63.1026(e)(1)(ii)]

75.d.i.2.A. Each dual mechanical seal system is operated with the barrier fluid at a pressure that is at all times (except periods of startup, shutdown, or malfunction) greater than the pump stuffing box pressure; or [40 CFR 63.1026(e)(1)(ii)(A)]

75.d.i.2.B. 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 Condition 83; or [40 CFR 63.1026(e)(1)(ii)(B)]

75.d.i.2.C. Equipped with a closed-loop system that purges the barrier fluid into a process stream. [40 CFR 63.1026(e)(1)(ii)(C)]

75.d.i.3. The barrier fluid is not in light liquid service. [40 CFR 63.1026(e)(1)(iii)]

75.d.i.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)]

75.d.i.5. Each pump is checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. The permittee must 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 permittee must follow the procedure specified in Conditions 75.d.i.5.A or 75.d.i.5.B prior to the next required inspection. [40 CFR 63.1026(e)(1)(v)]

75.d.i.5.A. The permittee must monitor the pump as specified in Condition 72.b and, as applicable, Condition 72.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 must be repaired using the procedures in Condition 73; or [40 CFR 63.1026(e)(1)(v)(A)]

75.d.i.5.B. The permittee must eliminate the visual indications of liquids dripping. [40 CFR 63.1026(e)(1)(v)(B)]

75.d.i.6. If indications of liquids dripping from the pump seal exceed the criteria established in Condition 75.d.i.1, or if based on the criteria established in Condition 75.d.i.1 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)]

75.d.i.7. Each sensor as described in Condition 75.d.i.4 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)]

75.d.i.8. When a leak is detected pursuant to Condition 75.d.i.4, it must be repaired as specified in Condition 73. [40 CFR 63.1026(e)(1)(viii)]

75.d.ii. *No external shaft* – Any pump that is designed with no externally actuated shaft penetrating the pump housing is exempt from the requirements of Condition 75.a. [40 CFR 63.1026(e)(2)]

75.d.iii. *Routed to a process or fuel gas system or equipped with a closed vent system* – Any pump that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage from the pump to a control device meeting the requirements of Condition 83 is exempt from the requirements of Condition 75.a. [40 CFR 63.1026(e)(3)]

75.d.iv. *90 percent exemption* – If more than 90 percent of the pumps at a process unit or affected facility meet the criteria in either Condition 75.d.i or 75.d.ii, the process unit or affected facility is exempt from the percent leaking calculation in Condition 75.b. [40 CFR 63.1026(e)(5)]

75.d.v. *Unsafe-to-monitor pumps* – Any pump that is designated, as described in Condition 71.c.i, as an unsafe-to-monitor pump is exempt from the requirements of Condition 75.a, the monitoring and inspection requirements of Conditions 75.d.i.1 through 75.d.i.5, and the permittee must monitor and inspect the pump according to the written plan specified in Condition 71.c.iv. [40 CFR 63.1026(e)(6)]

76. Applicable Requirements: *Connectors in gas and vapor service and in light liquid service standards* – [40 CFR 63.1027]

76.a. *Compliance schedule* – The permittee must monitor all connectors in each process unit initially for leaks by the later of either 12 months after the compliance date as specified in 40 CFR 63 subpart OOO or 12 months after initial startup. If all connectors in each process unit have been monitored for leaks prior to the compliance date specified in 40 CFR 63 subpart OOO, no initial monitoring is required provided either no process changes have been made since the monitoring or permittee can determine that the results of the monitoring, with or without adjustments, reliably demonstrate compliance despite process changes. If required to monitor because of a process change, the permittee is required to monitor only those connectors involved in the process change. [40 CFR 63.1027(a)]

76.b. *Leak detection* – Unless otherwise specified in a permittee-requested alternative means of

emission limitation per 40 CFR 63.1021(b), 40 CFR 63.1036, or 40 CFR 63.1037, or otherwise specified in Condition 76.e, the permittee must monitor all connectors in gas and vapor and light liquid service as specified in Conditions 76.a and 76.b.iii. [40 CFR 63.1027(b)]

76.b.i. *Monitoring method* – The connectors must be monitored to detect leaks by the method specified in Condition 72.b and, as applicable, Condition 72.c. [40 CFR 63.1027(b)(1)]

76.b.ii. *Instrument reading that defines a leak* – If an instrument reading greater than or equal to 500 parts per million is measured, a leak is detected. [40 CFR 63.1027(b)(2)]

76.b.iii. *Monitoring periods* – The permittee must perform monitoring, subsequent to the initial monitoring required in Condition 76.a, as specified in Conditions 76.b.iii.1 through 76.b.iii.3, and must comply with the requirements of Conditions 76.b.iii.4 and 76.b.iii.5. The required period in which monitoring must be conducted must be determined from Conditions 76.b.iii.1 through 76.b.iii.3 using the monitoring results from the preceding monitoring period. The percent leaking connectors must be calculated as specified in Condition 76.c. [40 CFR 63.1027(b)(3)]

76.b.iii.1. If the percent leaking connectors in the process unit was greater than or equal to 0.5 percent, then monitor within 12 months (1 year). [40 CFR 63.1027(b)(3)(i)]

76.b.iii.2. If the percent leaking connectors in the process unit was greater than or equal to 0.25 percent but less than 0.5 percent, then monitor within 4 years. The permittee may comply with the requirements of Condition 76.b by monitoring at least 40 percent of the connectors within 2 years of the start of the monitoring period, provided all connectors have been monitored by the end of the 4 year monitoring period. [40 CFR 63.1027(b)(3)(ii)]

76.b.iii.3. If the percent leaking connectors in the process unit was less than 0.25 percent, then monitor as provided in Condition 76.b.iii.3.A and either Condition 76.b.iii.3.B or 76.b.iii.3.C, as appropriate. [[40 CFR 63.1027(b)(3)(iii)]

76.b.iii.3.A. The permittee must monitor at least 50 percent of the connectors within 4 years of the start of the monitoring period. [40 CFR 63.1027(b)(3)(iii)(A)]

76.b.iii.3.B. If the percent leaking connectors calculated from the monitoring results in Condition 76.b.iii.3.A is greater than or equal to 0.35 percent of the monitored connectors, the permittee must monitor as soon as practical, but within the next 6 months, all connectors that have not yet been monitored during the monitoring period. At the conclusion of monitoring, a new monitoring period must be started pursuant to Condition 76.b.iii, based on the percent leaking connectors of the total monitored connectors. [40 CFR 63.1027(b)(3)(iii)(B)]

76.b.iii.3.C. If the percent leaking connectors calculated from the monitoring results in Condition 76.b.iii.3.A is less than 0.35 percent of the monitored connectors, the permittee must monitor all connectors that have not yet been monitored within 8 years of the start of the monitoring period. [40 CFR 63.1027(b)(3)(iii)(C)]

76.b.iii.4. If, during the monitoring conducted pursuant to Conditions 76.b.iii.1 through 76.b.iii.3, a connector is found to be leaking, it must be re-monitored once within 90 days after repair to confirm that it is not leaking. [40 CFR 63.1027(b)(3)(iv)]

76.b.iii.5. The permittee must keep a record of the start date and end date of each

monitoring period under this section for each process unit. [40 CFR 63.1027(b)(3)(v)]

76.c. *Percent leaking connectors calculation* – For use in determining the monitoring frequency, as specified in Conditions 76.a and 76.b.iii, the percent leaking connectors as used in Conditions 76.a and 76.b.iii must be calculated by using the following equation: [40 CFR 63.1027(c)]

$$\%C_L = {}^{C_L}/_{C_t} \times 100$$

Where:

$\%C_L$ = Percent leaking connectors as determined through periodic monitoring required in Conditions 76.a and 76.b.iii.1 through 76.b.iii.3.
C_L = Number of connectors measured at 500 parts per million or greater, by the method specified in Condition 72.b.
C_t = Total number of monitored connectors in the process unit or affected facility.

76.d. *Leak repair* – If a leak is detected pursuant to Conditions 76.a and 76.b, then the leak must be repaired using the procedures in Condition 73, as applicable. [40 CFR 63.1027(d)]

76.e. *Special provisions for connectors* – [40 CFR 63.1027(e)]

76.e.i. *Unsafe-to-monitor connectors* – Any connector that is designated, as described in Condition 71.c.i, as an unsafe-to-monitor connector is exempt from the requirements of Conditions 76.a and 76.b and the permittee must monitor according to the written plan specified in Condition 71.c.iv. [40 CFR 63.1027(e)(1)]

76.e.ii. *Inaccessible, ceramic, or ceramic-lined connectors* – [40 CFR 63.1027(e)(2)]

76.e.ii.1. Any connector that is inaccessible or that is ceramic or ceramic-lined (e.g., porcelain, glass, or glass-lined), is exempt from the monitoring requirements of Conditions 76.a and 76.b, from the leak repair requirements of Condition 76.d, and from the recordkeeping and reporting requirements of Conditions 84 and 85. An inaccessible connector is one that meets any of the provisions specified in Conditions 76.e.ii.1.A through 76.e.ii.1.F, as applicable. [40 CFR 63.1027(e)(2)(i)]

76.e.ii.1.A. Buried; [40 CFR 63.1027(e)(2)(i)(A)]

76.e.ii.1.B. Insulated in a manner that prevents access to the connector by a monitor probe; [40 CFR 63.1027(e)(2)(i)(B)]

76.e.ii.1.C. Obstructed by equipment or piping that prevents access to the connector by a monitor probe; [40 CFR 63.1027(e)(2)(i)(C)]

76.e.ii.1.D. Unable to be reached from a wheeled scissor-lift or hydraulic-type scaffold that would allow access to connectors up to 7.6 meters (25 feet) above the ground. [40 CFR 63.1027(e)(2)(i)(C)]

76.e.ii.1.E. Inaccessible because it would require elevating the monitoring personnel more than 2 meters (7 feet) above a permanent support surface or would require the erection of scaffold; [40 CFR 63.1027(e)(2)(i)(E)]

76.e.ii.1.F. Not able to be accessed at any time in a safe manner to perform monitoring. Unsafe access includes, but is not limited to, the use of a wheeled scissor-lift on unstable or uneven terrain, the use of a motorized man-lift basket in areas where an ignition potential exists, or access would require near proximity to hazards such as electrical lines, or would risk damage to equipment. [40 CFR 63.1027(e)(2)(i)(F)]

76.e.ii.2. If any inaccessible, ceramic or ceramic-lined connector is observed by visual, audible, olfactory, or other means to be leaking, the visual, audible, olfactory, or other indications of a leak to the atmosphere must be eliminated as soon as practical. [40 CFR 63.1027(e)(2)(ii)]

77. Applicable Requirements: *Agitators in gas and vapor service and in light liquid service standards* – [40 CFR 63.1028]

77.a. *Leak detection* – [40 CFR 63.1028(c)]

77.a.i. *Monitoring method* – Each agitator seal must be monitored monthly to detect leaks by the methods specified in Condition 72.b and, as applicable, Condition 72.c, except as specified in a permittee-requested alternative means of emission limitation per 40 CFR 63.1021(b), 40 CFR 63.1036, or 40 CFR 63.1037, or as specified in Condition 77.c. [40 CFR 63.1028(c)(1)]

77.a.ii. *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)]

77.a.iii. *Visual inspection* – [40 CFR 63.1028(c)(3)]

77.a.iii.1. Each agitator seal must be checked by visual inspection each calendar week for indications of liquids dripping from the agitator seal. The permittee must document that the inspection was conducted and the date of the inspection. [40 CFR 63.1028(c)(3)(i)]

77.a.iii.2. If there are indications of liquids dripping from the agitator seal, the permittee must follow the procedures specified in Conditions 77.a.iii.2.A or 77.a.iii.2.B prior to the next required inspection. [40 CFR 63.1028(c)(3)(ii)]

77.a.iii.2.A. The permittee must monitor the agitator seal as specified in Condition 72.b and, as applicable, Condition 72.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 must be repaired according to Condition 77.b; or [40 CFR 63.1028(c)(3)(ii)(A)]

77.a.iii.2.B. The permittee must eliminate the indications of liquids dripping from the agitator seal. [40 CFR 63.1028(c)(3)(ii)(B)]

77.b. *Leak repair* – If a leak is detected, then the leak must be repaired using the procedures in Condition 73. [40 CFR 63.1028(d)]

77.c. *Special provisions for agitators* – [40 CFR 63.1028(e)]

77.c.i. *Dual mechanical seal* – Each agitator equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of Condition 77.a, provided the requirements specified in Conditions 77.c.i.1 through 77.c.i.6 are met. [40 CFR 63.1028(e)(1)]

77.c.i.1. Each dual mechanical seal system must meet the applicable requirements specified in Conditions 77.c.i.1.A, 77.c.i.1.B, or 77.c.i.1.C. [40 CFR 63.1028(e)(1)(i)]

77.c.i.1.A. Operated with the barrier fluid at a pressure that is at all times (except during periods of startup, shutdown, or malfunction) greater than the agitator stuffing box pressure; or [40 CFR 63.1028(e)(1)(i)(A)]

77.c.i.1.B. 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

Condition 83; or [40 CFR 63.1028(e)(1)(i)(B)]

77.c.i.1.C. Equipped with a closed-loop system that purges the barrier fluid into a process stream. [40 CFR 63.1028(e)(1)(i)(C)]

77.c.i.2. The barrier fluid is not in light liquid service. [40 CFR 63.1028(e)(1)(ii)]

77.c.i.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)]

77.c.i.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 permittee must follow the procedure specified in Conditions 77.c.i.4.A or 77.c.i.4.B prior to the next required inspection. [40 CFR 63.1028(e)(1)(iv)]

77.c.i.4.A. The permittee must monitor the agitator seal as specified in Condition 72.b and, as applicable, Condition 72.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 must be repaired using the procedures in Condition 73, or [40 CFR 63.1028(e)(1)(iv)(A)]

77.c.i.4.B. The permittee must eliminate the visual indications of liquids dripping. [40 CFR 63.1028(e)(1)(iv)(B)]

77.c.i.5. Each sensor as described in Condition 77.c.i.3 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)]

77.c.i.6. The permittee of each dual mechanical seal system must meet the requirements specified in Conditions 77.c.i.6.A and 77.c.i.6.B. [40 CFR 63.1028(e)(1)(vi)]

77.c.i.6.A. The permittee must 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 must be repaired pursuant to Condition 73, as applicable. [40 CFR 63.1028(e)(1)(vi)(A)]

77.c.i.6.B. The permittee must 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)]

77.c.ii. *No external shaft* – Any agitator that is designed with no externally actuated shaft penetrating the agitator housing is exempt from Condition 77.a. [40 CFR 63.1028(e)(2)]

77.c.iii. *Routed to a process or fuel gas system or equipped with a closed vent system* – Any agitator that is routed to a process or fuel gas system that captures and transports leakage from the agitator to a control device meeting the requirements of Condition 83 is exempt from the requirements of Condition 77.a. [40 CFR 63.1028(e)(3)]

77.c.iv. *Difficult-to-monitor agitator seals* – Any agitator seal that is designated, as described in Condition 71.c.ii, as a difficult-to-monitor agitator seal is exempt from the requirements of Condition 77.a and the permittee must monitor the agitator seal according to the written plan specified in Condition 71.c.iv. [40 CFR 63.1028(e)(5)]

77.c.v. *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 Condition 77.a. [40 CFR 63.1028(e)(6)]

77.c.vi. *Unsafe-to-monitor agitator seals* – Any agitator seal that is designated, as described in Condition 71.c.i, as an unsafe-to-monitor agitator seal is exempt from the requirements of Condition 77.a and the permittee of the agitator seal monitors the agitator seal according to the written plan specified in Condition 71.c.iv. [40 CFR 63.1028(e)(7)]

78. Applicable Requirements: *Pumps, valves, connectors, and agitators in heavy liquid service; pressure relief devices in liquid service; and instrumentation systems standards* – [40 CFR 63.1029]

78.a. *Leak detection* – [40 CFR 63.1029(b)]

78.a.i. *Monitoring method* – Unless otherwise specified in a permittee-requested alternative means of emission limitation per 40 CFR 63.1021(b), 40 CFR 63.1036, or 40 CFR 63.1037, the permittee must comply with Conditions 78.a.i and 78.a.ii. Pumps, valves, connectors, and agitators in heavy liquid service; pressure relief devices in light liquid or heavy liquid service; and instrumentation systems must be monitored within 5 calendar days by the method specified in Condition 72.b and, as applicable, Condition 72.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 Condition 78.b. [40 CFR 63.1029(b)(1)]

78.a.ii. *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 Condition 78.a.i, a leak is detected and must be repaired pursuant to Condition 73, as applicable. [40 CFR 63.1029(b)(2)]

78.b. *Leak repair* – For equipment identified in Condition 78.a that is not monitored by the method specified in Condition 72.b and, as applicable, Condition 72.c, repaired must 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)]

79. Applicable Requirements: *Pressure relief devices in gas and vapor service standards* – [40 CFR 63.1030]

79.a. *Compliance standard* – Except during pressure releases as provided for in Condition 79.b, or as otherwise specified in Conditions 79.c and 79.d, each pressure relief device in gas and vapor service must be operated with an instrument reading of less than 500 parts per million as measured by the method specified in Condition 72.b and, as applicable, Condition 72.c. [40 CFR 63.1030(b)]

79.b. *Pressure relief requirements* – [40 CFR 63.1030(c)]

79.b.i. After each pressure release, the pressure relief device must be returned to a condition indicated by an instrument reading of less than 500 parts per million, as soon as practical, but no later than 5 calendar days after each pressure release, except as provided in Condition 73.c. [40 CFR 63.1030(c)(1)]

79.b.ii. The pressure relief device must be monitored no later than five calendar days after the pressure to confirm the condition indicated by an instrument reading of less than 500 parts per million above background, as measured by the method specified in Condition 72.b and, as applicable, Condition 72.c. [40 CFR 63.1030(c)(2)]

79.b.iii. The permittee must record the dates and results of the monitoring required by Condition 79.b.ii following a pressure release including the background level measured and the

maximum instrument reading measured during the monitoring. [40 CFR 63.1030(c)(3)]

79.c. *Pressure relief devices routed to a process or fuel gas system or equipped with a closed vent system and control device* – Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage from the pressure relief device to a control device meeting the requirements of Condition 83 is exempt from the requirements of Conditions 79.a and 79.b. [40 CFR 63.1030(d)]

79.d. *Rupture disk exemption* – Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of Conditions 79.a and 79.b provided the permittee installs a replacement rupture disk upstream of the pressure relief device as soon as practical after each pressure release but no later than 5 calendar days after each pressure release, except as provided in Condition 73.c. [40 CFR 63.1030(e)]

80. Applicable Requirements: *Compressors standards* – [40 CFR 63.1031]

80.a. *Seal system standard* – Each compressor must 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 Conditions 80.d and 80.e. Each compressor seal system must meet the applicable requirements specified in Condition 80.a.i, 80.a.ii, or 80.a.iii. [40 CFR 63.1031(b)]

80.a.i. Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure at all times (except during periods of startup, shutdown, or malfunction); or [40 CFR 63.1031(b)(1)]

80.a.ii. 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 Condition 83; or [40 CFR 63.1031(b)(2)]

80.a.iii. Equipped with a closed-loop system that purges the barrier fluid directly into a process stream. [40 CFR 63.1031(b)(3)]

80.b. *Barrier fluid system* – The barrier fluid must not be in light liquid service. Each barrier fluid system must be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both. Each sensor must be observed daily or must be equipped with an alarm unless the compressor is located within the boundary of an unmanned plant site. [40 CFR 63.1031(c)]

80.c. *Failure criterion and leak detection* – [40 CFR 63.1031(d)]

80.c.i. The permittee must 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 must be repaired pursuant to Condition 73, as applicable. [40 CFR 63.1031(d)(1)]

80.c.ii. The permittee must 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)]

80.d. *Routed to a process or fuel gas system or equipped with a closed vent system* – A compressor is exempt from the requirements of Conditions 80.a through 80.c if it is equipped with a system to capture and transport leakage from the compressor drive shaft seal to a process or a fuel gas system or to a closed vent system that captures and transports leakage from the compressor to a control device meeting the requirements of Condition 83. [40 CFR 63.1031(e)]

80.e. *Alternative compressor standard* – [40 CFR 63.1031(f)]

80.e.i. Any compressor that is designated, as described in Condition 71.e, as operating with an instrument reading of less than 500 parts per million above background must 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 Conditions 80.a through 80.c if the compressor is demonstrated, initially upon designation, annually, and at other times

requested by LRAPA to be operating with an instrument reading of less than 500 parts per million above background, as measured by the method specified in Condition 72.b and, as applicable, Condition 72.c. [40 CFR 63.1031(f)(1)]

80.e.ii. The permittee must 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)]

81. Applicable Requirements: *Sampling connection systems standards* – [40 CFR 63.1032]

81.a. *Equipment requirement* – Each sampling connection system must be equipped with a closed-purge, closed-loop, or closed vent system, except as provided in Condition 81.c. Gases displaced during filling of the sample container are not required to be collected or captured. [40 CFR 63.1032(b)]

81.b. *Equipment design and operation* – Each closed-purge, closed-loop, or closed vent system as required in Condition 81.a must meet the applicable requirements specified in Conditions 81.b.i through 81.b.iv. [40 CFR 63.1032(c)]

81.b.i. The system must return the purged process fluid directly to a process line or to a fuel gas system that meets the requirements of Condition 83; or [40 CFR 63.1032(c)(1)]

81.b.ii. Be designed and operated to capture and transport all the purged process fluid to a control device that meets the requirements of Condition 83; or [40 CFR 63.1032(c)(3)]

81.b.iii. Collect, store, and transport the purged process fluid to a system or facility identified in Condition 81.b.iii.1, 81.b.iii.2, or 81.b.iii.3. [40 CFR 63.1032(c)(4)]

81.b.iii.1. A waste management unit as defined in 40 CFR 63.111 or 40 CFR 63 subpart G, if the waste management unit is subject to and operating in compliance with the provisions of 40 CFR 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 63 subpart G, the waste management unit need not be subject to, and operated in compliance with the requirements of 40 CFR 63 subpart G, applicable to group 1 wastewater steams provided the facility has a National Pollution Discharge Elimination System (NPDES) permit or sends the wastewater to an NPDES-permitted facility. [40 CFR 63.1032(c)(4)(i)]

81.b.iii.2. 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)]

81.b.iii.3. 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)]

81.b.iv. 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)]

81.c. *In-situ sampling systems* – In-situ sampling systems and sampling systems without purges are exempt from the requirements of Conditions 81.a and 81.b. [40 CFR 63.1032(d)]

82. Applicable Requirements: *Open-ended valves or lines standards* – [40 CFR 63.1033]

82.a. *Equipment and operational requirements* – [40 CFR 63.1033(b)]

82.a.i. Each open-ended valve or line must be equipped with a cap, blind flange, plug, or a second valve, except as provided in Conditions 82.b and 82.c. The cap, blind flange, plug, or second valve must 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 Conditions 82.a.ii and 82.a.iii also apply. [40 CFR 63.1033(b)(1)]

82.a.ii. Each open-ended valve or line equipped with a second valve must 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)]

82.a.iii. 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 must comply with Condition 82.a.i at all other times. [40 CFR 63.1033(b)(3)]

82.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 Condition 82.a. [40 CFR 63.1033(c)]

82.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 Condition 82.a are exempt from the requirements of Condition 82.a. [40 CFR 63.1033(d)]

83. Applicable Requirement: *Closed vent systems and control devices; or emissions routed to a fuel gas system or process standards* – [40 CFR 63.1034]

83.a. *Compliance standard* – [40 CFR 63.1034(b)]

83.a.i. The permittee routing emissions from equipment leaks to a fuel gas system or process must comply with the provisions of 40 CFR 63 subpart SS (Conditions 65 through 70). [40 CFR 63.1034(b)(1)]

83.a.ii. The permittee of closed vent systems and control devices used to comply with the provisions of 40 CFR 63 subpart UU must comply with the provisions of 40 CFR 63 subpart SS and Condition 83.a.ii.1. [40 CFR 63.1034(b)(2)]

83.a.ii.1. Enclosed combustion devices must be designed and operated to reduce emissions of regulated material vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent, or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760 °C (1400 °F). [40 CFR 63.1034(b)(2)(ii)]

84. Recordkeeping Requirements: [40 CFR 63.1038]

84.a. *Recordkeeping system* – The permittee of more than one regulated source subject to the provisions of 40 CFR 63 subpart UU may comply with the recordkeeping requirements for these regulated sources in one recordkeeping system. The recordkeeping system must identify each record by regulated source and the type of program being implemented (e.g., quarterly monitoring, quality improvement) for each type of equipment. The records required by 40 CFR 63 subpart UU are summarized in Conditions 84.b and 84.c. [40 CFR 63.1038(a)]

84.b. *General equipment leak records* – [40 CFR 63.1038(b)]

84.b.i. As specified in Conditions 71.a and 71.b, the permittee must keep general and specific equipment identification if the equipment is not physically tagged and the permittee is electing to identify the equipment subject to 40 CFR 63 subpart UU through written documentation such as a log or other designation. [40 CFR 63.1038(b)(1)]

84.b.ii. The permittee must keep a written plan as specified in Condition 71.c.iv for any equipment that is designated as unsafe- or difficult-to-monitor. [40 CFR 63.1038(b)(2)]

84.b.iii. The permittee must maintain a record of the identity and an explanation as specified in Condition 71.d.ii for any equipment that is designated as unsafe-to-repair. [40 CFR 63.1038(b)(3)]

84.b.iv. As specified in Condition 71.e, the permittee must maintain the identity of compressors operating with an instrument reading of less than 500 parts per million. [40 CFR 63.1038(b)(4)]

84.b.v. The permittee must keep records associated with the determination that equipment is in heavy liquid service as specified in Condition 71.f. [40 CFR 63.1038(b)(5)]

84.b.vi. The permittee must keep records for leaking equipment as specified in Condition 72.e.ii. [40 CFR 63.1038(b)(6)]

84.b.vii. The permittee must keep records for leak repair as specified in Condition 73.e and records for delay of repair as specified in Condition 73.c. [40 CFR 63.1038(b)(7)]

84.c. *Specific equipment leak records* – [40 CFR 63.1038(c)]

84.c.i. For valves, the permittee must maintain the records specified in Conditions 84.c.i.1. [40 CFR 63.1038(c)(1)]

84.c.i.1. The monitoring schedule for each process unit as specified in Condition 74.a.iii.6. [40 CFR 63.1038(c)(1)(i)]

84.c.ii. For pumps, the permittee must maintain the records specified in Conditions 84.c.ii.1 through 84.c.ii.3. [40 CFR 63.1038(c)(2)]

84.c.ii.1. Documentation of pump visual inspections as specified in Condition 75.a.iv. [40 CFR 63.1038(c)(2)(i)]

84.c.ii.2. Documentation of dual mechanical seal pump visual inspections as specified in Condition 75.d.i.5. [40 CFR 63.1038(c)(2)(ii)]

84.c.ii.3. For the criteria as to the presence and frequency of drips for dual mechanical seal pumps, records of the design criteria and explanations and any changes and the reason for the changes, as specified in Condition 75.d.i.1. [40 CFR 63.1038(c)(2)(iii)]

84.c.iii. For connectors, the permittee must maintain the monitoring schedule for each process unit as specified in Condition 76.b.iii.5. [40 CFR 63.1038(c)(3)]

84.c.iv. For agitators, the permittee must maintain the following records: [40 CFR 63.1038(c)(4)]

84.c.iv.1. Documentation of agitator seal visual inspections as specified in Condition 77; and [40 CFR 63.1038(c)(4)(i)]

84.c.iv.2. For the criteria as to the presence and frequency of drips for agitators, the permittee must keep records of the design criteria and explanations and any changes and the reason for the changes, as specified in Condition 77.c.i.6. [40 CFR 63.1038(c)(4)(ii)]

84.c.v. For pressure relief devices in gas and vapor or light liquid service, the permittee must keep records of the dates and results of monitoring following a pressure release, as specified in Condition 79.b.iii. [40 CFR 63.1038(c)(5)]

84.c.vi. For compressors, the permittee must maintain the records specified in Condition 84.c.vi.1. [40 CFR 63.1038(c)(6)]

84.c.vi.1. For criteria as to failure of the seal system and/or the barrier fluid system, record the design criteria and explanations and any changes and the reason for the changes, as specified in Condition 80.c.ii. [40 CFR 63.1038(c)(6)(i)]

85. Reporting Requirements: [40 CFR 63.1039]

85.a. *Periodic Reports* – The permittee must report the information specified in Conditions 85.a.i through 85.a.v, as applicable, in the Periodic Report specified in the 40 CFR 63 subpart OOO (Condition 64). [40 CFR 63.1039(b)]

85.a.i. For the equipment specified in Conditions 85.a.i.1 through 85.a.i.5, 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 Condition 73, and for valves and connectors, identify the number of components that are determined by Condition 74.b.iii to be nonrepairable. [40 CFR 63.1039(b)(1)]

85.a.i.1. Valves in gas and vapor service and in light liquid service pursuant to Conditions 74.a and 74.b. [40 CFR 63.1039(b)(1)(i)]

85.a.i.2. Pumps in light liquid service pursuant to Conditions 75.a and 75.b. [40 CFR 63.1039(b)(1)(ii)]

85.a.i.3. Connectors in gas and vapor service and in light liquid service pursuant to Conditions 76.b and 76.c. [40 CFR 63.1039(b)(1)(iii)]

85.a.i.4. Agitators in gas and vapor service and in light liquid service pursuant to Condition 77.a. [40 CFR 63.1039(b)(1)(iv)]

85.a.i.5. Compressors pursuant to Condition 80.c. [40 CFR 63.1039(b)(1)(v)]

85.a.ii. Where any delay of repair is utilized pursuant to Condition 73.c, report that delay of repair has occurred and report the number of instances of delay of repair. [40 CFR 63.1039(b)(2)]

85.a.iii. For pressure relief devices in gas and vapor service pursuant to Condition 79.a and for compressors pursuant to Condition 80.e 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)]

85.a.iv. Report, if applicable, the initiation of a monthly monitoring program for valves pursuant to Condition 74.a.iii.1. [40 CFR 63.1039(b)(5)]

85.a.v. 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)]

Emissions Unit EU: B-1 (Boiler) Specific Emission Limits and Standards

Applicable Requirement	Condition Number	Pollutant/ Parameter	Limit/Standard	Monitoring Requirements	
				Method	Condition Number
32-010(3)	86	Visible Emissions	20% Opacity, 3-minute aggregate in 60 minutes	Periodic VE Observations	87
32-030(1)(b)	88	PM	0.14 gr/dscf	I&M and Recordkeeping	89
40 CFR Part 63, Subpart DDDDD	90	HAP	General compliance	Recordkeeping and Reporting	92, 93, 94
	91	HAP	Work practice standards	Monitoring, Recordkeeping, and Reporting	92, 93, 94

86. Applicable Requirement: The permittee must not cause or allow the emissions of any air contaminant into the atmosphere from the boiler in EU: B-1 that equal or exceed an average of 20 percent opacity for a period or periods aggregating more than three (3) minutes in any one (1) hour. [LRAPA 32-010(3)]

87. Monitoring Requirement: When burning liquid fuel, the permittee must monitor visible emissions from the boiler in EU: B-1 in accordance with the following procedures, test methods, and frequencies: [LRAPA 35-0120 and OAR 340-218-0050(3)]

87.a. Modified EPA Method 9 must be used to determine opacity, in accordance with the ODEQ Source Sampling Manual. Prior notification and a pre-test plan are not required to be submitted to LRAPA for each test or survey conducted. Each observation period must be a minimum of six (6) minutes, unless any one (1) reading is greater than the emissions limit for the emissions unit. In that case, the observation period must be a minimum of 60 minutes or until a violation of the emissions standard has been documented; whichever is a shorter period.

87.b. Visible emissions testing, using Modified EPA Method 9, may be waived for the boiler in EU: B-1 provided both of the following conditions are met:

87.b.i. The permittee must conduct a 6-minute visible emissions survey of each emissions unit, using EPA Method 22; and

87.b.ii. Visible emissions from an individual monitoring point are not detected for more than 5% (18 seconds) of the survey time.

87.c. The permittee must use the following monitoring schedule for conducting the visible emissions tests and/or surveys required by Condition 87:

87.c.i. During or immediately after startup, except if there are visual interferences detailed in Condition 87.e, the permittee must conduct a visual emissions survey in accordance with either Condition 87.a or 87.b. The visible emission survey must be performed by employees or contractors who have been trained in the general procedures for determining the presence of visible emissions.

87.c.ii. After the permittee conducts the initial visible emission survey required by Condition 87.c.i, and if liquid fuel is continuing to be burned in the boiler in EU: B-1, then the permittee must conduct weekly visible emission surveys in accordance with either Condition 87.a or 87.b. until the emission unit returns to burning gas 1 fuel.

87.c.iii. If any visible emissions are identified during the surveys required by Conditions 87.c.i or 87.c.ii for more than 5% of the survey time (18 seconds), the permittee must take corrective action to eliminate the visible emissions. The permittee must record the corrective action in a log and conduct another visible emissions survey within 24 hours in accordance with Condition 87.a.

87.d. All visible emissions tests and surveys must be conducted during operating conditions that have the potential to create visible emissions.

87.e. If the observer is unable to conduct the survey and/or Modified EPA Method 9 tests due to visual interferences caused by other visible emissions sources (e.g., fugitive emissions during high wind conditions) or due to weather conditions such as fog, heavy rain, or snow, the observer must note such conditions on the data observation sheet and make at least three (3) attempts to conduct the surveys and/or tests at approximately 2-hour intervals throughout the day. The permittee must attempt to make the observations daily until a valid observation period is completed.

88. Applicable Requirement: The permittee must not cause, suffer, allow, or permit particulate matter emissions in excess 0.14 grains per dry standard cubic foot for the boiler in EU: B-1, a source that was constructed or modified on or after June 1, 1970 but prior to April 16, 2015 for which there are no representative compliance source test results. [LRAPA 32-030(1)(b)]

89. Monitoring and Recordkeeping Requirement: The permittee must demonstrate compliance with Condition 88 by performing the compliance monitoring required by Condition 87. The permittee must maintain a record of the monitoring and any corrective action taken, if applicable. [LRAPA 35-0120 and OAR 340-218-0050(3)]

40 CFR 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters [LRAPA 44-150(5)(jjjj)]

90. Applicable Requirement: *Emission Limitations, Work Practice Standards, and Operating Limits* – [40 CFR 63.7500]

90.a. 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 LRAPA 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)]

90.b. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13 to 40 CFR 63 subpart DDDDD, or the operating limits in Table 4 to 40 CFR 63 subpart DDDDD. [40 CFR 63.7500(e)]

91. Applicable Requirement: The permittee must conduct an annual tune-up of the boiler to demonstrate continuous compliance as specified in Conditions 91.a through 91.f. (The initial tune-up requirement was completed August 12, 2015) [40 CFR 63.7540(a)(10)]

91.a. 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)]

91.b. 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)]

91.c. 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)]

91.d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_X requirement to which the unit is subject; [40 CFR 63.7540(a)(10)(iv)]

91.e. 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 [40 CFR 63.7540(a)(10)(v)]

91.f. Maintain on-site and submit, if requested by LRAPA, an annual report containing the information in Conditions 91.f.i through 91.f.ii: [40 CFR 63.7540(a)(10)(vi)]

91.f.i. 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; [40 CFR 63.7540(a)(10)(vi)(A)]

91.f.ii. A description of any corrective actions taken as a part of the tune-up. [40 CFR 63.7540(a)(10)(vi)(B)]

92. Reporting Requirements: [40 CFR 63.7550]

92.a. The permittee must submit an annual compliance report postmarked or submitted no later than January 31. [40 CFR 63.7550(b)(4)]

92.b. A compliance report must contain the following information depending on how the permittee chooses to comply with the limits set in 40 CFR 63 subpart DDDDD. [40 CFR 63.7550(c)]

92.b.i.1. Company and Facility name and address. [40 CFR 63.7550(c)(5)(i)]

92.b.i.2. Process unit information, emissions limitations, and operating parameter limitations. [40 CFR 63.7550(c)(5)(ii)]

92.b.i.3. Date of report and beginning and ending dates of the reporting period. [40 CFR 63.7550(c)(5)(iii)]

92.b.i.4. Include the date of the most recent tune-up. 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. [40 CFR 63.7550(c)(5)(xiv)]

92.b.i.5. 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. [40 CFR 63.7550(c)(5)(xvii)]

93. Reporting Requirement: The permittee must submit all reports required by Table 9 of 40 CFR 63 subpart DDDDD electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) The permittee must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for 40 CFR 63 subpart DDDDD, the permittee 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, the permittee must submit the report to EPA at the appropriate address listed in 40 CFR 63.13. The permittee must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. [40 CFR 63.7550(h)(3)]

94. Recordkeeping Requirements: [40 CFR 63.7555 and 40 CFR 63.7560]

94.a. The permittee must keep records according to Condition 94.a.i. [40 CFR 63.7555(a)]

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

94.b. The permittee’s records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). [40 CFR 63.7560(a)]

94.c. 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, and record. [40 CFR 63.7560(b)]

94.d. The permittee must keep each record on site, or the records must 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 can keep the records off site for the remaining 3 years. [40 CFR 63.7560(c)]

Emissions Unit EU: Miscellaneous Emission Units Specific Emission Limits and Standards

Applicable Requirement	Condition Number	Pollutant/ Parameter	Limit/Standard	Monitoring Requirements	
				Method	Condition Number
LRAPA 34-034	95	VOC	Notification for change in tank service	Recordkeeping and Reporting	95

95. Applicable Requirement: For EU: Miscellaneous EU, the permittee must notify LRAPA in writing at least 10 days prior to any change in service of any existing tank at the facility. For the purposes of this condition, a change in tank service does not include the placement of wash water for temporary storage and cleaning. [LRAPA 34-034]

Categorically Insignificant Activity (EG-1) Specific Emission Limits and Standards

40 CFR 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [LRAPA 44-150(5)(ffff)]

96. Applicable Requirement: *Stationary RICE subject to limited requirements*. [40 CFR 63.6590(b)]

96.a. The following stationary RICE do not have to meet the requirements of 40 CFR 63 subpart ZZZZ and of 40 CFR 63 subpart A, including initial notification requirements: [40 CFR 63.6590(b)(3)]

96.a.i. Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions. [40 CFR 63.6590(b)(3)(iii)]

97. Monitoring Requirement: The permittee must operate the emergency stationary RICE according to the requirements in Conditions 97.a through 97.c. 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 Conditions 97.a through 97.c, is prohibited. If the permittee does not operate the engine according to the requirements in Conditions 97.a through 97.c, the engine will not be considered an emergency engine under 40 CFR 63 subpart ZZZZ and must meet all requirements for non-emergency engines. [LRAPA 32-007(1)]

97.a. There is no time limit on the use of emergency stationary RICE in emergency situations. [LRAPA 32-007(1)]

97.b. The permittee may operate the emergency stationary RICE for the purpose specified in Condition 97.b.i for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition 97.c counts as part of the 100 hours per calendar year allowed by this Condition 97.b. [LRAPA 32-007(1)]

97.b.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 LRAPA 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. [LRAPA 32-007(1)]

97.c. The emergency stationary RICE 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 provided in Condition 97.b. 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. [LRAPA 32-007(1)]

Insignificant Activity Specific Emission Limits and Standards

98. Applicable Requirement(s): LRAPA acknowledges that insignificant emissions units (IEUs) identified by rule as either categorically insignificant activities or aggregate insignificant emissions as defined in LRAPA title 12 exist at facilities required to obtain an LRAPA Title V Operating Permit. IEUs must comply with all applicable requirements. In general, the applicable requirements that could apply to IEUs are incorporated as follows:

98.a. LRAPA 32-010(3) – 20% opacity for a period or periods aggregating more than three (3) minutes in any hour for sources other than wood fired boilers.

98.b. LRAPA 32-015(2)(b)(B) – 0.14 gr/dscf for non-fugitive, non-fuel burning equipment installed, constructed, or modified on or after June 1, 1970 but prior to April 16, 2015 if there are no representative compliance source tests.

98.c. LRAPA 32-015(2)(c) – 0.10 gr/dscf for non-fugitive, non-fuel burning equipment installed, constructed, or modified after April 16, 2015.

98.d. LRAPA 32-030(1)(b)&(3)(b) – 0.14 gr/dscf for fuel burning equipment sources installed, constructed, or modified after June 1, 1970, but prior to April 16, 2015 if there are no representative compliance source tests. For fuel burning equipment that burns fuels other than wood, the emission results are corrected to 50% excess air.

98.e. LRAPA 32-030(1)(a)&(3)(b) – 0.10 gr/dscf for fuel burning equipment sources installed, constructed, or modified after April 16, 2015. For fuel burning equipment that burns fuels other than wood, the emission results are corrected to 50% excess air.

98.f. LRAPA 32-045 – process weight limit for non-fugitive, non-fuel burning process equipment.

99. Testing, Monitoring, and Recordkeeping Requirement: Unless otherwise specified in this permit or an applicable requirement, LRAPA is not requiring any testing, monitoring, recordkeeping, or reporting for the applicable emissions limits and standards that apply to IEUs. However, if testing were performed for compliance purposes, the permittee would be required to use the test methods identified in the definitions of "opacity" and "particulate matter" in LRAPA title 12 and perform the testing in accordance with the ODEQ Source Sampling Manual.

PLANT SITE EMISSION LIMITS

100. The plant site emissions must not exceed the following limits for any 12 consecutive calendar month period: [LRAPA 42-0040 and 42-0041]

Annual (12-month rolling) PSELs (tons)

Pollutant	Plant Site Emissions Limit (tons/yr)	Unassigned Emissions (tons/yr)	Emission Reduction Credits (tons/yr)
PM	24	0	0
PM_{10}	14	0	0
$PM_{2.5}$	9	0	0
CO	99	0	0
NO_X	39	0	0
SO_2	39	0	0
VOC	39	0	0
GHG	74,000	0	0

101. Monitoring Requirement: The permittee must determine compliance with the PSELs using the following monitoring and calculation procedures: [LRAPA 35-0120, 42-0080 and OAR 340-218-0050(3)(a)]

101.a. The permittee must monitor and maintain monthly 12-month rolling records of the following process parameters:

Recordkeeping of Process Parameters

Process Parameter	Units	Pollutant(s)	Measurement Technique
Natural gas combusted in boiler (EU: B-1)	MMscf or MMBtu	PM, PM_{10}, $PM_{2.5}$, CO, NO_X, SO_2, VOC & HAPs	Recordkeeping
No. 2 fuel oil combusted in the boiler (EU: B-1)	Gallons	PM, PM_{10}, $PM_{2.5}$, CO, NO_X, SO_2, VOC & HAPs	Recordkeeping
No. 2 fuel oil combusted in the emergency generator and hours of operation (EU: EG-1)	Gallons and Hours	PM, PM_{10}, $PM_{2.5}$, CO, NO_X, SO_2, VOC & HAPs	Recordkeeping
Formaldehyde usage	Gallons	VOC and HAPs	Production Records
Phenol usage	Gallons	VOC and HAPs	Production Records
Epichlorohydrin usage	Gallons	VOC and HAPs	Production Records
Methanol usage	Gallons	VOC and HAPs	Production Records
DETA usage	Gallons	VOC and HAPs	Production Records
DMG usage	Gallons	VOC and HAPs	Production Records
Polyamide Resins produced	Gallons	VOC and HAPs	Production Records
95% Formic Acid usage	Gallons	VOC and HAPs	Production Records
60% Formic Acid usage	Gallons	VOC and HAPs	Production Records
PF Resin production	Gallons	VOC and HAPs	Production Records
UF Resin production	Gallons	VOC and HAPs	Production Records

Process Parameter	Units	Pollutant(s)	Measurement Technique
UFC usage	Gallons	VOC and HAPs	Production Records
UFC & Methanol loaded through LOAD-1	Pounds	VOC and HAPs	Recordkeeping
RESI-MIX® produced	Gallons	VOC and HAPs	Production Records
Salt usage	Pounds	PM, PM_{10}, $PM_{2.5}$	Production Records
Resin loaded through LOAD-2	Pounds	VOC and HAPs	Recordkeeping
Cooling Tower Operation	Gallons	PM, PM_{10}, $PM_{2.5}$, VOC	Recordkeeping
Truck Washing quantity	Number & Type of Resin Trucks	VOC and HAPs	Recordkeeping

101.b. The permittee must determine compliance with the PSELs, except GHGs, by calculating 12-month rolling emissions for each emissions unit by using the following formula and process parameters listed in Condition 101.a, and the emission factors listed in Condition 102:

$$E = \sum_{i=1}^{12} [\, P_{eu_i} \times EF_{eu} \times K \,]$$

where:
- E = pollutant emissions in tons/yr.
- $\sum_{i=1}^{12}$ = symbol representing "summation of" with limits defined from current calendar month i=1 to preceding twelve months at i=12.
- P_{eu_i} = process parameter identified in Condition 101.a for calendar month i.
- EF_{eu} = emission factor identified for each emissions unit and pollutant in Condition 102.
- K = conversion constant is 1 ton/2000 lbs for annual emissions calculations.

101.b.i. ***By the 15th of each month***, the permittee must demonstrate compliance with the PSELs, except GHGs, by utilizing the equation in Condition 101.b.

102. The permittee must use the emission factors in the table below in the equation in Condition 101.b for calculating the 12-month rolling emissions to demonstrate compliance with the PSELs. [LRAPA 34-016]

Emission Factors

Emissions Unit(s)	Pollutant	Fuels/Species/ Conditions	Emission Factor	Emission Factor Units	Emission Factor Verification Testing	
					Yes/No	Test Method
Boiler (B-1)	PM	Natural Gas/Fuel Oil	2.44E-03/2.39E-02	lb/MMBtu	No	NA
	PM_{10}	Natural Gas/Fuel Oil	2.44E-03/1.67E-03	lb/MMBtu	No	NA
	$PM_{2.5}$	Natural Gas/Fuel Oil	2.44E-03/1.16E-02	lb/MMBtu	No	NA
	CO	Natural Gas/Fuel Oil	8.19E-02/3.62E-02	lb/MMBtu	No	NA
	NO_X	Natural Gas/Fuel Oil	9.75E-02/1.45E-01	lb/MMBtu	No	NA
	SO_2	Natural Gas/Fuel Oil	1.66E-03/5.14E-01	lb/MMBtu	No	NA
	VOC	Natural Gas/Fuel Oil	5.36E-03/1.45E-03	lb/MMBtu	No	NA

Emissions Unit(s)	Pollutant	Fuels/Species/ Conditions	Emission Factor	Emission Factor Units	Emission Factor Verification Testing	
					Yes/No	Test Method
Resin Reactors (OX-1)	PM	Natural Gas	2.44E-03	lb/MMBtu	No	NA
	PM_{10}	Natural Gas	2.44E-03	lb/MMBtu	No	NA
	$PM_{2.5}$	Natural Gas	2.44E-03	lb/MMBtu	No	NA
	SO_2	Natural Gas	1.66E-03	lb/MMBtu	No	NA
	NO_X	Resin Plant Production	0.30	lb/hr	No	NA
	CO	Resin Plant Production	2.60	lb/hr	No	NA
	VOC	Resin Plant Production	0.12	lb/hr	Yes	See Condition 104
Urea Transfer System (Urea)	$PM/PM_{10}/PM_{2.5}$	Storage Silo (BH-1)	1.97E-05	lb/ton throughput	No	NA
	$PM/PM_{10}/PM_{2.5}$	Loading Hopper (BH-2)	3.94E-05	lb/ton throughput	No	NA
Resimixer (Resi-Mix)	$PM/PM_{10}/PM_{2.5}$	BH-3	2.00E-02	lb/ton throughput	No	NA
Dry Chemical Blower (Salt)	$PM/PM_{10}/PM_{2.5}$	BH-4 & BH-5	2.00E-02	lb/ton throughput	No	NA
Cooling Tower (CT-1)	$PM/PM_{10}/PM_{2.5}$	Gallon throughput	6.67E-05	lb/Mgal	No	NA
	VOC	Gallon throughput	7.00E-04	lb/Mgal	No	NA
Transfer Racks (LOAD-1)	VOC	UFC Truck Loading – Formaldehyde	8.38E-06	lb/lb product	No	NA
	VOC	UFC Truck Loading – Methanol	9.03E-06	lb/lb product	No	NA
	VOC	Methanol Distillate Truck Loading	1.15E-06	lb/lb product	No	NA
	VOC	Methanol Distillate Rail Car Loading	1.15E-06	lb/lb product	No	NA
Truck and Railcar Resin Loading (LOAD-2)	VOC	UF Resin	1.57E-06	lb/lb resin	No	NA
		PF Resin	1.58E-06			
		Methanol Solvated PF	1.34E-05			
		Polyamide Resin	9.50E-07			
		Resin w/ IPA	2.88E-05			
Truck Washing (TW-1)	VOC	UF Resin	5.31E-02	lb/truck	No	NA
	VOC	PF Resin	5.33E-02	lb/truck	No	NA
	VOC	Polyamide Resin	1.48E-01	lb/truck	No	NA

Emissions Unit(s)	Pollutant	Fuels/Species/ Conditions	Emission Factor	Emission Factor Units	Emission Factor Verification Testing	
					Yes/No	Test Method
TANKS Emission Factors						
DMG	VOC	Tank 301	1.68E-06	lb/gal throughput	No	NA
Phenol	VOC	Tanks 302 & 303	4.13E-05	lb/gal throughput	No	NA
Methanol & Formaldehyde	VOC	Tanks 304 & 306	6.62E-05	lb/gal throughput	No	NA
90% Formic Acid	VOC	Tank 305	8.93E-04	lb/gal throughput	No	NA
PF/UF Resin Chill Tanks	VOC	Tanks 402 & 603	1.70E-06	lb/gal throughput	No	NA
PF/UF Resin	VOC	Tanks 406-407, 409-413, 606-607, 609-610, I-3-I-6, SW1-SW2, WT-1, &WT-3	1.42E-05	lb/gal throughput	No	NA
Polyamide Resin	VOC	Tanks 501-506, 507-509, 706-707, & WT-4	6.28E-06	lb/gal throughput	No	NA
Methanol Distillate	VOC	Tank 602	1.37E-03	lb/gal throughput	No	NA
Process Water	VOC	Tank 604	4.28E-05	lb/gal throughput	No	NA
Resin w/ Flammable Resin	VOC	Tank 608	1.31E-04	lb/gal throughput	No	NA
DETA	VOC	Tank 701	2.21E-06	lb/gal throughput	No	NA
Methanol Distillate	VOC	Tank 703	6.46E-04	lb/gal throughput	No	NA
IPA	VOC	Tank 800	4.05E-04	lb/gal throughput	No	NA
EPI	VOC	Tank 801	2.75E-05	lb/gal throughput	No	NA
EPI	VOC	Tank 802	1.82E-05	lb/gal throughput	No	NA
60% Formic Acid	VOC	Tank AQ1	1.91E-04	lb/gal throughput	No	NA
Diesel Fuel	VOC	Tank DF-1	1.30E-06	lb/gal throughput	No	NA
WSR Stormwater	VOC	Tank 900	1.14E-05	lb/gal throughput	No	NA

GENERAL TESTING REQUIREMENTS

103. Unless otherwise specified in this permit, the permittee must conduct all testing in accordance with the ODEQ Source Sampling Manual. [LRAPA 35-0120(3) and OAR 340-218-0050(3)(a)]

103.a. Unless otherwise specified by a state or federal regulation, the permittee must submit a source test plan to LRAPA at least 30 days prior to the date of the test. The test plan must be prepared in accordance with the ODEQ Source Sampling Manual and address any planned variations or alternatives to prescribed test methods. The permittee should be aware that if significant variations are requested, it may require more than 30 days for LRAPA to grant approval and may require

EPA approval in addition to approval by LRAPA.

103.b. Only regular operating staff may adjust the processes or emission control device parameters during a compliance source test and within two (2) hours prior to the tests. Any operating adjustments made during a compliance source test, which are a result of consultation during the tests with source testing personnel, equipment vendors, or consultants, may render the source test invalid.

103.c. Unless otherwise specified by permit condition or LRAPA approved source test plan, all compliance source test must be performed as follows:

103.c.i. At least 90% of the maximum design capacity for initial performance tests on new or modified equipment; or

103.c.ii. At least 90% of the normal maximum operating rate for existing equipment. For purposes of this permit, the normal maximum operating rate is defined as no less than the 90th percentile of the average hourly operating rates during a 12-month period immediately preceding the source test. Data supporting the normal maximum operating rate must be included with the source test report. Average hourly operating rates can be determined by taking daily operating data and dividing by the number of hours of operation.

103.d. Each source test must consist of at least three (3) test runs and the emissions results must be reported as the arithmetic average of all valid test runs. If for reasons beyond the control of the permittee a test run is invalid, LRAPA may accept two (2) test runs for demonstrating compliance with the emission limit or standard.

103.e. Source testing reports prepared in accordance with the ODEQ Source Sampling Manual must be submitted to LRAPA within 60 days of completing any required source test, unless a different time period is approved in the source test submitted prior to the source test.

EU: OX-1 RTO Testing Requirements

104. Within one (1) year prior to the expiration date of this permit, the permittee must demonstrate compliance with the destruction removal efficiencies specified in Conditions 54 and 56 for organic HAP emissions control and Condition 83.a.ii.1 for VOC emissions control through the RTO in EU: OX-1. The permittee must also verify the emission factor for HCl emissions at the outlet of the RTO in EU: OX-1. The testing must be conducted in accordance with Condition 103 and Conditions 104.a through 104.c. [LRAPA 35-0120 and OAR 340-218-0050(3)(a)]

104.a. As previously detailed in Condition 61.a.v, the following methods must be used to determine the organic HAP concentration of the inlet and outlet of the RTO in EU: OX-1, unless an alternative method is approved by LRAPA:

104.a.i. Method 316 or Method 320, 40 CFR part 60, appendix A, must be used to determine the concentration of formaldehyde.

104.a.ii. Method 18, 40 CFR part 60, appendix A, must be used to determine the concentration of all organic HAP other than formaldehyde.

104.a.iii. Method 308, 40 CFR part 60, appendix A, may be used as an alternative to Method 18 to determine the concentration of methanol.

104.b. EPA Methods 1 through 4 and EPA Method 25A must be used for determining the inlet and outlet VOC emissions (as propane) of the RTO in EU: OX-1.

104.c. EPA Method 26 or 26A must be used for determining the outlet HCl emissions of the RTO in EU: OX-1.

GENERAL MONITORING REQUIREMENTS

105. The permittee must not knowingly render inaccurate any required monitoring device or methods. [OAR 340-218-0050(3)(a)(E)]

106. The permittee must use the same methods used to determine compliance as those used to determine actual emissions for fee purposes and can be no less rigorous than the requirements of OAR 340-218-0080. [OAR 340-218-0050(3)(a)(F)]

107. Monitoring requirements must commence on the date of permit issuance unless otherwise specified in the permit or an applicable requirement. [OAR 340-218-0050(3)(a)(G)]

GENERAL RECORDKEEPING REQUIREMENTS

108. The permittee must maintain the following general records of testing and monitoring required by this permit: [OAR 340-218-0050(b)(A)]

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

108.b. The date(s) analyses were performed;

108.c. The company or entity that performed the analyses;

108.d. The analytical techniques or methods used;

108.e. The results of such analyses;

108.f. The operating conditions as existing at the time of sampling or measurement; and

108.g. The records of quality assurance for continuous monitoring systems (including but not limited to quality control activities, audits, calibration drift checks).

109. Unless otherwise specified by permit condition, the permittee must make every effort to maintain 100 percent of the records required by the permit. If information is not obtained or recorded for legitimate reasons (e.g., the monitor or data acquisition system malfunctions due to a power outage), the missing record(s) will not be considered a permit deviation provided the amount of data lost does not exceed 10% of the averaging periods in a reporting period or 10% of the total operating hours in a reporting period, if no averaging time is specified. Upon discovering that a required record is missing, the permittee must document the reason for the missing record. In addition, any missing record that can be recovered from other available information will not be considered a missing record. [LRAPA 34-016, OAR 340-214-0114, and 340-218-0050(3)(b)]

110. Recordkeeping requirements must commence on the date of permit issuance unless otherwise specified in the permit or an applicable requirement. [OAR 340-218-0050(3)(b)(C)]

111. Unless otherwise specified, the permittee must retain records of all required monitoring data and support information for a period of as least five (5) years for the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-charts recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. All existing records required by the previous Air Contamination Discharge Permit or LRAPA Title V Operating Permit must also be retained for five (5) years from the date of the monitoring sample measurement, report or application. [LRAPA 34-016 and OAR 340-218-0050(3)(b)(B)]

REPORTING REQUIREMENTS

112. The permittee must submit three (3) copies of reports of any required monitoring at least every six (6) months, completed on forms approved by LRAPA. Six-month periods are January 1 to June 30, and July 1 to December 31. Two copies of the report must be submitted to LRAPA and one copy to the EPA. All instances of deviations from permit requirements must be clearly identified in such reports: [OAR 340-218-0050(3)(c)(A) and OAR 340-218-0080(6)(d)]

112.a. The first semi-annual report must be received ***by August 15*** and must include the following:

112.a.i. Semi-annual compliance certification detailed in Condition 113; and [OAR 340-218-0080]

112.a.ii. The Periodic Report required by 40 CFR 63 subpart H detailed in Condition 43.a;

112.a.iii. The 12-month rolling throughput of organic liquids loading as required by Condition 50;

112.a.iv. The Periodic Report required by 40 CFR 63 subpart OOO detailed in Condition 64;

112.a.v. The Periodic Report required by 40 CFR 63 subpart SS detailed in Condition 70; and

112.a.vi. The Periodic Report required by 40 CFR 63 subpart UU detailed in Condition 85.

112.b. The annual report must be received ***by February 15*** and must include the following:

112.b.i. The emission fee report; [OAR 340-220-0100]

112.b.ii. The excess emissions upset log; [OAR 340-214-0340]

112.b.iii. The second semi-annual compliance certification detailed in Condition 113; [OAR 340-218-0080]

112.b.iv. Annual certification that the risk management plan is being properly implemented; [OAR 340-218-0080(7)]

112.b.v. Parameters and calculations required by Condition 101;

112.b.vi. The Periodic Report required by 40 CFR 63 subpart H detailed in Condition 43.a;

112.b.vii. The 12-month rolling throughput of organic liquids loading as required by Condition 50;

112.b.viii. The Periodic Report required by 40 CFR 63 subpart OOO detailed in Condition 64;

112.b.ix. The Periodic Report required by 40 CFR 63 subpart SS detailed in Condition 70;

112.b.x. The Periodic Report required by 40 CFR 63 subpart UU detailed in Condition 85; and

112.b.xi. The annual compliance report required by 40 CFR 63 subpart DDDDD detailed in Condition 92.

113. The semi-annual compliance certification must include the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable): [OAR 340-218-0080(6)(c)]

113.a. The identification of each term or condition of the permit that is the basis of the certification;

113.b. The identification of the method(s) or other means used by the permittee for determining the compliance status with each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such methods and other means must include, at a minimum, the methods and means required under OAR 340-218-0050(3). If necessary, the permittee also must identify any other material information that must be included in the certification to comply with Section 113(c)(2) of the FCAA, which prohibits knowingly making a false certification or omitting material information;

113.c. The status of compliance with terms and conditions of the permit for the period covered by the certification, based on the method or means designated in OAR 340-218-0040(6)(c)(B). The certification must identify each deviation and take it into account in the compliance certification. The certification must also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance, as defined under OAR 340-200-0020, occurred; and

113.d. Such other fact as LRAPA may require to determine the compliance status of the source.

114. Notwithstanding any other provision contained in any applicable requirement, the permittee may use

monitoring as required under OAR 340-218-0050(3) and incorporated into the permit, in addition to any specified compliance methods, for the purpose of submitting compliance certifications. [OAR 340-218-0080(6)(e)]

115. Greenhouse Gas Reporting: If the calendar year emission rate of greenhouse gases (CO_2e) is greater than or equal to 2,756 tons (2,500 metric tons including both biogenic and anthropogenic), the permittee must register and report its greenhouse gas emissions with LRAPA ***by March 31*** of each year in accordance with OAR 340-215. The greenhouse gas report must be certified by the responsible official consistent with OAR 340-218-0040(1). [OAR 340-215-0040 and OAR 340-215-0046(1)(a)]

116. Excess Emissions Reporting: The permittee must report all excess emissions as follows: [LRAPA 36-010, 36-025(1) and OAR 340-218-0050(3)(c)]

116.a. Immediately (within one (1) hour after the permittee knew or should have known of an excess emission period) the permittee must notify LRAPA by telephone, email, facsimile, or in person of any excess emission; and

116.b. Within 15 days of the excess emissions event, the permittee must submit a written report that contains the following information: [LRAPA 36-025(1)]

116.b.i. The date and time of the beginning of the excess emissions event and the duration or best estimate of the time until return to normal operation;

116.b.ii. The date and time the permittee notified LRAPA of the event;

116.b.iii. The equipment involved;

116.b.iv. Whether the event occurred during startup, shutdown, maintenance, or as a result of a breakdown, malfunction, or emergency;

116.b.v. Steps taken to mitigate emissions and corrective actions taken;

116.b.vi. The magnitude and duration of each occurrence of excess emissions during the course of an event and the increase over normal rates or concentrations as determined by continuous monitoring or a best estimate, supported by operating data and calculations;

116.b.vii. The final resolution of the cause of the excess emissions; and

116.b.viii. Where applicable, evidence supporting any claim that emissions in excess of technology-based limits were due to an emergency pursuant to LRAPA 36-040.

116.c. In the event of any excess emissions which are of a nature that could endanger public health and occur during non-business hours, weekends, or holidays, the permittee must immediately notify LRAPA by calling the Oregon Emergency Response System (OERS). The current number is 1-800-452-0311.

116.d. If startups, shutdowns, or scheduled maintenance may result in excess emissions, the permittee must submit startup, shutdown, or scheduled maintenance procedures used to minimize excess emissions to LRAPA for prior authorization, as required in LRAPA 36-010 and 36-015. New or modified procedures must be received by LRAPA in writing at least 72 hours prior to the first occurrence of the excess emission event. The permittee must abide by the approved procedures and have a copy available at all times.

116.e. The permittee must notify LRAPA of planned startup/shutdown or scheduled maintenance events only if required by permit condition or if it results in excess emissions. When notice is required by this condition, it must be made in accordance with Condition 116.a.

116.f. The permittee must continue to maintain a log of all excess emissions in accordance with LRAPA 36-025(3). However, the permittee is not required to submit the detailed log with the semi-annual and annual monitoring reports. The permittee is only required to submit a brief summary listing the date, time, and the affected emissions units for each excess emission that occurred during the reporting period. [OAR 340-218-0050(3)(c)]

117. Permit Deviation Reporting: The permittee must promptly report deviations from permit requirements that do not cause excess emissions, 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. "Prompt" is defined as within 15 days of the deviation. Deviations that cause excess emissions, as specified in LRAPA Title 36 must be reported in accordance with Condition 112. [OAR 340-218-0050(3)(c)(B)]

118. All required reports must be certified by a responsible official consistent with OAR 340-218-0040(5). [OAR 340-218-0050(3)(c)(D)]

119. Reporting requirements must commence on the date of permit issuance unless otherwise specified in the permit. [OAR 340-218-0050(3)(c)(E)]

120. Reports must be sent to the following regulatory agency addresses, unless otherwise instructed:

Lane Regional Air Protection Agency
1010 Main Street
Springfield, OR 97477
(541) 736-1056

Enforcement and Compliance Assurance Division
Region 10 (20-C04)
U.S. Environmental Protection Agency
1200 Sixth Avenue, Suite 155
Seattle, WA 98101

NON-APPLICABLE REQUIREMENTS

121. The following Federal air quality requirements are not applicable to this facility for the reasons stated. [OAR-340-218-0110]

Rule Citation	Summary	Reason for Not Being Applicable
40 CFR Part 60, Subpart Db	Standard of Performance for Industrial-Commercial-Institutional Steam Generating Units.	The facility is not subject to this NSPS because the facility boiler is under 100 MMBtu/hr rating.
40 CFR Part 60, Subpart Dc	Standard of Performance for Industrial-Commercial-Institutional Steam Generating Units	The facility is not subject to this NSPS because the facility's the boiler was constructed prior to the June 9, 1989 commencement date and has not been reconstructed since that date.
40 CFR Part 60, Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessel (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	The facility is not subject to this NSPS because any tanks at the facility that are greater than 75 m^3 (19,813 gallons) and less than 151 m^3 (39,890 gallons) installed after the applicability date of July 23, 1984, store liquids with a with a maximum true vapor pressure less than 15.0 kPa.
40 CFR Part 60, Subpart VV	Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006	The facility is not subject to this NSPS because the facility manufactures formaldehyde - containing resins, not formaldehyde.

Rule Citation	Summary	Reason for Not Being Applicable
40 CFR Part 60, Subpart VVa	Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After November 7, 2006	The facility is not subject to this NSPS because the facility manufactures formaldehyde - containing resins, not formaldehyde.
40 CFR Part 60, Subpart III	Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes	The facility is not subject to this NSPS because the facility does not produce any of the chemicals listed in 40 CFR 60.617 as a product, co-product, by-product or intermediate and for which was construction, modification, or reconstruction commenced after October 21, 1983.
40 CFR Part 60, Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engine	The facility is not subject to this NSPS because the generator was manufactured prior to the July 11, 2005 compliance date.
40 CFR Part 60, Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engine	The facility does not operate any stationary spark ignition internal combustion engines.
40 CFR Part 61, Subpart FF	National Emission Standards for Benzene Waste Operations	The facility is not subject to this NESHAP because it does not generate benzene containing waste streams or benzene containing material.
40 CFR Part 63, Subpart F	National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry	This facility is not subject to this NESHAP because it does not manufacture formaldehyde or any other chemical listed in Table 1 of this subpart.
40 CFR Part 63, Subpart G	National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operation, and Wastewater	This facility is not subject to this NESHAP because it is not considered an “affected facility” under NESHAP 40 CFR 63, Subpart F.

KE/CMW
12/21/2022

GENERAL CONDITIONS

G1. General Provision

Terms not otherwise defined in the permit must have the meaning assigned to such terms in the referenced regulation.

G2. Reference Materials

Where referenced in this permit, the version of the following materials are effective as of the dates noted unless otherwise specified in the permit:

a. Source Sampling Manual; November 15, 2018 - State Implementation Plan Volume 4, Appendix A4;

b. Continuous Monitoring Manual; April 16, 2015 - State Implementation Plan Volume 3, Appendix A6; and

c. All state and federal regulations as in effect on the date of issuance of this permit.

G3. Applicable Requirements [OAR 340-218-0010(3)(b)]

Oregon Title V Operating Permits do not replace requirements in Air Contaminant Discharge Permits (ACDP) issued to the source even if the ACDP(s) have expired. For a source operating under a Title V permit, requirements established in an earlier ACDP remain in effect notwithstanding expiration of the ACDP or Title V permit, unless a provision expires by its terms or unless a provision is modified or terminated following the procedures used to establish the requirement initially. Source specific requirements, including, but not limited to TACT, RACT, BACT, and LAER requirements, established in an ACDP must be incorporated into the LRAPA Title V Operating Permit and any revisions to those requirements must follow the procedures used to establish the requirement initially.

G4. Compliance [OAR 340-218-0040(3)(n)(C), 340-218-0050(6), and 340-218-0080(4)]

a. The permittee must comply with all conditions of the federal operating permit. Any permit condition noncompliance constitutes a violation of the Federal Clean Air Act and/or state rules and is grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application. Any noncompliance with a permit condition specifically designated as enforceable only by the state constitutes a violation of state rules only and is grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application.

b. Any schedule of compliance for applicable requirements with which the source is not in compliance at the time of permit issuance must be supplemental to, and must not sanction noncompliance with the applicable requirements on which it is based.

c. For applicable requirements that will become effective during the permit term, the source must meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement.

G5. Masking Emissions:

The permittee must not install or use any device or other means designed to mask the emission of an air contaminant that causes or is likely to cause detriment to health, safety, or welfare of any person or otherwise violate any other regulation or requirement. [LRAPA 32-050(2)] This condition is enforceable only by LRAPA.

G6. Credible Evidence

Notwithstanding any other provisions contained in any applicable requirement, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any such applicable requirements. [LRAPA 34-017]

G7. Certification [OAR 340-214-0110, 340-218-0040(5), 340-218-0050(3)(c)(D), and 340-218-0080(2)]

Any document submitted to LRAPA or EPA pursuant to this permit must contain certification by a responsible official of truth, accuracy and completeness. All certifications must state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and, complete. The permittee must promptly, upon discovery, report to LRAPA a material error or omission in these records, reports, plans, or other documents.

G8. Outdoor Burning [LRAPA Title 47]

The permittee is prohibited from conducting outdoor burning, except as may be allowed by LRAPA 47-001 through 47-030.

G9. Asbestos [40 CFR Part 61, Subpart M (federally enforceable), OAR 340-248-0240, and LRAPA 43-015 (LRAPA-only enforceable)]

The permittee must comply with OAR 340-248-0240, LRAPA 43-015, and 40 CFR Part 61, Subpart M when conducting any renovation or demolition activities at the facility.

G10. Stratospheric Ozone and Climate Protection [40 CFR 82 Subpart F, OAR 340-260-0040]

The permittee must comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, Recycling and Emissions Reduction.

G11. Permit Shield [OAR 340-218-0110]

a. Compliance with the conditions of the permit must be deemed compliance with any applicable requirements as of the date of permit issuance provided that:

   i. such applicable requirements are included and are specifically identified in the permit, or

   ii. LRAPA, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

b. Nothing in this rule or in any federal operating permit must alter or affect the following:

   i. the provisions of ORS 468.115 (enforcement in cases of emergency) and ORS 468.035 (function of department);

   ii. the liability of the permittee of a source for any violation of applicable requirements prior to or at the time of permit issuance;

   iii. the applicable requirements of the national acid rain program, consistent with Section 408(a) of the FCAA; or

   iv. the ability of LRAPA to obtain information from a source pursuant to ORS 468.095 (investigatory authority, entry on premises, status of records).

c. Sources are not shielded from applicable requirements that are enacted during the permit term, unless such applicable requirements are incorporated into the permit by administrative amendment, as provided in OAR 340-218-0150(1)(h), significant permit modification, or reopening for cause by LRAPA.

G12. Inspection and Entry [OAR 340-218-0080(3)]

Upon presentation of credentials and other documents as may be required by law, the permittee must allow Lane Regional Air Protection Agency, or an authorized representative (including an authorized contractor acting as a representative of the EPA Administrator), to perform the following:

a. Enter upon the permittee's premises where a Title V operating permit program source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

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

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

d. As authorized by the FCAA or LRAPA rules, sample or monitor, at reasonable times, substances or parameters, for the purposes of assuring compliance with the permit or applicable requirements.

G13. Fee Payment [OAR 340-220-0010, and 340-220-0030 through 340-220-0190]

The permittee must pay an annual base fee and an annual emission fee for all regulated air pollutants except for carbon monoxide, any class I or class II substance subject to a standard promulgated under or established by Title VI of the Federal Clean Air Act, or any pollutant that is a regulated air pollutant solely because it is subject to a standard or regulation under Section 112(r) of the Federal Clean Air Act. The permittee must submit payment to Lane Regional Air Protection Agency, 1010 Main Street, Springfield, Oregon, 97477, within 30 days of the date LRAPA mails the fee invoice or August 1 of the year following the calendar year for which emission fees are paid, whichever is later. Disputes must be submitted in writing to LRAPA. Payment must be made regardless of the dispute. User-based fees must be charged for specific activities (e.g., computer modeling review, ambient monitoring review, etc.) requested by the permittee.

G14. Off-Permit Changes to the Source [OAR 340-218-0140(2)]

a. The permittee must monitor for, and record, any off-permit change to the source that:

i. Is not addressed or prohibited by the permit;

ii. Is not a Title I modification;

iii. Is not subject to any requirements under Title IV of the FCAA;

iv. Meets all applicable requirements;

v. Does not violate any existing permit term or condition; and

vi. May result in emissions of regulated air pollutants subject to an applicable requirement but not otherwise regulated under this permit or may result in insignificant changes as defined in LRAPA Title 12.

b. A contemporaneous notification, if required under OAR 340-218-0140(2)(b), must be submitted to LRAPA and the EPA.

c. The permittee must keep a record describing off-permit changes made at the facility that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those off-permit changes.

d. The permit shield of Condition G11 must not extend to off-permit changes.

G15. Section 502(b)(10) Changes to the Source [OAR 340-218-0140(3)]

a. The permittee must monitor for, and record, any Section 502(b)(10) change to the source, which is defined as a change that would contravene an express permit term but would not:

i. Violate an applicable requirement;

ii. Contravene a federally enforceable permit term or condition that is a monitoring, recordkeeping, reporting, or compliance certification requirement; or

iii. Be a Title I modification.

b. A minimum 7-day advance notification must be submitted to LRAPA and the EPA in accordance with OAR 340-218-0140(3)(b).

c. The permit shield of Condition G11 must not extend to Section 502(b)(10) changes.

G16. Administrative Amendment [OAR 340-218-0150]

Administrative amendments to this permit must be requested and granted in accordance with OAR 340-218-0150. The permittee must promptly submit an application for the following types of administrative amendments upon becoming aware of the need for one, but no later than 60 days of such event:

a. Legal change of the registered name of the company with the Corporations Division of the State of Oregon, or

b. Sale or exchange of the activity or facility.

G17. Minor Permit Modification [OAR 340-218-0170]

The permittee must submit an application for a minor permit modification in accordance with OAR 340-218-0170.

G18. Significant Permit Modification [OAR 340-218-0180]

The permittee must submit an application for a significant permit modification in accordance with OAR 340-218-0180.

G19. Staying Permit Conditions [OAR 340-218-0050(6)(c)]

Notwithstanding Conditions G16 and G17, the filing of a request by the permittee for a permit modification, revocation and re-issuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

G20. Construction/Operation Modification [OAR 340-218-0190]

The permittee must obtain approval from LRAPA prior to construction or modification of any stationary source of air pollution control equipment in accordance with LRAPA 34-010 and 34-034 through 34-038.

G21. New Source Review Modification [LRAPA 38-0010]

The permittee must not begin construction of a major source or a major modification of any stationary source without having received an Air Contaminant Discharge Permit (ACDP) (LRAPA 34-010) from LRAPA and having satisfied the requirements of LRAPA Title 38 (New Source Review).

G22. Need to Halt or Reduce Activity Not a Defense [OAR 340-218-0050(6)(b)]

The need to halt or reduce activity will not be a defense. It will not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

G23. Duty to Provide Information [OAR 340-218-0050(6)(e) and LRAPA 34-015]

The permittee must furnish to LRAPA, within a reasonable time, any information that LRAPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee must also furnish to LRAPA copies of records required to be retained by the permit or, for information claimed to be confidential, the permittee may furnish such records to LRAPA along with a claim of confidentiality.

G24. Reopening for Cause [OAR 340-218-0050(6)(c) and 340-218-0200]

a. The permit may be modified, revoked, reopened and reissued, or terminated for cause as determined by LRAPA.

b. A permit must be reopened and revised under any of the circumstances listed in OAR 340-218-0200(1)(a).

c. Proceedings to reopen and reissue a permit must follow the same procedures as apply to initial permit issuance and must affect only those parts of the permit for which cause to reopen exists.

G25. Severability Clause [OAR 340-218-0050(5)]

Upon any administrative or judicial challenge, all the emission limits, specific and general conditions, monitoring, recordkeeping, and reporting requirements of this permit, except those being challenged, remain valid and must be complied with.

G26. Permit Renewal and Expiration [OAR 340-218-0040(1)(a)(D) and 340-218-0130]

a. This permit must expire at the end of its term, unless a timely and complete renewal application is submitted as described below. Permit expiration terminates the permittee's right to operate.

b. Applications for renewal must be submitted at least 12 months before the expiration of this permit, unless LRAPA requests an earlier submittal. If more than 12 months is required to process a permit renewal application, LRAPA must provide no less than six (6) months for the permittee to prepare an application.

c. Provided the permittee submits a timely and complete renewal application, this permit must remain in effect until final action has been taken on the renewal application to issue or deny the permit.

G27. Permit Transference [OAR 340-218-0150(1)(d)]

The permit is not transferable to any person except as provided in OAR 340-218-0150(1)(d).

G28. Property Rights [340-218-0050(6)(d)]

The permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations, except as provided in OAR 340-218-0110.

G29. Permit Availability [LRAPA 34-015 and 340-218-0120(2)]

The permittee must have available at the facility at all times a copy of the LRAPA Title V Operating Permit and must provide a copy of the permit to LRAPA or an authorized representative upon request.

ALL INQUIRIES SHOULD BE DIRECTED TO:

Lane Regional Air Protection Agency
1010 Main Street
Springfield, OR 97477
(541) 736-1056

ATTACHMENT A: Air Pollution Emergencies

Table I

AIR POLLUTION EPISODE: ***ALERT CONDITION***

EMISSION REDUCTION PLAN

Part A: Pollution Episode Conditions for Carbon Monoxide or Ozone

For ***Alert Conditions*** due to excessive levels of carbon monoxide or ozone, persons operating motor vehicles shall be requested to voluntarily curtail or eliminate all unnecessary operations within the designated ***Alert Area***, and public transportation systems shall be requested to provide additional services in accordance with a preplanned strategy.

Part B: Pollution Episode Conditions for Particulate Matter

For ***Alert Conditions*** resulting from excessive levels of particulate matter, the following measures shall be taken in the designated area:

1. There shall be no open burning by any person of any material.

2. Persons operating fuel-burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12 noon and 4 p.m.

1. 3. Persons responsible for the operation of any source of air contaminants listed below shall take all required actions for the ***Alert Level***, in accordance with the preplanned strategy:

Source of Contamination	Control Actions — ***Alert Level***
A. Coal, oil, or wood-fired facilities.	1) Utilization of electric generating fuels having low ash and sulfur content. 2) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing. 3) Diverting electric power generation to facilities outside of ***Alert Area***.
B. Coal, oil, or wood-fired process steam generating facilities.	1) Utilization of fuel having low ash and sulfur content. 2) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing. 3) Substantial reduction of steam load demands consistent with continuing plant operations.

Source of Contamination	Control Actions — ***Alert Level***
C. Manufacturing industries of the following classifications: - Primary Metals Industries - Petroleum Refining - Chemical Industries - Mineral Processing Indus. - Grain Industries - Paper and Allied Products - Wood Processing Industry	1) Reduction of air contaminants from manufacturing operations by curtailing postponing, or deferring production and all operations. 2) Reduction by deferring trade waste disposal operations which emit solid particle gas vapors or malodorous substance. 3) Reduction of heat load demands for processing. 4) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

Table II

AIR POLLUTION EPISODE: ***WARNING CONDITIONS***

EMISSION REDUCTION PLAN

Part A: Pollution Episode Conditions for Carbon Monoxide or Ozone

For ***Warning Conditions***, resulting from excessive levels or carbon monoxide or ozone, the following measures shall be taken:

1. Operation of motor vehicles carrying fewer than three (3) persons shall be prohibited within designated areas during specified hours. Exceptions from this provision are:
    A. Public transportation and emergency vehicles
    B. Commercial vehicles
    C. Through traffic remaining on Interstate or primary highways.

2. At the discretion of the Agency, operations of all private vehicles within designated areas or entry of vehicles into designated areas may be prohibited for specified periods of time.

3. Public transportation operators shall, in accordance with a pre-planned strategy, provide the maximum possible additional service to minimize the public's inconvenience as a result of No. 1 or No. 2. above.

4. For ozone episodes the following additional measures shall be taken:
    A. No bulk transfer of gasoline without vapor recovery from 2:00 a.m. to 2:00 p.m.
    B. No service station pumping of gasoline from 2:00 a.m. to 2:00 p.m.
    C. No operation of paper coating plants from 2:00 a.m. to 2:00 p.m.
    D. No architectural painting or auto finishing;
    E. No venting of dry-cleaning solvents from 2:00 a.m. to 2:00 p.m. (except perchloroethylene).

5. Where appropriate for carbon monoxide episodes during the heating season, and where legal authority exists, governmental agencies shall prohibit all use of wood stoves and fireplaces for domestic space heating, except where such devices provide the sole source of heat.

Part B: Pollution Episode Conditions for Particulate Matter

For ***Warning Conditions*** resulting from excessive levels of particulate matter, the following measures shall be taken:

1. There shall be no open burning by any person of any material.

2. The use of incinerators for the disposal of solid or liquid wastes shall be prohibited.

3. Persons operating fuel-burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12 noon and 4 p.m.

4. Where legal authority exists, governmental agencies shall prohibit all use of wood stoves and fireplaces for domestic space heating, except where such devices provide the sole source of heat.

5. Persons responsible for the operation of any source of air contaminants listed below shall take all required actions for the ***Warning Level***, in accordance with a preplanned strategy:

Source of Contamination	Control Actions — ***Warning Level***
A. Coal, oil, or wood-fired electric power generating facilities.	1) Maximum utilization of fuels having lowest ash and sulfur content. 2) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing. 3) Diverting electric power generation to facilities outside of ***Warning Area***. 4) Prepare to use a plan of action if an ***Emergency Condition*** develops. 5) Cease operation of facilities not related to safety or protection of equipment or delivery of priority power.
B. Coal, oil, or wood-fired process steam generating facilities.	1) Maximum utilization of fuels having the lowest ash and sulfur content. 2) Utilization of mid-day (12: 00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing. 3) Prepare to use a plan of action if an ***Emergency Condition*** develops. 4) Cease operation of facilities not related to safety or protection of equipment or delivery of priority power.

Source of Contamination	Control Actions — ***Warning Level***
C. Manufacturing industries which require considerable lead time for shut-down including the following classifications: - Petroleum Refining - Chemical Industries - Primary Metals Industries - Glass Industries - Paper and Allied Products	1) Reduction of air contaminants from manufacturing operations by, if necessary, assuming reasonable economic hardships by postponing production and allied operations. 2) Reduction by deferring trade waste disposal operations which emit solid particles, gases, vapors or malodorous substances. 3) Maximum reduction of heat load demands for processing. 4) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence of boiler lancing or soot blowing.
D. Manufacturing industries which require relatively short time for shut-down.	1) Elimination of air contaminants from manufacturing operations by ceasing, allied operations to the extent possible without causing injury to persons or damage to equipment. 2) Elimination of air contaminants from trade waste disposal processes which emit solid particles, gases, vapors, or malodorous substances. 3) Reduction of heat load demands for processing. 4) Utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

Table III

AIR POLLUTION EPISODE: ***EMERGENCY CONDITIONS***

EMISSION REDUCTION PLAN

1. There shall be no open burning by any person of any material.

2. The use of incinerators for the disposal of solid or liquid wastes shall be prohibited.

3. All places of employment, commerce, trade, public gatherings, government, industry, business, or manufacture shall immediately cease operation, except the following:

    A. Police, fire, medical and other emergency services;

    B. Utility and communication services;

    C. Governmental functions necessary for civil control and safety;

    D. Operations necessary to prevent injury to persons or serious damage to equipment or property;

    E. Food stores, drug stores and operations necessary for their supply;

F. Operations necessary for evacuation of persons leaving the area;

G. Operations conducted in accordance with an approved preplanned emission reduction plan on file with the Agency.

4. All commercial and manufacturing establishments not included in these rules shall institute such actions as will result in maximum reduction of air contaminants from their operations which emit air contaminants, to the extent possible without causing injury or damage to equipment.

5. The use of motor vehicles is prohibited except for the exempted functions in 3, above.

6. Airports shall be closed to all except emergency air traffic.

7. Where legal authority exists, governmental agencies shall prohibit all use of wood stoves and fireplaces.

8. Any person responsible for the operation of a source of atmospheric contamination listed below shall take all required control actions for this ***Emergency Level***.

Source of Contamination	Control Actions — ***Emergency Level***
A. Coal, oil, or wood-fired electric power generating facilities.	1) Maximum utilization of fuels having lowest ash and sulfur content.
	2) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing. 3) Diverting electric power generation to facilities outside of Emergency area. 4) Cease operation of facilities not related to safety or protection of equipment or delivery of priority power.
B. Coal, oil, or wood-fired steam generating facilities.	1) Reducing heat and steam process demands to absolute necessities consistent with preventing equipment damage. 2) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing. 3) Taking the action called for in the emergency plan. 4) Cease operation of facilities not related to safety or protection of equipment or delivery of priority power.

Source of Contamination	Control Actions — ***Emergency Level***
C. Manufacturing industries of the following classifications: - Primary Metals Industry - Petroleum Refining Operations - Chemical Industries - Mineral Processing Industries - Paper and Allied Products - Grain Industry - Wood Processing Industry	1) The elimination of air of contaminants from manufacturing operations by ceasing, curtailing, postponing or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment. 2) Elimination of air contaminants from trade waste disposal processes which emit solid particles, gases, vapors, or malodorous substances. 3) Maximum reduction of heat load demands for processing. 4) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing.