

United States Environmental Protection Agency  
Region 5  
Air & Radiation Division  
77 West Jackson Boulevard  
Chicago, Illinois 60604

**AIR POLLUTION CONTROL  
TITLE V PERMIT TO OPERATE**

Permit No.:	V-IL-1716300103-2014-10
Issue Date:	January 18, 2017
Effective Date:	February 17, 2017
Expiration Date:	February 17, 2022

In accordance with the provisions of Title V of the Clean Air Act and 40 C.F.R. Part 71,

**Veolia ES Technical Solutions, L.L.C.**

is authorized to operate air emission units and to conduct other air pollutant emitting activities in accordance with the permit conditions listed in this permit.

This source is authorized to operate in St. Clair County at the following address:

7 Mobile Avenue, Sauget, Illinois 62201

Terms and conditions not otherwise defined in this permit have the meaning assigned to them in 40 C.F.R. Part 71 unless other regulations or statutes are referenced. All terms and conditions of the permit are enforceable by EPA and citizens under the Clean Air Act.

Once effective, this permit supersedes any other permit issued to the source pursuant to Title V of the Clean Air Act and 40 C.F.R. Part 71.

  
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Edward Nam, Director  
Air and Radiation Division  
U.S. EPA - Region 5

1/18/17  
\_\_\_\_\_  
Date

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## Abbreviations and Acronyms

ASTM	American Society for Testing and Materials
AWFCO	Automatic waste feed cutoff
CAA or Act	Clean Air Act [42 U.S.C. § 7401 et seq.]
CEM	Continuous Emission Monitor
CEMS	Continuous Emissions Monitoring System
C.F.R.	Code of Federal Regulations
CMS	Continuous Monitoring System
CO	Carbon Monoxide
COM	Continuous Opacity Monitor
CPMS	Continuous Parametric Monitoring System
DOC	Documentation of Compliance
DRE	Destruction and removal efficiency
EPA	United States Environmental Protection Agency
ESV	Emergency Safety Vent
EU	Emission Unit
Facility	Veolia ES Technical Solutions, L.L.C.
gal	gallon
g	grams
gr/scf	grains per standard cubic foot of exhaust gas
HAP	Hazardous Air Pollutant
hr	hour
HWC	hazardous waste combustor
IAC	Illinois Administrative Code
IEPA	Illinois Environmental Protection Agency
kg	kilogram
kpa	kilo pascals
lb	pound
LVM	Low Volatile Metals (Arsenic, Chromium and Beryllium)
MACT	Maximum Achievable Control Technology
µg/dscm	micrograms per dry standard cubic meter of exhaust gas
Mg	megagram
MMBtu	million British Thermal Units
NESHAP	National Emission Standards for Hazardous Air Pollutants
ng TEQ/dscm	nanograms toxicity equivalents per dry standard cubic meter of exhaust gas
NOC	Notification of Compliance
NOx	Nitrogen Oxides
NSPS	New Source Performance Standard
NSR	New Source Review
Operator	Veolia ES Technical Solutions, L.L.C.
Permittee	Veolia ES Technical Solutions, L.L.C.
PM	Particulate Matter
PM <sub>10</sub>	Particulate matter less than 10 microns in diameter

ppm	parts per million
POHC	principle organic hazardous constituent
PSD	Prevention of Significant Deterioration
Psi	Pounds per square inch
SO <sub>2</sub>	Sulfur Dioxide
SVM	Semivolatile Metals (Lead and Cadmium)
tpy	tons per year
VOC	Volatile Organic Compounds
VHAP	Volatile Hazardous Air Pollutant

## 1.0. SOURCE IDENTIFICATION AND UNIT-SPECIFIC INFORMATION

### 1.1. GENERAL SOURCE INFORMATION

Parent Company: Veolia ES Technical Solutions, L.L.C.  
 700 E. Butterfield Road  
 Lombard, Illinois 60148

Facility: Veolia ES Technical Solutions, L.L.C.  
 7 Mobile Avenue  
 Sauget, Illinois 62201

County: St. Clair

SIC Code: 4953

AFS Plant Identification Number: 1716300103

### 1.2. FACILITY DESCRIPTION

Veolia ES Technical Solutions, L.L.C. is a treatment, storage, and disposal facility, which accepts offsite waste for further disposal through incineration. Containers and bulk shipments of hazardous and solid wastes are received, analyzed, transferred to temporary storage facilities, processed, and incinerated in one of three combustion units.

### 1.3. EMISSION UNITS

The emissions units located at the facility at the time of permit issuance are:

<b>Emission Unit</b>	<b>Description</b>	<b>Manufacturer /Model</b>	<b>Date of Construction</b>	<b>Emission Control Equipment</b>
Hazardous Waste Combustors	Incineration Unit #2 (Incinerator) with a Maximum Heat Capacity of 16 mmBtu/hr	Trade Waste Incineration, TWI-2000, Series 2	October 1986	Joy-Niro Spray Dryer Absorber (SDA-2), Pulse Flo Fabric Filter (BH-2)

<b>Emission Unit</b>	<b>Description</b>	<b>Manufacturer /Model</b>	<b>Date of Construction</b>	<b>Emission Control Equipment</b>
	Incineration Unit #3 (Incinerator) with a Maximum Heat Capacity of 16 mmBtu/hr	Trade Waste Incineration, TWI-2000, Series 2	November 1987	Joy-Niro Spray Dryer Absorber (SDA-3), Pulse Flo Fabric Filter (BH-3)
	Incineration Unit #4 (Rotary Kiln) with a Maximum Heat Capacity of 50 mmBtu/hr	International Waste Energy, PY*ROX	June 1988	Tempering Chamber, Activated Carbon Injection, Spray Dryer Absorber, Fabric Filter
Material Processing Areas	Waste Processing Units (Area 1 and Area 2)		1988	None
	Lab Pack Repack Unit		1988	
Drum Crusher	Empty drums are crushed		1984	None
Storage Tanks for Liquid Wastes	Tanks #2 (4,931 gals), #4 (4,931 gals), #6 (7,200 gals), #8 (5,820 gals), #10 (12,869 gals), #20 (12,869 gals), #30 (12,869 gals), #40 (12,869 gals), #50 (12,869 gals), #60 (12,869 gals), #300 (19,850 gals), #302 (30,000 gals), #304 (30,000 gals), #306 (30,000 gals), #308 (30,000 gals), #310 (30,000 gals), #312 (10,000 gals) and #314 (10,000 gals)	Modern Welding	April 2002 for #2 and #4; June 2004 for #10 and #20; March 2009 for #30; 1988 for the others	Activated Carbon Absorption Systems on each storage tank vent
	Storage tank for #2 fuel oil: Tank #390 (30,000 gals)	Modern Welding	1988	None
Bulk Solid Waste	Temporary storage of bulk solid wastes in pits prior to being fed		1988	Cyclone, Airtol Baghouse (BF Bldg-BH-1), Carbon

<b>Emission Unit</b>	<b>Description</b>	<b>Manufacturer /Model</b>	<b>Date of Construction</b>	<b>Emission Control Equipment</b>
Storage Facility	to Incineration Unit #4			Adsorption Unit (BF Bldg-CA)
Gasoline Storage Tank	550 gallon tank, equipped with submerged loading pipe		June 2012	None
Boiler	Natural Gas-Fired Boiler with a Maximum Heat Capacity of 10.6 mmBtu/hr (Boiler #1)	Cleaver Brooks, 250	November 1995	None
Emergency Generators (2)	Two #2 Fuel oil-fired Emergency Generators each with Maximum Heat Capacity of 0.40 mmBtu/hr (<112 kilowatts (kW))		1988	None
Fugitive Emissions	Pumps, Valves, Open-End Lines and Compressors		N/A	None

## **2.0. UNIT-SPECIFIC OPERATING REQUIREMENTS**

### **2.1. HAZARDOUS WASTE COMBUSTORS, UNITS 2, 3 AND 4**

#### **(A) Emission Limitations and Standards [40 C.F.R. § 71.6(a)(1)]**

The Permittee shall comply with the following requirements at each individual incinerator unless specified otherwise:

##### **1. Visible Emission Limitations.**

- (a) The Permittee shall not cause or allow from any emission source the emission into the atmosphere of smoke or other particulate matter with an opacity greater than 30 percent, except as allowed by 35 IAC 212.123(b) and 212.124. [35 IAC 212.123(a)]
- (b) The Permittee shall not cause or allow from any process, including any material handling or storage activity, the emission of fugitive particulate matter that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour). [35 IAC 212.301 and 212.314]

##### **2. Sulfur Dioxide Limitations.**

Total sulfur dioxide emissions shall not exceed 7.7 tons per year (tpy) from Unit 2, 7.7 tpy from Unit 3, and 50.76 tpy from Unit 4. [Construction Permits 87100024 and 88010001]

##### **3. Carbon Monoxide Limitations.**

- (a) The Permittee shall not allow emissions of carbon monoxide in excess of 100 parts per million (ppm) by volume, on an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis and corrected to 7 percent oxygen. The Permittee must also document that, during the destruction and removal efficiency test runs or their equivalent as provided by 40 C.F.R. § 63.1206(b)(7), hydrocarbons do not exceed 10 ppm by volume during those runs, on an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane. [40 C.F.R. § 63.1219(a)(5)]
- (b) The Permittee shall not allow emissions of carbon monoxide from any incinerator in excess of 500 ppm corrected to 50 percent excess air. [35 IAC 216.141, Construction Permits 83120053, 87100024 and 88010001]

- (c) The Permittee shall not allow emissions of carbon monoxide in excess of 6.6 tpy from Unit 2, 6.6 tpy from Unit 3 and 13.86 tpy from Unit 4. [Construction Permits 87100024 and 88010001]

4. Particulate Matter Limitations.

- (a) The Permittee shall not cause or allow the emission of particulate matter into the atmosphere from any incinerator burning more than 0.907 megagram per hour (Mg/hr) (2,000 pounds per hour (lb/hr)) but less than 27.2 Mg/hr (60,000 lb/hr) of refuse to exceed 183 milligrams per standard cubic meter (mg/scm) (0.08 grain per standard cubic foot (gr/scf)) of effluent gases corrected to 12 percent carbon dioxide. [35 IAC 212.181(b), Construction Permit 83120053]
- (b) The Permittee shall not allow emissions of particulate matter from the facility in excess of 0.013 gr/dscf, corrected to 7 percent oxygen. [40 C.F.R. § 63.1219(a)(7)]
- (c) The Permittee shall not allow emissions of total suspended particulate matter in excess of 15.0 tpy from Unit 2, 15.0 tpy from Unit 3, and 16.92 tpy from Unit 4. [Construction Permits 87100024 and 88010001]

5. Volatile Organic Compounds Limitations.

- (a) The Permittee shall not cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except that, if no odor nuisance exists, this limitation shall apply only to photochemically reactive material. Alternatively, the Permittee may use a control device to reduce such emissions either to 10 ppm equivalent methane (molecular weight 16) or less, or to convert 85 percent of the hydrocarbons to carbon dioxide and water. [35 IAC 219.301, 219.302]
- (b) Organic material emissions shall not exceed 0.9 tpy from Unit 2, 0.9 tpy from Unit 3, and 3.1 tpy from Unit 4. [Construction Permits 87100024 and 88010001]

6. Nitrogen Oxide Limitations.

Nitrogen oxide emissions shall not exceed 4.0 tpy from Unit 2, 4.0 tpy from Unit 3, and 61.6 tpy from Unit 4. [Construction Permits 87100024 and 88010001]

7. Hazardous Air Pollutant Limitations.

- (a) The Permittee shall not allow emissions of dioxins and furans from the facility in excess of:
  - (i) 0.20 nanograms toxicity equivalents per dry standard cubic meter (ng TEQ/dscm), corrected to 7 percent oxygen. [40 C.F.R. § 63.1219(a)(1)(i)(A)]; or
  - (ii) 0.40 ng TEQ/dscm, corrected to 7 percent oxygen, provided that the combustion gas temperature at the inlet to the initial particulate matter control device is 400°F or lower based on the average of the test run average temperatures). [40 C.F.R. § 63.1219(a)(1)(i)(B)]
- (b) The Permittee shall not allow emissions of mercury from the facility in excess of 130 micrograms per dry standard cubic meter ( $\mu\text{g}/\text{dscm}$ ), corrected to 7 percent oxygen. [40 C.F.R. § 63.1219(a)(2)]
- (c) The Permittee shall not allow combined emissions of cadmium and lead from the facility in excess of 230  $\mu\text{g}/\text{dscm}$ , corrected to 7 percent oxygen. [40 C.F.R. § 63.1219(a)(3)]
- (d) The Permittee shall not allow combined emissions of arsenic, beryllium, and chromium from the facility in excess of 92  $\mu\text{g}/\text{dscm}$ , corrected to 7 percent oxygen. [40 C.F.R. § 63.1219(a)(4)]
- (e) The Permittee shall design, install, operate, and maintain a treatment process that destroys benzene in the waste stream by incinerating the waste in a combustion unit that achieves a destruction efficiency of 99 percent or greater for benzene. [40 C.F.R. § 61.348(a)(1)(iii)]
- (f) All joints or seams between the pipe sections of any transfer system that consists of continuous hard-piping shall be permanently or semi-permanently sealed (e.g., a welded joint between two sections of metal pipe or a bolted and gasketed flange). [40 C.F.R. § 63.689(c)(2)]

8. Hydrogen Chloride Limitations.

- (a) The Permittee shall not allow combined emissions of hydrogen chloride and chlorine gas (total chlorine) from the facility in excess of 32 ppm by volume, expressed as a chloride ( $\text{Cl}^-$ ) equivalent, dry basis and corrected to 7 percent oxygen. [40 C.F.R. § 63.1219(a)(6)]
- (b) The Permittee shall not allow hydrogen chloride emissions in excess of 4.0 lbs/hr from either Unit 2 or Unit 3 or the control devices shall

demonstrate a minimum hydrogen chloride removal efficiency of 99 percent. [Construction Permits 83120053 and 87100024]

9. Destruction and Removal Efficiency (DRE) Standard.

- (a) Units 2, 3 and 4 must each achieve a DRE of 99.99 percent for each principal organic hazardous constituent (POHC) specified under condition 2.1(A)(9)(c)(ii), below. The Permittee shall calculate the DRE for each POHC using the following equation:

$$\text{DRE} = [1 - (\text{W}_{\text{OUT}}/\text{W}_{\text{IN}})] \times 100\%$$

Where:

$\text{W}_{\text{IN}}$  = mass feedrate of one POHC in a waste feedstream; and

$\text{W}_{\text{OUT}}$  = mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere.

The Permittee must perform intermediate calculations using at least three significant figures, but may round the resultant emission levels to two significant figures to document compliance. [40 C.F.R. § 63.1219(c)(1) and (d)]

- (b) For dioxin-listed hazardous wastes F020, F021, F022, F023, F026, or F027 (*see* 40 C.F.R. § 261.31), Units 2, 3 and 4 must each achieve a DRE of 99.9999 percent for each POHC specified under condition 2.1(A)(9)(c)(ii), below. The Permittee must demonstrate this DRE performance on POHCs that are more difficult to incinerate than tetra-, penta-, and hexachlorodibenzo-*p*-dioxins and dibenzofurans. The Permittee must use the equation in condition 2.1(A)(9)(a), above, to calculate DRE for each POHC. In addition, the Permittee must notify the Administrator of its intent to incinerate hazardous wastes F020, F021, F022, F023, F026, or F027. [40 C.F.R. § 63.1219(c)(2)]
- (c) Principal organic hazardous constituents [40 C.F.R. § 63.1219(c)(3)]
- (i) The Permittee must treat the POHCs in the waste feed that the Permittee specifies under condition 2.1(A)(9)(c)(ii), below, to the extent required by 40 C.F.R. § 63.1219(c)(1) and (c)(2).
- (ii) The Permittee must specify one or more POHCs that are representative of the most difficult to destroy organic compounds in the hazardous waste feedstream. The Permittee must base this specification on the degree of difficulty of incineration of the organic constituents in the waste and on their concentration or mass in the

waste feed, considering the results of waste analyses or other data and information.

**(B) Nonapplicable Regulations [40 C.F.R. § 71.6(f)(1)]**

1. Units 2, 3 and 4 are not subject to 40 C.F.R. Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because:
  - (a) The affected units are required to comply with a NESHAP proposed after November 15, 1990. Emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act are exempt from CAM. [40 C.F.R. § 64.2(b)(1)(i)]
2. Units 2, 3 and 4 are not subject to 35 IAC Part 229 of the Illinois State Implementation Plan (SIP), “Hospital Medical Infectious Waste Incinerators,” because the Permittee is prohibited from accepting or processing hospital medical infectious waste at the facility. [35 IAC 229.110]

**(C) Work Practice and Operational Requirements [40 C.F.R. § 71.6(a)(1)]**

1. The Permittee shall not burn hospital medical infectious waste, municipal waste, or waste that is subject to the Beryllium NESHAP. [42 U.S.C. § 7661c(a)]
2. The Permittee must operate Units 2, 3 and 4 in compliance with the following operating parameter limits (OPLs). The Permittee must also comply with the OPLs contained in the Notification of Compliance (NOC) required pursuant to condition 2.1(E)(2), below. If any OPL contained in this condition 2.1(C)(2) differs from the corresponding OPL contained in the Permittee’s most recent NOC, the Permittee may submit an application requesting a revision to the OPLs in this permit, pursuant to 40 C.F.R. § 71.7(e)(1). Nothing in this permit obligates the Administrator to approve an application to revise OPLs in this permit.

Operating Parameter	OPL			Averaging Period
	Unit #2	Unit #3	Unit #4	
Minimum primary combustion chamber temperature (40 C.F.R. § 63.1209(j)(1), (k)(2))	1,709 °F	1,709 °F	1,561 °F	hourly rolling average
Minimum secondary combustion chamber temperature (40 C.F.R. § 63.1209(j)(1), (k)(2))	1,885 °F	1,885 °F	1,881 °F	hourly rolling average

Operating Parameter	OPL			Averaging Period
	Unit #2	Unit #3	Unit #4	
Maximum flue gas flowrate or production rate (40 C.F.R. § 63.1209(j)(2)), (k)(3), (m)(2), (n)(5), (o)(2))	15,310 acf/min	15,310 acf/min	37,393 acf/min	hourly rolling average
Maximum hazardous waste pumpable feedrate rate for each combustion chamber (40 C.F.R. § 63.1209(j)(3), (k)(4))	3,107 lbs/hr	3,107 lbs/hr	3,312 lbs/hr for PCC and 1,203 lbs/hr for SCC	hourly rolling average
Maximum hazardous waste total feedrate rate for each combustion chamber (40 C.F.R. § 63.1209(j)(3), (k)(4))	4,017 lbs/hr	4,017 lbs/hr	10,632 lbs/hr for PCC and 1,203 lbs/hr for SCC	hourly rolling average
Operation of waste firing system for each location where waste is fed to the incinerator (40 C.F.R. § 63.1209(j)(4))	Minimum waste atomization pressure for low BTU waste – 15 psi	Minimum waste atomization pressure for low BTU waste – 15 psi	Minimum waste atomization pressure for low BTU waste – 15 psi	instantaneous
Maximum temperature of the gas at the inlet to a dry particulate matter control device (i.e., baghouse inlet) (40 C.F.R. § 63.1209(k)(1), (n)(1))	420 °F	420 °F	399 °F	hourly rolling average
Minimum carbon injection rate (40 C.F.R. § 63.1209(k)(6)(i))	N/A	N/A	6.2 lbs/hr	hourly rolling average
Minimum carrier fluid (gas or liquid) flowrate or pressure drop for activated carbon injection system (40 C.F.R. § 63.1209(k)(6)(ii))	N/A	N/A	N/A	hourly rolling average

Operating Parameter	OPL			Averaging Period
	Unit #2	Unit #3	Unit #4	
The brand (i.e., manufacturer) and type of carbon used during the comprehensive performance test (40 C.F.R. § 63.1209(k)(6)(iii))	N/A	N/A	NORIT Americas Inc. DARCO® FGL	
Maximum total feedrate of mercury (40 C.F.R. § 63.1209(l)(1)(i))	0.0021 lbs/hr	0.0021 lbs/hr	0.040 lbs/hr	12-hour rolling average
Maximum ash feedrate (40 C.F.R. § 63.1209(m)(3))	503 lbs/hr	503 lbs/hr	4,777 lbs/hr	12-hour rolling average
Maximum total feedrate of semivolatile metals (40 C.F.R. § 63.1209(n)(2)(ii))	62 lbs/hr	62 lbs/hr	62 lbs/hr	12-hour rolling average
Maximum total feedrate of low volatile metals (40 C.F.R. § 63.1209(n)(2)(ii))	46 lbs/hr	46 lbs/hr	46 lbs/hr	12-hour rolling average
Maximum total feedrate of low volatile metals in pumpable feedstreams (40 C.F.R. § 63.1209(n)(2)(vii))	46 lbs/hr	46 lbs/hr	46 lbs/hr	12-hour rolling average
Maximum feedrate of total chlorine and chloride in all feedstreams (40 C.F.R. § 63.1209(n)(4), (o)(1))	204 lbs/hr	204 lbs/hr	203 lbs/hr	12-hour rolling average
Minimum sorbent feedrate (40 C.F.R. § 63.1209(o)(4)(i))	2.24 lb/lb Cl <sub>2</sub>	2.24 lb/lb Cl <sub>2</sub>	2.13 lb/lb Cl <sub>2</sub>	hourly rolling average
Minimum carrier fluid flowrate or nozzle pressure drop for the spray dryer adsorber (40 C.F.R. § 63.1209(o)(4)(ii))	1.90 gal/lb Cl <sub>2</sub>	1.90 gal/lb Cl <sub>2</sub>	3.10 gal/lb Cl <sub>2</sub>	hourly rolling average

Operating Parameter	OPL			Averaging Period
	Unit #2	Unit #3	Unit #4	
The brand ( <i>i.e.</i> , manufacturer) and type of sorbent used during the comprehensive performance test (40 C.F.R. § 63.1209 (o)(4)(iii)(A))	Mississippi Lime Company Hydrated Lime Code MR200	Mississippi Lime Company Hydrated Lime Code MR200	Mississippi Lime Company Hydrated Lime Code MR200	
Maximum combustion chamber pressure (40 C.F.R. § 63.1209(p))	-0.01 inch H <sub>2</sub> O	-0.01 inch H <sub>2</sub> O	-0.01 inch H <sub>2</sub> O	5 seconds for Units 2 and 3 and instantaneous for Unit 4

3. Compliance with standards. [40 C.F.R. § 63.1206(b)(1)]

The emission standards and operating requirements derived from 40 C.F.R. Part 63, Subpart EEE, apply at all times except:

- (a) During periods of startup, shutdown, and malfunction; and
- (b) When hazardous waste is not in the combustion chamber (*i.e.*, the hazardous waste feed to the combustor has been cut off for a period of time not less than the hazardous waste residence time) and the Permittee has documented in the operating record compliance with all otherwise-applicable requirements and standards promulgated under authority of sections 112 (*e.g.*, 40 C.F.R. Part 63, Subparts LLL, DDDDD, and NNNNN) or 129 of the Act in lieu of the emission standards under 40 C.F.R. §§ 63.1203, 63.1204, 63.1205, 63.1215, 63.1216, 63.1217, 63.1218, 63.1219, 63.1220, and 63.1221; the monitoring and compliance standards of 40 C.F.R. §§ 63.1206 through 63.1209, except the modes of operation requirements of § 63.1209(q); and the notification, reporting, and recordkeeping requirements of §§ 63.1210 through 63.1212.

4. Changes in design, operation, or maintenance. [40 C.F.R. § 63.1206(b)(5)]

- (a) If the Permittee plans to change (as defined in 40 C.F.R. § 63.1206(b)(5)(iii)) the design, operation, or maintenance practices of the source in a manner that may adversely affect compliance with any emission standard that is not monitored with a CEMS, the Permittee must not burn hazardous waste for more than a total of 720 hours (renewable at the discretion of the Administrator) and only for the purposes of pretesting or

comprehensive performance testing. Pretesting is defined at 40 C.F.R. § 63.1207(h)(2)(i) and (ii). [40 C.F.R. § 63.1206(b)(5)(i)(C)(1)]

- (i) The Permittee may petition the Administrator to obtain written approval to burn hazardous waste in the interim prior to submitting a Notification of Compliance for purposes other than testing or pretesting. The Permittee must specify operating requirements, including limits on operating parameters that the Permittee determines will ensure compliance with the emission standards of 40 C.F.R. Part 63, Subpart EEE, based on available information. The Administrator will review, modify as necessary, and approve if warranted the interim operating requirements. [40 C.F.R. § 63.1206(b)(5)(i)(C)(2)]
- (ii) Nothing in this permit exempts any changes made under this provision from any applicable requirements under Title I of the CAA. [40 C.F.R. § 71.6(a)(1)]

- (b) Notification. [40 C.F.R. § 63.1206(b)(5)]

The Permittee must comply with the notification requirements of condition 2.1(E)(9), below.

5. General Operating Requirements. [40 C.F.R. § 63.1206(c)(1)]

- (a) The Permittee must operate under the operating requirements specified in the Documentation of Compliance (DOC) under 40 C.F.R. § 63.1211(c) or the NOC under 40 C.F.R. §§ 63.1207(j) and 63.1210(d), except:
  - (i) During performance tests under approved test plans according to 40 C.F.R. § 63.1207(e), (f), and (g);
  - (ii) Under the provisions of condition 2.1(C)(3)(a) or (b), above; and
  - (iii) As provided by condition 2.1(C)(2), above.
- (b) Documentation of Compliance. [40 C.F.R. § 63.1211(c)]

The Permittee's operating record must include a DOC. The DOC must identify the applicable emission standards under 40 C.F.R. Part 63, Subpart EEE, and the limits on the operating parameters under 40 C.F.R. § 63.1209 that will ensure compliance with those emission standards.

- (c) Failure to comply with the operating requirements is failure to ensure compliance with the emission standards of 40 C.F.R. Part 63, Subpart EEE.

6. Startup, Shutdown, and Malfunction Plan. [40 C.F.R. §§ 63.6(e)(3), 63.1206(c)(2)]

(a) The Permittee is subject to the startup, shutdown, and malfunction plan requirements of 40 C.F.R. § 63.6(e)(3). [40 C.F.R. § 63.1206(c)(2)(i)]

(i) The Permittee must develop a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction; and a program of corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with the relevant standard. The startup, shutdown, and malfunction plan does not need to address any scenario that would not cause the source to exceed an applicable emission limitation in the relevant standard. The purpose of the startup, shutdown, and malfunction plan is to:

- A. Ensure that, at all times, the Permittee operates and maintains each affected source, including associated air pollution control and monitoring equipment, in a manner which satisfies the general duty to minimize emissions established by 40 C.F.R. § 63.6(e)(1)(i);
- B. Ensure that the Permittee is prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and
- C. Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).

[40 C.F.R. § 63.6(e)(3)(i)]

(ii) The Permittee must maintain at the affected source a current startup, shutdown, and malfunction plan and must make the plan available upon request for inspection and copying by the Administrator. In addition, if the startup, shutdown, and malfunction plan is subsequently revised as provided in 40 C.F.R. § 63.6(e)(3)(viii), the Permittee must maintain at the affected source each previous (i.e., superseded) version of the startup, shutdown, and malfunction plan, and must make each previous version available for inspection and copying by the Administrator for a period of 5 years after revision of the plan. If at any time after adoption of a startup, shutdown, and malfunction plan an affected source ceases operation or is otherwise

no longer subject to the provisions of this part, the Permittee must retain a copy of the most recent plan for 5 years from the date the source ceases operation or is no longer subject to 40 C.F.R. Part 63, and must make the plan available upon request for inspection and copying by the Administrator. Upon receipt of a written request from the Administrator that the Permittee submit a copy of any startup, shutdown, and malfunction plan (or portion thereof) which the Permittee maintains at the affected source or which is in the possession of the Permittee, the Permittee must promptly submit a copy of the requested plan (or a portion thereof) to the Administrator. The Permittee may elect to submit the required copy of any startup, shutdown, and malfunction plan to the Administrator in an electronic format. The Permittee may claim that any portion of such a startup, shutdown, and malfunction plan is confidential business information (CBI) entitled to protection from disclosure under section 114(c) of the Act or 40 C.F.R. § 2.301. If the Permittee makes a CBI claim, it must clearly designate in the submission the material which it claims as confidential. [40 C.F.R. § 63.6(e)(3)(v)]

- (iii) To satisfy the requirements of 40 C.F.R. § 63.6 to develop a startup, shutdown, and malfunction plan, the Permittee may use the affected source's standard operating procedures (SOP) manual, an Occupational Safety and Health Administration (OSHA) plan manual, or other plan, provided the alternative plans meet all the requirements of 40 C.F.R. § 63.6 and the Permittee makes the alternative plans available for inspection when requested by the Administrator. [40 C.F.R. § 63.6(e)(3)(vi)]
- (iv) The Permittee must revise the startup, shutdown, and malfunction plan if required by the Administrator to do so based on the results of a determination made under 40 C.F.R. § 63.6(e)(1)(i), or if the Administrator finds that the plan:
  - A. Does not address a startup, shutdown, or malfunction event that has occurred;
  - B. Fails to provide for the operation of the source (including associated air pollution control and monitoring equipment) during a startup, shutdown, or malfunction event in a manner consistent with the general duty to minimize emissions established by 40 C.F.R. § 63.6(e)(1)(i);

- C. Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control and monitoring equipment as quickly as practicable; or
- D. Includes an event that does not meet the definition of startup, shutdown, or malfunction listed in 40 C.F.R. § 63.2.

[40 C.F.R. § 63.6(e)(3)(vii)]

- (v) The Permittee may periodically revise the startup, shutdown, and malfunction plan for the affected source as necessary to satisfy the requirements of 40 C.F.R. Part 63 or to reflect changes in equipment or procedures at the affected source. The Permittee may make such revisions to the startup, shutdown, and malfunction plan without prior approval by the Administrator or the permitting authority. However, the Permittee must report each revision to the startup, shutdown, and malfunction plan in the semiannual report required by 40 C.F.R. § 63.10(d)(5). If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the Permittee developed the plan, the Permittee must revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events, and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. In the event that the Permittee makes any revision to the startup, shutdown, and malfunction plan which alters the scope of the activities at the source which are deemed to be a startup, shutdown, or malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under 40 C.F.R. Part 63, the revised plan shall not take effect until after the Permittee has provided a written notice describing the revision to the Administrator. [40 C.F.R. § 63.6(e)(3)(viii)]
- (vi) Any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established by 40 C.F.R. Part 63 shall not be deemed to constitute revisions to this permit, and the elements of the startup, shutdown, and malfunction plan shall not be considered an applicable requirement as defined in 40 C.F.R. §§ 70.2 and 71.2. [40 C.F.R. § 63.6(e)(3)(ix)]

- (vii) The procedures specified in the startup, shutdown, and malfunction plan do not fall within the permit shield provided in condition 4.21 of this permit. [40 C.F.R. § 63.6(e)(3)(ix)]
- (b) The Permittee is subject to the following provisions of 40 C.F.R. § 63.1206(c)(2) and (3):
  - (i) The Permittee must identify in the startup, shutdown, and malfunction plan a projected oxygen correction factor, based on normal operations, to use during periods of startup and shutdown. [40 C.F.R. § 63.1206(c)(2)(iii)]
  - (ii) The Permittee must record the startup, shutdown, and malfunction plan in the operating record. [40 C.F.R. § 63.1206(c)(2)(iv)]
  - (iii) Operating under the startup, shutdown, and malfunction plan: [40 C.F.R. § 63.1206(c)(2)(v)(A)]
    - A. Compliance with automatic waste feed cutoff (AWFCO) requirements during malfunctions:
      - I. During malfunctions, the AWFCO requirements of condition 2.1(C)(7) of this permit continue to apply, except for condition 2.1(C)(7)(e). If there is an exceedance of a 40 C.F.R. Part 63, Subpart EEE, emission standard monitored by a CEMS or operating limit specified under 40 C.F.R. § 63.1209, the automatic waste feed cutoff system must immediately and automatically cutoff the hazardous waste feed, except as provided by condition 2.1(C)(7)(f) of this permit. If the malfunction itself prevents immediate and automatic cutoff of the hazardous waste feed, the Permittee must cease feeding hazardous waste as quickly as possible.
      - II. Although the automatic waste feed cutoff requirements continue to apply during a malfunction, an exceedance of an emission standard monitored by a CEMS or operating limit specified under 40 C.F.R. § 63.1209 is not a violation of 40 C.F.R. Part 63, Subpart EEE, if the source continues to operate in accordance with 40 C.F.R. § 63.6(e)(1). [40 C.F.R. § 63.1206(c)(2)(v)(A)(2)]
      - III. Excessive number of exceedances during malfunctions. For each set of 10 exceedances of an emission standard or operating requirement while hazardous waste remains

in the combustion chamber (i.e., when the hazardous waste residence time has not transpired since the hazardous waste feed was cutoff) during a 60-day block period, the Permittee must:

- (aa) Within 45 days of the 10th exceedance, complete an investigation of the cause of each exceedance and evaluation of approaches to minimize the frequency, duration, and severity of each exceedance, and revise the startup, shutdown, and malfunction plan as warranted by the evaluation to minimize the frequency, duration, and severity of each exceedance; and
  - (bb) Record the results of the investigation and evaluation in the operating record, and include a summary of the investigation and evaluation, and any changes to the startup, shutdown, and malfunction plan, in the excess emissions report required under condition 2.1(D) of this permit and 40 C.F.R. § 63.10(e)(3). [40 C.F.R. § 63.1206(c)(2)(v)(A)]
- B. Compliance with AWFCO requirements when burning hazardous waste during startup and shutdown: [40 C.F.R. § 63.1206(c)(2)(v)(B)]
- I. If the Permittee feeds hazardous waste during startup or shutdown, the Permittee must include waste feed restrictions (*e.g.*, type and quantity), and other appropriate operating conditions and limits in the startup, shutdown, and malfunction plan. [40 C.F.R. § 63.1206(c)(2)(v)(B)(1)]
  - II. The Permittee must interlock the operating limits established under condition 2.1(C)(6)(iii)(B)(1), above, with the automatic waste feed cutoff system required under condition 2.1(C)(7), except for condition 2.1(C)(7)(e). [40 C.F.R. § 63.1206(c)(2)(v)(B)(2)]
  - III. When feeding hazardous waste during startup or shutdown, the automatic waste feed cutoff system must immediately and automatically cutoff the hazardous waste feed if the Permittee exceeds the operating limits established under condition 2.1(C)(6)(b)(iii)(B)(1) of

this permit, except as provided by condition 2.1(C)(7).  
[40 C.F.R. § 63.1206(c)(2)(v)(B)(3)]

IV. Although the automatic waste feed cutoff requirements of 40 C.F.R. § 63.1206 (c)(2)(v)(B)(4) apply during startup and shutdown, an exceedance of an emission standard or operating limit is not a violation of Subpart EEE if the Permittee operates in accordance with 40 C.F.R. § 63.6(e)(1). [40 C.F.R. § 63.1206(c)(2)(v)(B)(4)]

- (c) The Permittee shall not cause or allow the continued operation of an emission source during malfunction or breakdown of the emission source or related air pollution control equipment if such operation would cause a violation of the standards or limitations set forth in the Illinois Administrative Code, Subchapter c: Emission Standards and Limitations for Stationary Sources. The Permittee shall not cause or allow violation of the standards or limitations set forth in Subchapter c: Emission Standards and Limitations for Stationary Sources during startup. [35 IAC 201.149]

7. Automatic waste feed cutoff (AWFCO). [40 C.F.R. § 63.1206(c)(3)]

- (a) The Permittee must operate the hazardous waste combustor with a functioning AWFCO system that immediately and automatically cuts off the hazardous waste feed, except as provided by condition 2.1(C)(7)(f):
  - (i) When any of the following are exceeded: Operating parameter limits specified under condition 2.1(C) of this permit and 40 C.F.R. § 63.1209; an emission standard monitored by a CEMS; and the allowable combustion chamber pressure;
  - (ii) When the span value of any CMS detector, except a CEMS, is met or exceeded;
  - (iii) Upon malfunction of a CMS monitoring an operating parameter limit specified under condition 2.1(C) of this permit and 40 C.F.R. § 63.1209 or an emission level; or
  - (iv) When any component of the AWFCO system fails. [40 C.F.R. § 63.1206(c)(3)(i)]
- (b) Ducting of combustion gases. During an AWFCO, the Permittee must continue to duct combustion gasses to the air pollution control system while hazardous waste remains in the combustion chamber (i.e., if the

hazardous waste residence time has not transpired since the hazardous waste feed cutoff system was activated). [40 C.F.R. § 63.1206(c)(3)(ii)]

- (c) Restarting waste feed. The Permittee must continue to monitor during the cutoff the operating parameters for which limits are established under condition 2.1(C) of this permit and 40 C.F.R. § 63.1209 and the emissions required under that section to be monitored by a CEMS, and must not restart the hazardous waste feed until the operating parameters and emission levels are within the specified limits. [40 C.F.R. § 63.1206(c)(3)(iii)]
- (d) Failure of the AWFCO system. If the AWFCO system fails to automatically and immediately cut off the flow of hazardous waste upon exceedance of a parameter required to be interlocked with the AWFCO system under condition 2.1(C)(7)(a), the Permittee has failed to comply with the AWFCO requirements of condition 2.1(C)(7). If an equipment or other failure prevents immediate and automatic cutoff of the hazardous waste feed, however, the Permittee must cease feeding hazardous waste as quickly as possible. [40 C.F.R. § 63.1206(c)(3)(iv)]
- (e) Corrective measures. If, after any AWFCO, there is an exceedance of an emission standard or operating requirement, irrespective of whether the exceedance occurred while hazardous waste remained in the combustion chamber (i.e., whether the hazardous waste residence time has transpired since the hazardous waste feed cutoff system was activated), the Permittee must investigate the cause of the AWFCO, take appropriate corrective measures to minimize future AWFCOs, and record the findings and corrective measures in the operating record. [40 C.F.R. § 63.1206(c)(3)(v)]
- (f) Ramping down waste feed. [40 C.F.R. § 63.1206(c)(3)(viii)]
  - (i) The Permittee may ramp down the waste feedrate of pumpable hazardous waste over a period not to exceed 1 minute, except as provided by condition 2.1(C)(7)(f)(ii) of this permit, below. If the Permittee elects to ramp down the waste feed, the Permittee must document ramp down procedures in the operating and maintenance plan. The procedures must specify that the ramp down begins immediately upon initiation of AWFCO and the procedures must prescribe a bona fide ramping down. If an emission standard or operating limit is exceeded during the ramp down, the Permittee has failed to comply with the emission standards or operating requirements of 40 C.F.R. Part 63, Subpart EEE.
  - (ii) If the AWFCO is triggered by an exceedance of any of the following operating limits, the Permittee may not ramp down the waste feed

cutoff: minimum combustion chamber temperature, maximum hazardous waste feedrate, or any hazardous waste firing system operating limits that may be established for its combustor.

- (g) Compliance with the AWFCO requirements in 40 C.F.R. Part 63, Subpart EEE, will assume compliance with the requirements for a waste feed cutoff interlock system and sensors required by construction permits 87100024, 88010001, and 83120053. [40 C.F.R. § 71.6(a)(3)(i)(A)]

8. Emergency safety vent (ESV) openings. [40 C.F.R. § 63.1206(c)(4)]

- (a) Failure to meet standards. If an ESV opens when hazardous waste remains in the combustion chamber (i.e., when the hazardous waste residence time has not expired) during an event other than a malfunction as defined in the startup, shutdown, and malfunction plan such that combustion gases are not treated as during the most recent comprehensive performance test (e.g., if the combustion gas by-passes any emission control device that was operating during the performance test), the Permittee must document in the operating record whether the source remained in compliance with the emission standards of 40 C.F.R. Part 63, Subpart EEE, considering emissions during the ESV opening event. [40 C.F.R. § 63.1206(c)(4)(i)]
- (b) ESV operating plan. [40 C.F.R. § 63.1206(c)(c)(4)(ii)]
  - (i) The Permittee must develop an ESV operating plan, comply with the operating plan, and keep the plan in the operating record.
  - (ii) The ESV operating plan must provide detailed procedures for rapidly stopping the waste feed, shutting down the combustor, and, if feasible, maintaining temperature and negative pressure in the combustion chamber during the hazardous waste residence time. The plan must include calculations, information and data documenting the effectiveness of the plan's procedures for ensuring that combustion chamber temperature and negative pressure are maintained as is reasonably feasible.
- (c) Corrective measures. After any ESV opening that results in a failure to meet the emission standards as defined in condition 2.1(C)(8)(a) of this permit, the Permittee must investigate the cause of the ESV opening, take appropriate corrective measures to minimize such future ESV openings, and record the findings and corrective measures in the operating record. [40 C.F.R. § 63.1206(c)(4)(iii)]

9. Combustion system leaks. [40 C.F.R. § 63.1206(c)(5)]
  - (a) The Permittee must control combustion system leaks of hazardous air pollutants by maintaining the maximum combustion zone pressure lower than ambient pressure using an instantaneous monitor; and [40 C.F.R. § 63.1206(c)(5)(i)(B)]
  - (b) The Permittee must specify in the performance test work plan and NOC the method that it will use to control combustion system leaks. Because the Permittee controls combustion system leaks by maintaining the combustion zone pressure lower than ambient pressure using an instantaneous monitor, the Permittee must also specify in the performance test work plan and NOC the monitoring and recording frequency of the pressure monitor, and specify how the monitoring approach is integrated into the automatic waste feed cutoff system. [40 C.F.R. § 63.1206(c)(5)(ii)]
10. Operator training and certification. [40 C.F.R. § 63.1206(c)(6)]
  - (a) The Permittee must establish training programs for all categories of personnel whose activities may reasonably be expected to directly affect emissions of hazardous air pollutants from the source. Such persons include, but are not limited to, chief facility operators, control room operators, continuous monitoring system operators, persons that sample and analyze feedstreams, persons that manage and charge feedstreams to the combustor, persons that operate emission control devices, and ash and waste handlers. Each training program shall be of a technical level commensurate with the person's job duties specified in the training manual. Each commensurate training program shall require an examination to be administered by the instructor at the end of the training course. Passing of this test shall be deemed the "certification" for personnel, except that, for control room operators, the training and certification program shall be as specified in conditions 2.1(C)(10)(c) through (e) of this permit. [40 C.F.R. § 63.1206(c)(6)(i)]
  - (b) The Permittee must ensure that the source is operated and maintained at all times by persons who are trained and certified to perform these and any other duties that may affect emissions of hazardous air pollutants. A certified control room operator must be on duty at the site at all times the source is in operation. [40 C.F.R. § 63.1206(c)(6)(ii)]
  - (c) Hazardous waste incinerator control room operators must: [40 C.F.R. § 63.1206(c)(6)(iii)]

- (i) Be trained and certified under a site-specific, source-developed and implemented program that meets the requirements of condition 2.1(C)(10)(d), below; or
  - (ii) Be trained under the requirements of, and certified under, one of the following American Society of Mechanical Engineers (ASME) standards: QHO-1-1994, QHO-1a-1996, or QHO-1-2004 (Standard for the Qualification and Certification of Hazardous Waste Incinerator Operators). If the Permittee elects to use the ASME program:
    - A. Control room operators must, prior to the compliance date, achieve provisional certification, and must submit an application to ASME and be scheduled for the full certification exam. Within 1 year of the compliance date, control room operators must achieve full certification;
    - B. New operators and operators of new sources must, before assuming their duties, achieve provisional certification, and must submit an application to ASME, and be scheduled for the full certification exam. Within 1 year of assuming their duties, these operators must achieve full certification; or
  - (iii) Be trained and certified under a State program.
- (d) Site-specific, source developed and implemented training programs for control room operators must include the following elements:
- (i) Training on the following subjects:
    - A. Environmental concerns, including types of emissions;
    - B. Basic combustion principles, including products of combustion;
    - C. Operation of the specific type of combustor used by the operator, including proper startup, waste firing, and shutdown procedures;
    - D. Combustion controls and continuous monitoring systems;
    - E. Operation of air pollution control equipment and factors affecting performance;

- F. Inspection and maintenance of the combustor, continuous monitoring systems, and air pollution control devices;
- G. Actions to correct malfunctions or conditions that may lead to malfunction;
- H. Residue characteristics and handling procedures; and
- I. Applicable federal, state, and local regulations, including Occupational Safety and Health Administration workplace standards; and

- (ii) An examination designed and administered by the instructor; and
- (iii) Written material covering the training course topics that may serve as reference material following completion of the course.

[40 C.F.R. § 63.1206(c)(6)(v)]

- (e) To maintain control room operator qualification under a site-specific, source developed and implemented training program as provided by condition 2.1(C)(10)(d), above, control room operators must complete an annual review or refresher course covering, at a minimum, the following topics:

- (i) Update of regulations;
- (ii) Combustor operation, including startup and shutdown procedures, waste firing, and residue handling;
- (iii) Inspection and maintenance;
- (iv) Responses to malfunctions or conditions that may lead to malfunction; and
- (v) Operating problems encountered by the operator.

[40 C.F.R. § 63.1206(c)(6)(vi)]

- (f) The Permittee must record the operator training and certification program in the operating record. [40 C.F.R. § 63.1206(c)(6)(vii)]

11. Operation and maintenance plan. [40 C.F.R. § 63.1206(c)(7)]

- (a) The Permittee must prepare and at all times operate according to an operation and maintenance (O&M) plan that describes in detail procedures for operation, inspection, maintenance, and corrective measures for all components of the combustors, including associated pollution control equipment, that could affect emissions of regulated hazardous air pollutants. [40 C.F.R. § 63.1206(c)(7)(i)]
- (b) The plan must prescribe how the Permittee will operate and maintain the combustors in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels achieved during the comprehensive performance test. [40 C.F.R. § 63.1206(c)(7)(ii)]
- (c) This plan ensures compliance with the operation and maintenance requirements of 40 C.F.R. § 63.6(e) and minimizes emissions of pollutants, automatic waste feed cutoffs, and malfunctions. [40 C.F.R. § 63.1206(c)(7)(iii)]
- (d) The Permittee must record the plan in the operating record. [40 C.F.R. § 63.1206(c)(7)(iv)]

**(D) Monitoring and Testing [40 C.F.R. § 71.6(a)(3)(i)(A), 40 C.F.R. § 71.6(c)(1)]**

- 1. Continuous emissions monitoring systems (CEMS) and other monitoring devices. [40 C.F.R. § 63.1209(a) except as otherwise specified]:
  - (a) The Permittee must use either a carbon monoxide or hydrocarbon CEMS to demonstrate and monitor compliance with the carbon monoxide or hydrocarbon standard. The Permittee must also use an oxygen CEMS to continuously correct the carbon monoxide measurements to 7 percent oxygen.
  - (b) After such time as the EPA promulgates all performance specifications and operational requirements applicable to PM CEMS, the Permittee must install, calibrate, maintain, and operate a PM CEMS to demonstrate and monitor compliance with the particulate matter standards under this permit.
  - (c) Performance specifications. The Permittee must install, calibrate, maintain, and continuously operate all CEMS in compliance with the quality assurance procedures provided in the appendix to 40 C.F.R. Part 63, Subpart EEE, and Performance Specifications 1 (opacity), 4B (carbon monoxide and oxygen), and 8A (hydrocarbons) in Appendix B to 40 C.F.R. Part 60.

- (d) Carbon monoxide readings exceeding the span should be recorded in accordance with the following requirements of 40 C.F.R. § 63.1209(a)(3):
  - (i) Except as provided by 40 C.F.R. § 63.1209(a)(3)(ii), if a carbon monoxide CEMS detects a response that results in a 1-minute average at or above the 3,000 ppmv span level required by Performance Specification 4B in Appendix B to 40 C.F.R. Part 60, the Permittee must record the 1-minute average as 10,000 ppmv. The Permittee must use the 1-minute 10,000 ppmv value for calculating the hourly rolling average carbon monoxide level.
  - (ii) Carbon monoxide CEMS that use a span value of 10,000 ppmv when 1-minute carbon monoxide levels are equal to or exceed 3,000 ppmv are not subject to 40 C.F.R. § 63.1209(a)(3)(i). Carbon monoxide CEMS that use a span value of 10,000 are subject to the same CEMS performance and equipment specifications when operating in the range of 3,000 ppmv to 10,000 ppmv that are provided by Performance Specification 4B for other carbon monoxide CEMS, except:
    - A. Calibration drift must be less than 300 ppmv; and
    - B. Calibration error must be less than 500 ppmv.
- (e) Hydrocarbon readings exceeding the span.
  - (i) Except as provided by 40 C.F.R. § 63.1209(a)(4)(ii), if a hydrocarbon CEMS detects a response that results in a 1-minute average at or above the 100 ppmv span level required by Performance Specification 8A in Appendix B to 40 C.F.R. Part 60, the Permittee must record the 1-minute average as 500 ppmv. The Permittee must use the 1-minute 500 ppmv value for calculating the hourly rolling average hydrocarbon level.
  - (ii) Hydrocarbon CEMS that use a span value of 500 ppmv when 1-minute hydrocarbon levels are equal to or exceed 100 ppmv are not subject to 40 C.F.R. § 63.1209(a)(4)(i). Hydrocarbon CEMS that use a span value of 500 ppmv are subject to the same CEMS performance and equipment specifications when operating in the range of 100 ppmv to 500 ppmv that are provided by Performance Specification 8A in Appendix B to 40 C.F.R. Part 60 for other hydrocarbon CEMS, except:

- A. The zero and high-level calibration gas must have a hydrocarbon level of between 0 and 100 ppmv, and between 250 and 450 ppmv, respectively;
  - B. The strip chart recorder, computer, or digital recorder must be capable of recording all readings within the CEM measurement range and must have a resolution of 2.5 ppmv;
  - C. The CEMS calibration must not differ by more than  $\pm 15$  ppmv after each 24-hour period of the seven day test at both zero and high levels;
  - D. The calibration error must be no greater than 25 ppmv; and
  - E. The zero level, mid-level, and high level calibration gas used to determine calibration error must have a hydrocarbon level of 0–200 ppmv, 150–200 ppmv, and 350–400 ppmv, respectively.
- (f) Petitions to use CEMS for other standards. The Permittee may petition EPA to use CEMS for compliance monitoring for particulate matter, mercury, semivolatile metals, low volatile metals, and hydrogen chloride and chlorine gas under 40 C.F.R. § 63.8(f), in lieu of compliance with the corresponding operating parameter limits.
- (g) Calculation of rolling averages. The Permittee shall calculate rolling averages in accordance with the following requirements of 40 C.F.R. § 63.1209(a)(6):
- (i) Calculation of rolling averages upon intermittent operations. The Permittee must ignore periods of time when 1-minute values are not available for calculating the hourly rolling average. When 1-minute values become available again, the first 1-minute value is added to the previous 59 values to calculate the hourly rolling average. [40 C.F.R. § 63.1209(a)(6)(ii)]
  - (ii) Calculation of rolling averages when the hazardous waste feed is cut off. [40 C.F.R. § 63.1209(a)(6)(iii)]
    - A. Except as provided by condition 2.1(D)(1)(g)(ii)(B), below, the Permittee must continue monitoring carbon monoxide when the hazardous waste feed is cut off if the source is operating. The Permittee must not resume feeding hazardous waste if the emission levels exceed the standard.

- B. The Permittee is not subject to the CEMS requirements of 40 C.F.R. Part 63, Subpart EEE, during periods of time the Permittee meets the requirements of 40 C.F.R. § 63.1206(b)(1)(ii) (compliance with emissions standards for nonhazardous waste burning sources when the Permittee is not burning hazardous waste).
- (h) Operating parameter limits for hydrocarbons. If the Permittee elects to comply with the carbon monoxide and hydrocarbon emission standard by continuously monitoring carbon monoxide with a CEMS, the Permittee must demonstrate that hydrocarbon emissions during the comprehensive performance test do not exceed the hydrocarbon emissions standard. In addition, the limits the Permittee establishes on the DRE operating parameters required under 40 C.F.R. § 63.1209(j) also must ensure that the Permittee maintains compliance with the hydrocarbon emission standard. If the Permittee does not conduct the hydrocarbon demonstration and DRE tests concurrently, the Permittee must establish separate operating parameter limits under 40 C.F.R. § 63.1209(j) based on each test, and the more restrictive of the operating parameter limits applies.
- (i) Multi-metals monitoring devices. [40 C.F.R. § 63.1209(g)(2); 40 C.F.R. § 71.6(c)(1)]

As further specified in Conditions 2.1(D)(i)(i) through (xiv), below, the Permittee shall install, calibrate, maintain and operate multi-metals monitoring devices on Units 2, 3 and 4 within 12 months (365 days) after this permit becomes effective, unless the Administrator determines that a time extension is warranted based on the Permittee's documentation in writing of factors beyond its control that prevent the Permittee from meeting the 12-month deadline. These devices will be used as described herein to establish limits on operating parameters to control the emission of metals from the Permittee's facility. The Permittee must also install and operate an oxygen CEMS on each unit to continuously correct the data from these multi-metals monitoring devices to 7 percent oxygen. This requirement does not provide or imply an endorsement or validation of any specific vendor's hardware or software.

- (i) Unless otherwise approved by the Administrator in writing, each multi-metals device must meet the installation requirements in Other Test Method (OTM) 16, Performance Specification YY (Specifications and Test Procedures for X-ray Fluorescence Based Multi-Metals Continuous Emission Monitoring Systems at Stationary Sources) and the on-going quality control and quality assurance procedures set forth in OTM 20, Procedure Z (Quality Assurance Requirements for X-Ray-Fluorescence Based Multi-

Metals Continuous Emission Monitoring Systems at Stationary Sources) and subsequent revisions.

- (ii) At a minimum, each multi-metals monitoring device shall measure and report the total concentrations (regardless of speciation) of the following metals in both their vapor and solid forms in the exhaust stream: arsenic, beryllium, cadmium, chromium, lead and mercury.
  - A. Exception for beryllium emissions: If the Permittee installs a multi-metals monitoring device that is incapable of measuring beryllium emissions, the Permittee must quantify beryllium emissions using 12-hour rolling average the beryllium feedrate as determined according to condition 2.1(D)(4)(d), below, for the most recent 12-hour period for which feedstream analysis data for beryllium is available, and the system removal efficiency and exhaust parameters used by the Permittee to estimate beryllium emissions for that 12-hour period.
  - B. For purposes of condition 2.1(D)(1)(i)(ii)(A), above, unless otherwise approved in writing by EPA, the Permittee shall base its calculations on the beryllium feedrate as determined according to condition 2.1(D)(4)(d), below, system removal efficiency from the last comprehensive performance test required by conditions 2.1(D)(8) and (10), below, and continuous flow and temperature data as measured by CMS required under condition 2.1(D)(2), below. If beryllium stack concentrations were not detectable (i.e., emissions were non-detect values) during the last comprehensive performance test, the Permittee may use the lowest system removal efficiency for LVM instead of one for beryllium.
- (iii) The indicator range for mercury, semi-volatile metals (SVM), or low volatile metals (LVM) measured by the multi-metals monitoring device is equal to the emission limit (in the units of micrograms per dry standard cubic meter,  $\mu\text{g}/\text{dscm}$ , corrected to 7 percent oxygen) for the respective metal or group of metals specified in condition 2.1(A)(7) of this permit. For this purpose, the indicator range for LVM (arsenic, beryllium and chromium) and SVM (lead and cadmium) is the sum of emissions of the individual constituents of each metal group. Nothing in this condition precludes the Permittee from establishing an indicator range for any metal or metal group at a value that is less (i.e., more stringent) than the emission limits in condition 2.1(A)(7).
- (iv) For a period of no less than 12 calendar months with complete data as specified in conditions 2.1(D)(1)(i)(iv)(B) and (C), below, the

Permittee shall operate each multi-metals monitoring device at all times except during periods of monitor downtime due to calibration, quality assurance checks or scheduled maintenance. Operation “at all times” is defined as the collection of at least one measurement for each successive 15-minute period.

- A. In order to calculate a valid 1-hour block average, valid device readings must be available for at least three of the four 15-minute cycles in each hour.
  - B. Each multi-metals monitoring device must provide a minimum of 95 percent valid data capture of 1-hour data for each calendar month, based on source operating time.
  - C. Only those calendar months for which the minimum data availability rate as specified in condition 2.1(D)(1)(i)(iv)(B), above, was met shall be counted towards the total operating period for the multi-metals monitoring device.
  - D. For those months for which the minimum data availability rate is not met, the Permittee must provide, as part of its quarterly report, an explanation of the reasons that the device or devices did not collect data for the minimum period.
- (v) During the period when each multi-metals monitoring device is installed and operating, the Permittee shall calculate and record 1-hour block average emissions from the raw data obtained by each monitoring device. The Permittee shall also calculate 6-hour and 12-hour rolling averages of data for each monitoring device, calculated each hour as the average of data collected over the previous 6 and 12 operating hours, respectively. The Permittee shall maintain for five years all data used in all calculations.
- (vi) The Permittee shall report to EPA in accordance with condition 2.1(D)(1)(i)(x) for every 6-hour and 12-hour rolling averaging period during which the 6-hour and 12-hour rolling average emissions from any incinerator, as measured by the multi-metals monitoring device, were outside the indicator range specified in condition 2.1(D)(1)(i)(iii), above.
- (vii) During the period when any multi-metals monitoring device is being operated, the Permittee must continue to operate other CMS required under condition 2.1(D)(2) for the respective incinerator, and must monitor feedrates for the incinerator using the procedures contained in the feedstream analysis plan required under condition

2.1(D)(4)(b), and the supplemental procedures contained in condition 2.1(D)(4)(d)(2).

- (viii) At the end of each multi-metals monitoring device's operating period as defined in condition 2.1(D)(1)(i)(iv), above, the Permittee may petition the Administrator, in accordance with 40 C.F.R. § 63.1209(a)(5), to use any or all of the multi-metals monitoring devices as CEMS to demonstrate compliance with monitoring for mercury, LVM and SVM under 40 C.F.R. § 63.8(f) in lieu of compliance with the corresponding operating parameter limits for the respective incinerators.
- (ix) For purposes of condition 2.1(D)(1)(i), any 1-hour block average multi-metals monitoring device reading above any indicator range, as defined in condition 2.1(D)(1)(i)(iii), above, is an excursion as defined at 40 C.F.R. § 64.1. If the Permittee opts to interlock the multi-metals monitoring devices with the automatic waste feed cut-off (AWFCO) system required by condition 2.1(C)(7), the Permittee shall use the corresponding 12-hour rolling average of multi-metals monitoring device data.
- (x) If the data from any multi-metals monitoring devices show an excursion, as defined in condition 2.1(D)(1)(i)(ix), the Permittee must analyze the feedstream analysis data for the waste burned at the time of the excursion and the combustion conditions that existed at the time of the excursion to determine why the excursion occurred. The Permittee will send to the Administrator within 30 days of the excursion all feedstream analysis data for the period of the excursion and its analysis of the cause of the excursion, actions taken to address the excursion, and the corresponding 6- and 12-hour rolling average concentrations of each affected metal or class of metals for the measurement period that includes the hour(s) for which an excursion occurred.
- (xi) From the time that a multi-metals monitoring device records an excursion, the Permittee must immediately take corrective action to reduce emissions of the affected metal(s) and record all corrective actions taken. Corrective actions may include, but are not limited to, stop feeding or reduce the feedrate of the batch of waste burned when the excursion occurred, or adjustment to combustion conditions. The Permittee must document all corrective actions in the report required by condition 2.1(D)(1)(i)(x).
- (xii) If operation of the multi-metals monitoring devices, in conjunction with feedstream analysis or other relevant data, reveals that any of the feedrate limits and/or other OPLs included in Section 2.1(C)(2) of this

permit must be made more stringent in order to assure compliance with the applicable emissions limits, EPA may reopen this permit, pursuant to 40 C.F.R. § 71.7(f).

- (xiii) If operation of the multi-metals monitoring devices, in conjunction with feedstream analysis or other relevant data, reveals that any of the feedrate limits and/or any other OPLs included in Section 2.1(C)(2) of this permit are more stringent than necessary to assure compliance with the applicable emissions limits, the Permittee may petition the Administrator to use the results of historical comprehensive performance tests, feedstream analysis, and multi-metals monitoring device data to establish revised feedrate limits or other OPLs for the affected incinerators provided the monitoring data demonstrate that compliance would be assured at the higher feedrate limits regardless of the waste burned. Nothing in this permit or 40 C.F.R. Part 63, Subpart EEE, obligates the Administrator to approve a petition for revised feedrate limits or other OPLs.
- (xiv) Notwithstanding the specific recordkeeping and reporting requirements contained in condition 2.1(E) of this permit, the Permittee shall, on a quarterly basis, submit to EPA a summary of emissions data recorded by each multi-metals monitoring device and the 1-hour block average, and the 6-hour and 12-hour rolling average mercury, SVM and LVM feedrates recorded during the same period. The emissions data summary shall include:
  - A. The 1-hour block average, and the 6-hour and 12-hour rolling average concentrations of mercury, LVM and SVM as recorded by the multi-metals monitoring device, in the units of the applicable MACT standards ( $\mu\text{g}/\text{dscm}$ , corrected to 7 percent oxygen);
  - B. The 1-hour block average, and the 6-hour and 12-hour rolling average feedrates, as determined through the required feedstream analyses conducted during the same period;
  - C. Sample calculations, equations or other data used by the Permittee to convert monitoring device and feedrate data;
  - D. The total duration in hours of any excursions, as defined in condition 2.1(D)(1)(i)(ix), above, during the reporting period, the 1-hour block average, and the 6-hour and 12-hour rolling average concentrations recorded during each period for which an excursion was recorded, the total duration of excursions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of

excursions during the reporting period into those that are due to startup/shutdown, control equipment problems, process problems, other known causes, and other unknown causes; and

- E. All excursions that occurred during the reporting period and corrective actions taken in response to excursions.

2. Other continuous monitoring systems (CMS). [40 C.F.R. § 63.1209(b)]

- (a) The Permittee must use CMS (e.g., thermocouples, pressure transducers, flow meters) to document compliance with the applicable operating parameter limits under 40 C.F.R. § 63.1209.
- (b) Except as specified in conditions 2.1(D)(2)(b)(i) and (ii), below, the Permittee must install and operate continuous monitoring systems other than CEMS in conformance with 40 C.F.R. § 63.8(c)(3) that requires, at a minimum, to comply with the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system:
  - (i) Calibration of thermocouples and pyrometers. The calibration of thermocouples must be verified at a frequency and in a manner consistent with manufacturer specifications, but no less frequent than once per year. The Permittee must operate and maintain optical pyrometers in accordance with manufacturer specifications unless otherwise approved by the Administrator. The Permittee must calibrate optical pyrometers in accordance with the frequency and procedures recommended by the manufacturer, but no less frequent than once per year, unless otherwise approved by the Administrator.
  - (ii) Accuracy and calibration of weight measurement devices for activated carbon injection systems. If the Permittee operates a carbon injection system, the accuracy of the weight measurement device must be  $\pm 1$  percent of the weight being measured. The calibration of the device must be verified at least once each calendar quarter at a frequency of approximately 120 days.
- (c) A CMS must sample the regulated parameter without interruption, evaluate the detector response at least once each 15 seconds, and compute and record the average values at least every 60 seconds.
- (d) The span of the non-CEMS CMS detector must not be exceeded. The Permittee must interlock the span limits into the automatic waste feed cutoff system required by 40 C.F.R. § 63.1206(c)(3).

- (e) Calculation of rolling averages.
  - (i) Calculation of rolling averages upon intermittent operations. The Permittee must ignore periods of time when 1-minute values are not available when calculating rolling averages. When 1-minute values become available again, the first 1-minute value is added to the previous 1-minute values to calculate rolling averages.
  - (ii) Calculation of rolling averages when the hazardous waste feed is cutoff.
    - A. Except as provided by condition 2.1(D)(2)(e)(ii)(B), below, the Permittee must continue monitoring operating parameter limits with a CMS when the hazardous waste feed is cutoff if the source is operating. The Permittee must not resume feeding hazardous waste if an operating parameter exceeds its limit.
    - B. The Permittee is not subject to the CMS requirements during periods of time the Permittee meets the requirements of 40 C.F.R. § 63.1206(b)(1)(ii) (compliance with emissions standards for nonhazardous waste burning sources when the Permittee is not burning hazardous waste).

3. Bag leak detection system requirements. [40 C.F.R. § 63.1206(c)(8)]

The Permittee must continuously operate a bag leak detection system under the following requirements:

- (a) A bag leak detection system that meets the specifications and requirements of condition 2.1(D)(3)(b), below, and the Permittee must comply with the corrective measures and notification requirements of conditions 2.1(D)(3)(c) and 2.1(E)(5).
- (b) Bag leak detection system specification and requirements:
  - (i) The bag leak detection system must be certified by the manufacturer to be capable of continuously detecting and recording particulate matter emissions at concentrations of 1.0 milligram per actual cubic meter unless the Permittee demonstrates, under 40 C.F.R. § 63.1209(g)(1), that a higher detection limit would routinely detect particulate matter loadings during normal operations;
  - (ii) The bag leak detection system shall provide output of relative or absolute particulate matter loadings;

- (iii) The bag leak detection system shall be equipped with an alarm system that will sound an audible alarm when an increase in relative particulate loadings is detected over a preset level;
  - (iv) The bag leak detection system shall be installed and operated in a manner consistent with available written guidance from EPA or, in the absence of such written guidance, the manufacturer's written specifications and recommendations for installation, operation, and adjustment of the system;
  - (v) The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time;
  - (vi) Following initial adjustment, the Permittee must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in the operation and maintenance plan required under 40 C.F.R. § 63.1206(c)(7). The Permittee must not increase the sensitivity by more than 100 percent or decrease the sensitivity by more than 50 percent over a 365-day period unless such adjustment follows a complete baghouse inspection which demonstrates the baghouse is in good operating condition; and
  - (vii) The bag leak detector shall be installed downstream of the baghouse and upstream of any wet acid gas scrubber. Where multiple detectors are required, the system's instrumentation and alarm system may be shared among the detectors.
- (c) Bag leak detection system corrective measures requirements. The operating and maintenance plan required by 40 C.F.R. § 63.1206(c)(7) must include a corrective measures plan that specifies the procedures the Permittee will follow in the case of a bag leak detection system alarm or malfunction. The corrective measures plan must include, at a minimum, the procedures used to determine and record the time and cause of the alarm as well as the corrective measures taken to correct the control device malfunction or minimize emissions as specified below. Failure to initiate the corrective measures required by this condition 2.1(D)(3)(c) is failure to ensure compliance with the emission standards in 40 C.F.R. Part 63, Subpart EEE.
- (i) The Permittee must initiate the procedures used to determine the cause of the alarm within 30 minutes of the time the alarm first sounds; and

- (ii) The Permittee must alleviate the cause of the alarm by taking the necessary corrective measure(s) which may include, but are not to be limited to, the following:
  - A. Inspecting the baghouse for air leaks, torn or broken filter elements, or any other malfunction that may cause an increase in emissions;
  - B. Sealing off defective bags or filter media;
  - C. Replacing defective bags or filter media, or otherwise repairing the control device;
  - D. Sealing off a defective baghouse compartment;
  - E. Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system; or
  - F. Shutting down the combustor.

4. Analysis of feedstreams.

- (a) General. Prior to feeding the material, the Permittee must obtain an analysis of each feedstream that is sufficient to document compliance with the applicable feedrate limits contained in 40 C.F.R. § 63.1209 and condition 2.1(C) of this permit. [40 C.F.R. § 63.1209(c)(1)]
- (b) Feedstream analysis plan. [40 C.F.R. § 63.1209(c)(2)]
  - (i) The Permittee must develop and implement a feedstream analysis plan and record it in the operating record. The plan must specify at a minimum:
    - A. The parameters for which the Permittee will analyze each feedstream to ensure compliance with the operating parameter limits contained in 40 C.F.R. § 63.1209 and condition 2.1(C) of this permit;
    - B. Whether the Permittee will obtain the analysis by performing sampling and analysis or by other methods, such as using analytical information obtained from others or using other published or documented data or information;
    - C. How the Permittee will use the analysis to document compliance with applicable feedrate limits (e.g., if the Permittee blends hazardous wastes and obtains analyses of the

wastes prior to blending but not of the blended, as-fired, waste, the plan must describe how the Permittee will determine the pertinent parameters of the blended waste);

- D. The test methods which the Permittee will use to obtain the analyses;
  - E. The sampling method which the Permittee will use to obtain a representative sample of each feedstream to be analyzed using sampling methods described in Appendix IX to 40 C.F.R. Part 266, or an equivalent method; and
  - F. The frequency with which the Permittee will review or repeat the initial analysis of the feedstream to ensure that the analysis is accurate and up to date.
- (ii) The feedstream analysis plan that the Permittee submitted to EPA on August 16, 2013, and dated October 2008, is hereby incorporated into this permit by reference. Any future version of the feedstream analysis plan approved by EPA supersedes the October 2008 feedstream analysis plan and is incorporated by reference into this permit.
- (c) Review and approval of feedstream analysis plan. The Permittee must submit the feedstream analysis plan to the Administrator for review and approval, if requested. [40 C.F.R. § 63.1209(c)(3)]
- (d) Compliance with feedrate limits.
- (i) To comply with the applicable feedrate limits of 40 C.F.R. § 63.1209 and condition 2.1(C) of this permit, the Permittee must monitor and record feedrates as follows:
    - A. Determine and record the value of the parameter for each feedstream by sampling and analysis or other method;
    - B. Determine and record the mass or volume flowrate of each feedstream by a CMS. If the Permittee determines flowrate of a feedstream by volume, the Permittee must determine and record the density of the feedstream by sampling and analysis (unless the Permittee reports the constituent concentration in units of weight per unit volume (e.g., mg/l)); and
    - C. Calculate and record the mass feedrate of the parameter per unit time.

[40 C.F.R. § 63.1209(c)(4)]

- (ii) Analysis procedures for mercury, LVM and SVM. [40 C.F.R. § 71.6(c)(1)]

The Permittee shall implement the following procedures for mercury, lead and cadmium (SVM) and arsenic, beryllium, chromium (LVM), and must maintain records of all analyses, reports and written determinations in accordance with condition 2.1(E)(21). Consistent with condition 2.1(D)(4)(b)(i)(D), above, the Permittee must specify in the feedstream analysis plan the quality assurance/quality control procedures and test methods it will use to conduct the sampling and analyses required in this condition 2.1(D)(4)(d)(ii).

Within 60 days of this permit becoming effective, the Permittee shall submit to the Administrator for approval a revised feedstream analysis plan, pursuant to condition 2.1(D)(4)(c), above, that incorporates into the plan, at a minimum, the feedstream analysis procedures contained in this condition 2.1(D)(4)(d)(ii).

- A. Pre-acceptance screening procedure.

The Permittee may obtain, prior to the shipment of waste to the facility, a representative sample of the waste for analysis of mercury, LVM and SVM by the Permittee using appropriate quality assurance/quality control procedures and an appropriate test method that are consistent with EPA's "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846), available at <http://www.epa.gov/waste/hazard/testmethods/sw846/>. The Permittee is not required for purposes of this permit to follow this pre-acceptance screening sampling and analysis procedure for each waste stream since the Permittee will be conducting waste acceptance sampling and analysis as required below.

- B. Waste acceptance procedure.

Subject to the exemptions in condition 2.1(D)(4)(d)(ii)(F), below, and except as provided below, the Permittee shall conduct representative sampling using the methods specified in 40 C.F.R. Part 261, Appendix I, of each shipment of waste prior to feeding the waste into any incinerator and shall analyze such samples for mercury, LVM and SVM using appropriate

quality assurance/quality control procedures and appropriate test methods that are consistent with SW-846. In this permit, “shipment” means the collection of all waste streams identified in the waste manifest form that accompanies the waste. The Permittee shall use the following analytical protocol and frequency for all waste streams accepted for incineration:

#### I. Initial Analysis.

- (aa) The Permittee shall sample and analyze at least ten percent of containers in each of the first five or more shipments of each waste stream received at the facility per calendar year. The Permittee shall use the analytical result for each shipment sampled and analyzed for performing metals feedrate calculations for that shipment. If any metals analysis result is below the reporting limit (i.e., non-detect), the reporting limit as defined in condition 2.1(D)(4)(d)(ii)(E)(III), below, will be used for metals feedrate calculations.
- (bb) For the next nine shipments of the same waste stream received, the Permittee shall use the 95% upper confidence level (UCL) of the data from condition 2.1(D)(4)(d)(ii)(B)(I)(aa), above (i.e., profile concentration) for metals feedrate calculations for those shipments.

#### II. Subsequent Analysis.

- (aa) For every tenth shipment received after the initial five shipments, the Permittee shall sample and analyze at least ten percent of containers in the shipment, and shall use the metals analysis results for metals feedrate calculations for that shipment (shipment concentration).
- (bb) The Permittee shall re-calculate the profile concentration in condition 2.1(D)(4)(d)(ii)(B)(I)(aa), above, by including analytical data from each subsequent analysis required by conditions 2.1(D)(4)(d)(ii)(B)(I)(bb) and (II)(aa), and shall use the re-calculated profile concentration for metals feedrate calculations for the non-sampled shipments.

### III. Discrepant Analytical Results.

- (aa) A shipment is discrepant for metals if the shipment concentration, as defined in condition 2.1(D)(4)(d)(ii)(B)(II)(aa), above, exceeds the UCL.
- (bb) Following a discrepant metals analysis, the Permittee shall sample and analyze at least ten percent of containers in each of the next five or more shipments of that waste stream, and shall recalculate the initial and subsequent profile concentrations as described in conditions 2.1(D)(4)(d)(ii)(B)(I) and (II), above.

### IV. Feedstreams in which the physical nature of the waste makes it technically impracticable to obtain a representative laboratory sample.

- (aa) In lieu of conducting sampling and analysis as described in conditions 2.1(D)(4)(d)(ii)(B)(I) through (III), above, the Permittee may elect to use a combination of laboratory analysis and acceptable knowledge (as described in condition 2.1(D)(4)(d)(ii)(B)(IV)(bb), below) for the following wastes whose physical nature may make it technically impracticable to obtain a representative laboratory sample: batteries, cathode ray tubes, piping, wire, tubing, syringes, metal sheeting and parts, explosive components, electronic devices, and personal protection equipment that are impractical to sample and difficult to obtain accurate and representative analysis (gloves, boots and disposable garments).
- (bb) The use of acceptable knowledge shall be consistent with EPA guidance as contained in Section 1.2 of Waste Analysis at Facilities that Generate, Treat, Store, and Dispose of Hazardous Wastes - Final, A Guidance Manual, EPA 530-R-12-001 (April 2015), available at <http://www2.epa.gov/sites/production/files/2015-04/documents/tsdf-wap-guide-final.pdf>. Acceptable knowledge includes, but is not limited to, process knowledge whereby detailed information on the

wastes is obtained from existing published or documented waste analysis data or studies conducted on hazardous wastes generated by processes similar to that which generated the waste, incidents of human injury or environmental damage attributed to the waste, data on waste composition or properties from analysis or relevant testing performed by the generator, information on the properties of waste constituents or, in cases of newly listed wastes, data from recent waste analyses performed prior to the effective date of the listings.

- (cc) The acceptable knowledge shall be applied to identifying the composition of the base construction materials of the waste (e.g., steel in the case of steel piping). The Permittee shall then collect surface “wipe” samples or, if coated or containing residue, remove a chip of paint or other coating or residue and conduct laboratory analysis to determine the representative concentrations of any contaminants present.
- (dd) The Permittee shall maintain documentation that clearly demonstrates that the information relied upon is current and sufficient to identify the waste accurately and completely.

V. Additional Sampling and Analysis.

The Permittee shall perform sampling and analysis, and must re-calculate the initial and subsequent profile concentrations, as described in conditions 2.1(D)(4)(d)(ii)(B)(I) through (III), above, under any of the following circumstances:

- (aa) A generator notifies the Permittee, or the Permittee has reason to believe, that the process or operation generating the waste has changed;
- (bb) When the results of the pre-acceptance inspection conducted by the Permittee according to 40 C.F.R. § 264.13(c), indicate that the waste received at the facility does not match the waste designated on the accompanying manifest or shipping paperwork; or

- (cc) The Permittee determines through a review of other information available to the Permittee that the concentration of arsenic, beryllium, chromium, lead, cadmium or mercury in the waste stream may have changed.

C. Batch sampling procedure.

- I. Except as provided in condition 2.1(D)(4)(d)(ii)(C)(II), below, if waste accepted for incineration is batched, treated, blended, mixed, or otherwise altered from its shipped state, the Permittee shall sample and analyze such batched, treated, blended, mixed, or otherwise altered waste for mercury, LVM and SVM in its final form as feed for incineration, prior to incineration using appropriate quality assurance/quality control procedures and appropriate test methods that are consistent with SW-846.
- II. In lieu of sampling and analysis as specified in condition 2.1(D)(4)(d)(ii)(C)(I), above, the Permittee may perform a mass balance calculation to determine concentrations in the final batched, treated, blended, mixed, or otherwise altered waste. The calculation must be based on all batched, treated, blended, mixed, or otherwise altered ingredients and the contribution of each ingredient determined pursuant to condition 2.1(D)(4)(d)(ii)(E), below.
- III. Feedstreams which are exempt from sampling in accordance with conditions 2.1(D)(4)(d)(ii)(F)(I) through (III), below, can be batched, treated, blended, mixed, or otherwise altered provided the Permittee complies with conditions 2.1(D)(4)(d)(ii)(F)(II) and (III), below.

D. Fuel procedure.

The Permittee shall document the concentration of mercury, LVM and SVM in any fuel other than natural gas, including used oil, diesel, and alternative fuels, but not including hazardous waste, fed into the incinerators by either (1) obtaining analytical results from each fuel supplier or (2) conducting representative sampling using the methods in 40 C.F.R. Part 261, Appendix I, of each fuel supply and

analyzing such samples using appropriate quality assurance/quality control procedures and appropriate test methods. The Permittee shall follow this procedure at least once per year for each fuel supply.

E. Treatment of detection limits for metal feedrate calculations.

The Permittee shall determine the concentrations of arsenic, beryllium, cadmium, chromium, lead and mercury as set forth below in order to calculate the mass of mercury, LVM and SVM for each waste or fuel fed to each incinerator:

- I. If the applicable metal is detected at or above the reporting limit for that metal as defined in condition 2.1(D)(4)(d)(ii)(E)(III), below, in any sampling analysis required by condition 2.1(D)(4)(d)(ii), above, the metal concentration shall be equal to the concentration of that metal detected from the associated sampling analysis at or above the reporting limit for that metal.
- II. If the applicable metal is not detected at or above the reporting limit for that metal as defined in condition 2.1(D)(4)(d)(ii)(E)(III), below, in any sampling analysis required by conditions 2.1(D)(4)(d)(ii)(A) through (D), above, the metal concentration shall be equal to the reporting limit for that metal.
- III. The reporting limit shall be determined as the lower limit of quantitation as described in Method 6010c of SW-846, multiplied by the appropriate extraction and dilution factors. All positive sample results must fall within the established linear dynamic range, and non-detects reported at the lower limit of quantitation with appropriate dilution factors applied as specified by Method 6010c of SW-846.
- IV. The mass of LVM in each feedstream is the algebraic sum of the mass of arsenic, beryllium and chromium in that feedstream.
- V. The mass of SVM in the feedstream is the algebraic sum of the mass of lead and cadmium in that feedstream.

- F. Exemptions to the analysis procedures in condition 2.1(D)(4)(d)(ii).
- I. The following wastes shall be exempt from the analysis procedures set forth in conditions 2.1(D)(4)(d)(ii)(A) through (E), above:
- (aa) Packaged chemicals from laboratories, hospitals, household clean sweeps, or manufacturing facilities, including scintillation vials packed in accordance with Small Quantity Chemical Guidelines (SQCGs) except those that are not packaged in numerous small containers or are unknowns (such as having no labels or other identification). For packaged chemicals, the Permittee shall obtain a packing list for each container from the generator specifying the type and quantity of chemicals contained within;
  - (bb) Empty containers as defined in 35 IAC 721.107(b);
  - (cc) Pharmaceutical and commercial products or chemicals that are off-specification or outdated and are packaged in consumer quantities, are unused or banned, and are in their original packaging except those that are not packaged in numerous small containers or are unknowns (such as having no labels or other identification);
  - (dd) Aerosol cans, lecture bottles or gas cylinders, except those that are unknowns (such as having no labels or other identification);
  - (ee) Controlled substances, as defined in 21 C.F.R. Part 1308, regulated by the federal government and handled unopened until destroyed in the incinerator; and
  - (ff) Explosive, air or water reactive, poison inhalation hazard, or odiferous material, such as mercaptan, which present sampling and analytical safety hazards and that are handled unopened until destroyed in the incinerator.

- II. For each waste listed in conditions 2.1(D)(4)(d)(ii)(F)(I)(aa) through (ff), above, the Permittee shall review any container labels, material safety data sheets, drum inventories, packing lists, and any other relevant data or information provided by the generator to determine the metals concentrations in these exempted wastes, and shall keep this relevant documentation in the Technical Manager's File or electronic system. The Permittee shall document the amount of mercury, LVM or SVM present in the waste based on such review. The Permittee's documentation shall describe the information reviewed and the basis for the determination on the amount of mercury, LVM or SVM present in the waste.
- III. Any waste listed in conditions 2.1(D)(4)(d)(ii)(F)(I)(aa) through (ff), above, for which there is insufficient information to allow the Permittee to make a reasonable determination of the amount of mercury, LVM and SVM present in the waste shall not be exempt from the analysis procedures in conditions 2.1(D)(4)(d)(ii)(A) through (E), above.
- IV. The Permittee may request approval from the Administrator to exempt any waste that is not listed in conditions 2.1(D)(4)(d)(ii)(F)(I)(aa) through (ff), above, from the analysis procedures set forth in conditions 2.1(D)(4)(d)(ii)(A) through (E), above.
  - (aa) The Permittee shall describe the information reviewed and the basis for the proposed exemption.
  - (bb) The Permittee shall submit all such written requests to the address in condition 4.2(B), below.
  - (cc) The Administrator shall have 60 days from the date of receipt of the written request to approve or disapprove the request as submitted by the Permittee, or to request additional information needed to enable the Administrator to make a decision on the Permittee's request.
  - (dd) If the Administrator requires additional information to make a decision on the Permittee's

request, the Administrator shall have 60 days following receipt of the additional information to act on the Permittee's request.

- (ee) If the Administrator does not respond to the request within 60 days of receiving the request and any additional information requested, the Permittee may consider its request to exempt the specified waste(s) approved.
- (ff) The Permittee shall maintain any written determination of exemption at the facility in accordance with condition 2.1(E)(21), below.

G. Condition 2.1(D)(4)(d)(ii) shall supersede any conflicting or less stringent provision in the Permittee's feedstream analysis plan as required in condition 2.1(D)(4)(b), above.

- (e) Waiver of monitoring of constituents in certain feedstreams. Notwithstanding the specific analysis procedures for mercury, LVM and SVM contained in condition 2.1(D)(4)(d)(ii), above, the Permittee is not required to monitor levels of metals or chlorine in the following feedstreams to document compliance with the feedrate limits contained in 40 C.F.R. § 63.1209 and condition 2.1(C) of this permit, provided that the Permittee documents in the comprehensive performance test plan the expected levels of the constituent in the feedstream and accounts for those assumed feedrate levels in documenting compliance with feedrate limits: natural gas, process air, and feedstreams from vapor recovery systems. [40 C.F.R. § 63.1209(c)(5)]
- (f) Performance evaluations. [40 C.F.R. § 63.1209(d)]
  - (i) The requirements of 40 C.F.R. § 63.8(d) (quality control program) and (e) (performance evaluation of continuous monitoring systems) apply, except that the Permittee must conduct performance evaluations of components of the CMS under the frequency and procedures (for example, submittal of performance evaluation test plan for review and approval) applicable to performance tests as provided by 40 C.F.R. § 63.1207.
  - (ii) The Permittee must comply with the quality assurance procedures for CEMS prescribed in the appendix to 40 C.F.R. Part 63, Subpart EEE.
- (g) Conduct of monitoring. [40 C.F.R. § 63.1209(e)]

The provisions of 40 C.F.R. § 63.8(b) apply.

- (h) Operation and maintenance of continuous monitoring systems. [40 C.F.R. § 63.1209(f)]

The Permittee is subject to the provisions of 40 C.F.R. § 63.8(c), except:

- (i) Subsection 63.8(c)(3). Instead of complying with 40 C.F.R. § 63.8(c)(3), the Permittee shall comply with 40 C.F.R. § 63.1211(c), which requires CMSs to be installed, calibrated, and operational on the compliance date; and
  - (ii) Subsection 63.8(c)(4)(ii). Instead of complying with 40 C.F.R. § 63.8(c)(4)(ii), the Permittee shall comply with the performance specifications for carbon monoxide, hydrocarbon and oxygen CEMS in 40 C.F.R. Part 60, Subpart B, which requires detectors to measure the sample concentration at least once every 15 seconds for calculating an average emission rate once every 60 seconds.
- (i) Reduction of monitoring data. [40 C.F.R. § 63.1209(h)]

Unless otherwise specified in this permit, the following provisions of 40 C.F.R. § 63.8(g) apply:

- (i) The Permittee must reduce the monitoring data for each CMS, as specified in conditions 2.1(D)(4)(i)(ii) through (v), below.
- (ii) The Permittee shall reduce all data from CEMS for measurement other than opacity, unless otherwise specified in the relevant standard, to 1-hour averages computed from four or more data points equally spaced over each 1-hour period, except during periods when calibration, quality assurance, or maintenance activities pursuant to provisions of this part are being performed. During these periods, a valid hourly average shall consist of at least two data points with each representing a 15-minute period. Alternatively, an arithmetic or integrated 1-hour average of CEMS data may be used. Time periods for averaging are defined in 40 C.F.R. § 63.2.
- (iii) The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O<sub>2</sub> or ng/J of pollutant).
- (iv) All emissions data shall be converted into units of the relevant standard for reporting purposes using the conversion procedures specified in that standard. After conversion into units of the relevant

standard, the data may be rounded to the same number of significant digits as used in that standard to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

- (v) Monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level adjustments must not be included in any data average computed under this part. For the Permittee complying with the requirements of 40 C.F.R. § 63.10(b)(2)(vii)(A) or (B), data averages must include any data recorded during periods of monitor breakdown or malfunction.
- (j) When an operating parameter is applicable to multiple standards. [40 C.F.R. § 63.1209(i)]
  - (i) As required by 40 C.F.R. § 63.1209(j) through (p), the Permittee must establish limits on operating parameters based on comprehensive performance testing to ensure the Permittee maintains compliance with the emission standards.
  - (ii) For several parameters, the Permittee must establish a limit for the parameter to ensure compliance with more than one emission standard. An example is a limit on minimum combustion chamber temperature to ensure compliance with both the DRE standard of 40 C.F.R. § 63.1209(j) and the dioxin/furan standard of 40 C.F.R. § 63.1209(k).
  - (iii) If the performance tests for such standards are not performed simultaneously, the most stringent limit for a parameter derived from independent performance tests applies.
- (k) Destruction and Removal Efficiency. [40 C.F.R. § 63.1209(j)]

To remain in compliance with the DRE standard, the Permittee must establish operating limits during the comprehensive performance test (or during a previous DRE test under provisions of 40 C.F.R. § 63.1206(b)(7)) for the following parameters, unless the limits are based on manufacturer specifications, and comply with those limits at all times that hazardous waste remains in the combustion chamber (i.e., the hazardous waste residence time has not transpired since the hazardous waste feed cutoff system was activated):

- (i) Minimum combustion chamber temperature.
  - A. The Permittee must measure the temperature of each combustion chamber at a location that best represents, as

practicable, the bulk gas temperature in the combustion zone. The Permittee must document the temperature measurement location in the test plan the Permittee submit under 40 C.F.R. § 63.1207(e).

B. The Permittee must establish a minimum hourly rolling average limit as the average of the test run averages.

(ii) Maximum flue gas flowrate or production rate.

A. As an indicator of gas residence time in the control device, the Permittee must establish and comply with a limit on the maximum flue gas flowrate, the maximum production rate, or another parameter that the Permittee documents in the site-specific test plan as an appropriate surrogate for gas residence time, as the average of the maximum hourly rolling averages for each run.

B. The Permittee must comply with this limit on an hourly rolling average basis.

(iii) Maximum hazardous waste feedrate.

A. The Permittee must establish limits on the maximum pumpable and total (i.e., pumpable and nonpumpable) hazardous waste feedrate for each location where hazardous waste is fed.

B. The Permittee must establish the limits as the average of the maximum hourly rolling averages for each run.

C. The Permittee must comply with the feedrate limit(s) on an hourly rolling average basis.

(iv) Operation of waste firing system. The Permittee must specify operating parameters and limits to ensure that good operation of each hazardous waste firing system is maintained.

(l) Dioxins and furans. [40 C.F.R. § 63.1209(k)]

The Permittee must comply with the dioxin and furans emission standard by establishing and complying with the following operating parameter limits. The Permittee must base the limits on operations during the comprehensive performance test, unless the limits are based on manufacturer specifications.

- (i) Gas temperature at the inlet to a dry particulate matter control device.

Each combustor is equipped with a baghouse (fabric filter). Therefore, the Permittee must establish a limit on the maximum temperature of the gas at the inlet to the device on an hourly rolling average. The Permittee must establish the hourly rolling average limit as the average of the test run averages.

- (ii) Minimum combustion chamber temperature.

- A. The Permittee must measure the temperature of each combustion chamber at a location that best represents, as practicable, the bulk gas temperature in the combustion zone. The Permittee must document the temperature measurement location in the test plan under 40 C.F.R. § 63.1207(e) and (f);
- B. The Permittee must establish a minimum hourly rolling average limit as the average of the test run averages.

- (iii) Maximum flue gas flow rate or production rate.

- A. As an indicator of gas residence time in the control device, the Permittee must establish and comply with a limit on the maximum flue gas flow rate, the maximum production rate, or another parameter that the Permittee documents in the site-specific test plan as an appropriate surrogate for gas residence time, as the average of the maximum hourly rolling averages for each run.
- B. The Permittee must comply with this limit on an hourly rolling average basis.

- (iv) Maximum hazardous waste feedrate.

- A. The Permittee must establish limits on the maximum pumpable and total (pumpable and nonpumpable) waste feedrate for each location where waste is fed.
- B. The Permittee must establish the limits as the average of the maximum hourly rolling averages for each run.
- C. The Permittee must comply with the feedrate limit(s) on an hourly rolling average basis.

(v) Particulate matter operating limit.

Unit #4 is equipped with an activated carbon injection system, therefore, the Permittee must establish operating parameter limits on the particulate matter control device as specified by 40 C.F.R. § 63.1209(m)(1).

(vi) Activated carbon injection parameter limits.

- A. Carbon feedrate. The Permittee must establish a limit on minimum carbon injection rate on an hourly rolling average calculated as the average of the test run averages for Unit #4. If the carbon injection system injects carbon at more than one location, the Permittee must establish a carbon feedrate limit for each location.
- B. Carrier fluid. The Permittee must establish a limit on minimum carrier fluid (gas or liquid) flowrate or pressure drop as an hourly rolling average based on the manufacturer's specifications for Unit #4. The Permittee must document the specifications in the test plan submitted under 40 C.F.R. § 63.1207(e) and (f).
- C. Carbon specification.
  - I. The Permittee must specify and use the brand (i.e., manufacturer) and type of carbon used during the comprehensive performance test until a subsequent comprehensive performance test is conducted, unless the Permittee documents in the site-specific performance test plan required under 40 C.F.R. § 63.1207(e) and (f) key parameters that affect adsorption and establish limits on those parameters based on the carbon used in the performance test.
  - II. The Permittee may substitute at any time a different brand or type of carbon provided that the replacement has equivalent or improved properties compared to the carbon used in the performance test and conforms to the key sorbent parameters identified under 40 C.F.R. § 63.1209(k)(6)(iii)(A). The Permittee must include in the operating record documentation that the substitute carbon will provide the same level of control as the original carbon.

- (vii) Inhibitor feedrate parameter limits. If the Permittee feeds a dioxin/furan inhibitor into the combustion system, the Permittee must establish limits for the following parameters:
- A. Minimum inhibitor feedrate. The Permittee must establish a limit on minimum inhibitor feedrate on an hourly rolling average as the average of the test run averages.
  - B. Inhibitor specifications.
    - I. The Permittee must specify and use the brand (i.e., manufacturer) and type of inhibitor used during the comprehensive performance test until a subsequent comprehensive performance test is conducted, unless the Permittee documents in the site-specific performance test plan required under 40 C.F.R. § 63.1207(e) and (f) key parameters that affect the effectiveness of the inhibitor and establish limits on those parameters based on the inhibitor used in the performance test.
    - II. The Permittee may substitute at any time a different brand or type of inhibitor provided that the replacement has equivalent or improved properties compared to the inhibitor used in the performance test and conforms to the key parameters the Permittee identifies under 40 C.F.R. § 63.1209(k)(9)(ii)(A). The Permittee must include in the operating record documentation that the substitute inhibitor will provide the same level of control as the original inhibitor.

(m) Mercury. [40 C.F.R. § 63.1209(l)]

The Permittee must comply with the mercury emission standard by establishing and complying with the following operating parameter limits. The Permittee must base the limits on operations during the comprehensive performance test, unless the limits are based on manufacturer specifications.

- (i) Feedrate of mercury. When complying with the mercury emission standards under 40 C.F.R. §§ 63.1203, 63.1216 and 63.1219, the Permittee must establish a 12-hour rolling average limit for the total feedrate of mercury in all feedstreams as the average of the test run averages.

- (ii) Extrapolation of feedrate levels. The Permittee may request as part of the performance test plan under 40 C.F.R. §§ 63.7(b) and (c) and 63.1207(e) and (f) approval to use the mercury feedrates and associated emission rates during the comprehensive performance test to extrapolate to higher allowable feedrate limits and emission rates. The extrapolation methodology will be reviewed and approved, if warranted, by EPA. EPA's review will consider in particular whether:
  - A. Performance test metal feedrates are appropriate (i.e., whether feedrates are at least at normal levels; depending on the heterogeneity of the waste, whether some level of spiking would be appropriate; and whether the physical form and species of spike material is appropriate); and
  - B. Whether the extrapolated feedrates the Permittee requests are warranted considering historical metal feedrate data.
- (iii) Activated carbon injection. Unit #4 is equipped with an activated carbon injection system, therefore, the Permittee must establish operating parameter limits prescribed by 40 C.F.R. § 63.1209(k)(5) and (k)(6).
- (n) Particulate matter. [40 C.F.R. § 63.1209(m)]

The Permittee must comply with the particulate matter emission standard by establishing and complying with the following operating parameter limits. The Permittee must base the limits on operation during the comprehensive performance test, unless the limits are based on manufacturer specifications.

- (i) Control device operating parameter limits.

For each particulate matter control device that is not a fabric filter or high energy wet scrubber, or is not an electrostatic precipitator or ionizing wet scrubber for which the Permittee elects to monitor particulate matter loadings under 40 C.F.R. § 63.1206(c)(9) for process control, the Permittee must ensure that the control device is properly operated and maintained as required by 40 C.F.R. § 63.1206(c)(7) and by monitoring the operation of the control device as follows: [40 C.F.R. § 63.1209(m)(1)(iv)]

- A. During each comprehensive performance test conducted to demonstrate compliance with the particulate matter emissions standard, the Permittee must establish a range of operating

values for the control device that is a representative and reliable indicator that the control device is operating within the same range of conditions as during the performance test. The Permittee must establish this range of operating values as follows:

- I. The Permittee must select a set of operating parameters appropriate for the control device design that the Permittee determines to be a representative and reliable indicator of the control device performance.
  - II. The Permittee must measure and record values for each of the selected operating parameters during each test run of the performance test. A value for each selected parameter must be recorded using a continuous monitor.
  - III. For each selected operating parameter measured in accordance with the requirements of 40 C.F.R. § 63.1209(m)(1)(iv)(A)(1), the Permittee must establish a minimum operating parameter limit or a maximum operating parameter limit, as appropriate for the parameter, to define the operating limits within which the control device can operate and still continuously achieve the same operating conditions as it did during the performance test.
  - IV. The Permittee must prepare written documentation to support the operating parameter limits established for the control device and must include this documentation in the performance test plan that the Permittee submits for review and approval. This documentation must include a description for each selected parameter and the operating range and monitoring frequency required to ensure the control device is being properly operated and maintained.
- B. The Permittee must install, calibrate, operate, and maintain a monitoring device equipped with a recorder to measure the values for each operating parameter selected in accordance with the requirements of 40 C.F.R. § 63.1209(m)(1)(iv)(A)(1). The Permittee must install, calibrate, and maintain the monitoring equipment in accordance with the equipment manufacturer's specifications. The recorder must record the detector responses at least every 60 seconds, as required in the definition of continuous monitor.

- C. The Permittee must regularly inspect the data recorded by the operating parameter monitoring system at a sufficient frequency to ensure the control device is operating properly. An excursion is determined to have occurred any time that the actual value of a selected operating parameter is less than the minimum operating limit (or, if applicable, greater than the maximum operating limit) established for the parameter in accordance with the requirements of 40 C.F.R. § 63.1209(m)(1)(iv)(A)(3).
  - D. Operating parameters selected in accordance with 40 C.F.R. § 63.1209(m)(1)(iv) may be based on manufacturer specifications provided the Permittee supports the use of manufacturer specifications in the performance test plan that the Permittee submits for review and approval.
- (ii) Maximum flue gas flowrate or production rate.
- A. As an indicator of gas residence time in the control device, the Permittee must establish a limit on the maximum flue gas flowrate, the maximum production rate, or another parameter that the Permittee documents in the site-specific test plan as an appropriate surrogate for gas residence time, as the average of the maximum hourly rolling averages for each run.
  - B. The Permittee must comply with this limit on an hourly rolling average basis.
- (iii) Maximum ash feedrate.

The Permittee must establish a maximum ash feedrate limit as a 12-hour rolling average of the test run averages. This requirement is waived, however, if the Permittee complies with particulate matter detection system requirements under 40 C.F.R. § 63.1206(c)(9).

- (o) Semivolatile metals and low volatile metals. [40 C.F.R. § 63.1209(n)]

The Permittee must comply with the semivolatile metal (cadmium and lead) and low volatile metal (arsenic, beryllium, and chromium) emission standards by establishing and complying with the following operating parameter limits, as specified in condition 2.1(C)(2). The Permittee must base the limits on operations during the comprehensive performance test, unless the limits are based on manufacturer specifications.

- (i) Maximum inlet temperature to dry particulate matter air pollution control device. The Permittee must establish a limit on the maximum inlet temperature to the primary dry metals emissions control device (e.g., baghouse) on an hourly rolling average basis as the average of the test run averages.
- (ii) Maximum feedrate of semivolatile and low volatile metals – General. Except as provided by 40 C.F.R. § 63.1209(n)(2)(vii), the Permittee must establish feedrate limits for SVM and LVM as follows:
  - A. When complying with the emission standards under 40 C.F.R. §§ 63.1203 and 63.1219, the Permittee must establish 12-hour rolling average limits for the total feedrate of SVM and LVM in all feedstreams as the average of the test run averages.
  - B. LVM limits for pumpable wastes. The Permittee must establish separate feedrate limits for LVM in pumpable feedstreams using the procedures prescribed above for total LVM. Dual feedrate limits for both pumpable and total feedstreams are not required, however, if the Permittee establishes the total feedrate limit solely based on the feedrate of pumpable feedstreams.
- (iii) Control device OPLs. The Permittee must establish OPLs on the particulate matter control device as specified by 40 C.F.R. § 63.1209(m)(1).
- (iv) Maximum total chlorine and chloride feedrate. The Permittee must establish a 12-hour rolling average limit for the feedrate of total chlorine and chloride in all feedstreams as the average of the test run averages.
- (v) Maximum flue gas flowrate or production rate.
  - A. As an indicator of gas residence time in the control device, the Permittee must establish a limit on the maximum flue gas flowrate, the maximum production rate, or another parameter that the Permittee documents in the site-specific test plan as an appropriate surrogate for gas residence time, as the average of the maximum hourly rolling averages for each run.
  - B. The Permittee must comply with this limit on an hourly rolling average basis.

(p) Hydrogen chloride and chlorine gas. [40 C.F.R. § 63.1209(o)]

The Permittee must comply with the hydrogen chloride and chlorine gas emission standard by establishing and complying with the following operating parameter limits. The Permittee must base the limits on operations during the comprehensive performance test, unless the limits are based on manufacturer specifications.

(i) Feedrate of total chlorine and chloride. The Permittee must establish a 12-hour rolling average limit for the total feedrate of chlorine (organic and inorganic) in all feedstreams as the average of the test run averages.

(ii) Maximum flue gas flowrate or production rate.

A. As an indicator of gas residence time in the control device, the Permittee must establish a limit on the maximum flue gas flowrate, the maximum production rate, or another parameter that the Permittee documents in the site-specific test plan as an appropriate surrogate for gas residence time, as the average of the maximum hourly rolling averages for each run.

B. The Permittee must comply with this limit on an hourly rolling average basis.

(iii) Dry Scrubber. The combustor is equipped with a dry scrubber, therefore, the Permittee must establish and comply with the following operating parameter limits:

A. Minimum sorbent feedrate. The Permittee must establish a limit on minimum sorbent feedrate on an hourly rolling average as the average of the test run averages.

B. Minimum carrier fluid flowrate or nozzle pressure drop. The Permittee must establish a limit on minimum carrier fluid (gas or liquid) flowrate or nozzle pressure drop based on manufacturer's specifications.

C. Sorbent specifications:

I. The Permittee must specify and use the brand (i.e., manufacturer) and type of sorbent used during the comprehensive performance test until a subsequent comprehensive performance test is conducted, unless the Permittee documents in the site-specific performance

test plan required under 40 C.F.R. § 63.1207(e) and (f) key parameters that affect adsorption and establish limits on those parameters based on the sorbent used in the performance test.

- II. The Permittee may substitute at any time a different brand or type of sorbent provided that the replacement has equivalent or improved properties compared to the sorbent used in the performance test and conforms to the key sorbent parameters the Permittee identifies under 40 C.F.R. § 63.1209(o)(4)(iii)(A). The Permittee must record in the operating record documentation that the substitute sorbent will provide the same level of control as the original sorbent.

- (q) Maximum combustion chamber pressure. [40 C.F.R. § 63.1209(p)]

The Permittee must monitor the pressure instantaneously and the automatic waste feed cutoff system must be engaged when negative pressure is not adequately maintained.

- (r) Operating under different modes of operation. [40 C.F.R. § 63.1209(q)]

The Permittee has not established different mode of operation. Therefore, the source shall only operate under the terms and conditions identified in this permit.

- (s) Significant figures. [40 C.F.R. §§ 63.1203(d) and 63.1219(d)]

The emission limits provided in 40 C.F.R. §§ 63.1203 and 63.1219(a) and (b) are presented with two significant figures. Although the Permittee must perform intermediate calculations using at least three significant figures, the Permittee may round the resultant emission levels to two significant figures to document compliance.

5. Changes in design, operation, or maintenance. [40 C.F.R. § 63.1206(b)(5)(i)(B)]

If the Permittee plans to change (as defined in 40 C.F.R. § 63.1206(b)(5)(iii)) the design, operation, or maintenance practices of the source in a manner that may adversely affect compliance with any emission standard that is not monitored with a CEMS, the Permittee must conduct a comprehensive performance test under the requirements of 40 C.F.R. § 63.1207(f)(1) and (g)(1) to document compliance with the affected emission standard(s) and establish operating parameter limits as required under 40 C.F.R. § 63.1209, and submit to the Administrator a NOC under 40 C.F.R. §§ 63.1207(j) and 63.1210(d).

6. Compliance with the carbon monoxide and hydrocarbon emission standards. [40 C.F.R. § 63.1206(b)(6)]

- (a) This condition 2.1(D)(6) applies to the Permittee if it elects to comply with the carbon monoxide and hydrocarbon emissions standards of 40 C.F.R. Part 63, Subpart EEE, by documenting continuous compliance with the carbon monoxide standard using a CEMS and documenting compliance with the hydrocarbon standard during the DRE performance test or its equivalent.
- (b) If during the acceptable DRE test the Permittee did not obtain hydrocarbon emissions data sufficient to document compliance with the hydrocarbon standard, the Permittee must either:
  - (i) Perform, as part of the performance test, an “equivalent DRE test” to document compliance with the hydrocarbon standard. An equivalent DRE test is comprised of a minimum of three runs each with a minimum duration of 1 hour during which the Permittee operates the combustor as close as reasonably possible to the operating parameter limits that the Permittee established based on the initial DRE test. The Permittee must use the highest hourly rolling average hydrocarbon emission level achieved during the equivalent DRE test to document compliance with the hydrocarbon standard; or
  - (ii) Perform a DRE test as part of the performance test.

7. Performance testing requirements.

- (a) General. The provisions of 40 C.F.R. § 63.7 apply, except as provided by 40 C.F.R. § 63.1207. [40 C.F.R. § 63.1207(a)]
- (b) During the confirmatory performance tests required by conditions 2.1(D)(8) and (10), below, the Permittee shall also measure emissions of nitrogen oxides, sulfur dioxide, visible emissions (opacity) and volatile organic compounds to document compliance with the nitrogen oxide, sulfur dioxide, visible emissions and volatile organic compound limitations, respectively. [40 C.F.R. § 71.6(a)(3)(i)(B)]

8. Types of performance tests. [40 C.F.R. § 63.1207(b)]

- (a) Comprehensive performance test.

The Permittee must conduct comprehensive performance tests to demonstrate compliance with the emission standards provided by 40 C.F.R.

Part 63, Subpart EEE, establish limits for the operating parameters provided by 40 C.F.R. § 63.1209, and demonstrate compliance with the performance specifications for continuous monitoring systems for each incinerator.

(b) Confirmatory performance test.

The Permittee must conduct confirmatory performance tests on each incinerator to:

- (i) Demonstrate compliance with the dioxin/furan emission standard when the source operates under normal operating conditions; and
- (ii) Conduct a performance evaluation of continuous monitoring systems required for compliance assurance with the dioxin/furan emission standard under 40 C.F.R. § 63.1209(k).

9. Initial comprehensive performance test. [40 C.F.R. § 63.1207(c)(3)]

The Permittee must commence the initial comprehensive performance test to demonstrate compliance with the standards under 40 C.F.R. §§ 63.1219, 63.1220, and 63.1221 not later than 12 months after the compliance date.

10. Frequency of testing. [40 C.F.R. § 63.1207(d)]

Except as otherwise specified in 40 C.F.R. § 63.1207(d)(4), the Permittee must conduct testing periodically as prescribed in 40 C.F.R. § 63.1207(d)(1) through (d)(3). The date of commencement of the initial comprehensive performance test is the basis for establishing the deadline to commence the initial confirmatory performance test and the next comprehensive performance test. The Permittee may conduct performance testing at any time prior to the required date. The deadline for commencing subsequent confirmatory and comprehensive performance testing is based on the date of commencement of the previous comprehensive performance test. Unless the Administrator grants a time extension under § 63.1207(b)(3)(i), the Permittee must conduct testing as follows:

- (a) Comprehensive performance testing. Except as otherwise specified in 40 C.F.R. § 63.1207(d)(4), the Permittee must commence testing no later than 61 months after the date of commencing the previous comprehensive performance test.
- (b) Confirmatory performance testing. Except as otherwise specified in 40 C.F.R. § 63.1207(d)(4), the Permittee must commence confirmatory performance testing no later than 31 months after the date of commencing

the previous comprehensive performance test. If the Permittee submits data in lieu of the initial performance test, the Permittee must commence the initial confirmatory performance test within 31 months of the date 6 months after the compliance date. To ensure that the confirmatory test is conducted approximately midway between comprehensive performance tests, the Administrator will not approve a test plan that schedules testing within 18 months of commencing the previous comprehensive performance test.

- (c) Duration of testing. The Permittee must complete performance testing within 60 days after the date of commencement, unless the Administrator determines that a time extension is warranted based on its documentation in writing of factors beyond its control that prevents the Permittee from meeting the 60-day deadline.

11. Content of performance test plans. [40 C.F.R. § 63.1207(f)]

The provisions of 40 C.F.R. § 63.7(c)(2)(i)–(iii) and (v) apply.

- (a) Content of comprehensive performance test plan. [40 C.F.R. § 63.1207(f)(1)]

In addition to the requirements of 40 C.F.R. § 63.7(c)(2)(i)–(iii) and (v) regarding the content of the test plan, the Permittee must include the following information in the comprehensive performance test plan:

- (i) An analysis of each feedstream, including hazardous waste, other fuels, and industrial furnace feedstocks, as fired, that includes:
  - A. Heating value, levels of ash (for hazardous waste incinerators only), levels of SVM, LVM, mercury, and total chlorine (organic and inorganic); and
  - B. Viscosity or description of the physical form of the feedstream;
- (ii) For organic hazardous air pollutants established by 42 U.S.C. § 7412(b)(1), excluding caprolactam (CAS number 105602) as provided by 40 C.F.R. § 63.60:
  - A. Except as provided by 40 C.F.R. § 63.1207(f)(1)(ii)(D), an identification of such organic hazardous air pollutants that are present in each hazardous waste feedstream. The Permittee need not analyze for organic hazardous air pollutants that would reasonably not be expected to be found in the feedstream. The Permittee must identify any constituents the Permittee excludes from analysis and explain the basis for

excluding them. The Permittee must conduct the feedstream analysis according to 40 C.F.R. § 63.1208(b)(8);

- B. An approximate quantification of such identified organic hazardous air pollutants in the hazardous waste feedstreams, within the precision produced by analytical procedures of 40 C.F.R. § 63.1208(b)(8); and
  - C. A description of blending procedures, if applicable, prior to firing the hazardous waste feedstream, including a detailed analysis of the materials prior to blending, and blending ratios.
  - D. The Administrator may approve on a case-by-case basis a hazardous waste feedstream analysis for organic hazardous air pollutants in lieu of the analysis required under 40 C.F.R. § 63.1207(f)(1)(ii)(A) if the reduced analysis is sufficient to ensure that the POHCs used to demonstrate compliance with the applicable DRE standards of this subpart continue to be representative of the most difficult to destroy organic compounds in its hazardous waste feedstreams;
- (iii) A detailed engineering description of the hazardous waste combustor, including:
- A. Manufacturer's name and model number of the hazardous waste combustor;
  - B. Type of hazardous waste combustor;
  - C. Maximum design capacity in appropriate units;
  - D. Description of the feed system for each feedstream;
  - E. Capacity of each feed system;
  - F. Description of automatic hazardous waste feed cutoff system(s);
  - G. Description of the design, operation, and maintenance practices for any air pollution control system; and
  - H. Description of the design, operation, and maintenance practices of any stack gas monitoring and pollution control monitoring systems.

- (iv) A detailed description of sampling and monitoring procedures including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis;
- (v) A detailed test schedule for each hazardous waste for which the performance test is planned, including date(s), duration, quantity of hazardous waste to be burned, and other relevant factors;
- (vi) A detailed test protocol, including, for each hazardous waste identified, the ranges of hazardous waste feedrate for each feed system, and, as appropriate, the feedrates of other fuels and feedstocks, and any other relevant parameters that may affect the ability of the hazardous waste combustor to meet the emission standards;
- (vii) A description of, and planned operating conditions for, any emission control equipment that will be used;
- (viii) Procedures for rapidly stopping the hazardous waste feed and controlling emissions in the event of an equipment malfunction;
- (ix) A determination of the hazardous waste residence time as required by 40 C.F.R. § 63.1206(b)(11);
- (x) If the Permittee is requesting to extrapolate metal feedrate limits from comprehensive performance test levels under 40 C.F.R. § 63.1209(l)(1)(v) or 63.1209(n)(2)(vii):
  - A. A description of the extrapolation methodology and rationale for how the approach ensures compliance with the emission standards;
  - B. Documentation of the historical range of normal (i.e., other than during compliance testing) metals feedrates for each feedstream; and
  - C. Documentation that the level of spiking recommended during the performance test will mask sampling and analysis imprecision and inaccuracy to the extent that the extrapolated feedrate limits adequately assure compliance with the emission standards.
- (xi) If the Permittee does not continuously monitor regulated constituents in natural gas, process air feedstreams, and feedstreams from vapor

recovery systems under 40 C.F.R. § 63.1209(c)(5), the Permittee must include documentation of the expected levels of regulated constituents in those feedstreams;

- (xii) Documentation justifying the duration of system conditioning required to ensure the combustor has achieved steady-state operations under performance test operating conditions, as provided by 40 C.F.R. § 63.1207(g)(1)(iii);
- (xiii) The Permittee must submit an application to request alternative monitoring under 40 C.F.R. § 63.1209(g)(1) not later than with the comprehensive performance test plan, as required by § 63.1209(g)(1)(iii)(A);
- (xiv) The Permittee must document the temperature location measurement in the comprehensive performance test plan, as required by 40 C.F.R. §§ 63.1209(j)(1)(i) and 63.1209(k)(2)(i);
- (xv) Because Unit 4 is equipped with activated carbon injection, the Permittee must document in the comprehensive performance test plan for Unit 4:
  - A. The manufacturer specifications for minimum carrier fluid flowrate or pressure drop, as required by 40 C.F.R. § 63.1209(k)(6)(ii); and
  - B. Key parameters that affect carbon adsorption, and the operating limits the Permittee establishes for those parameters based on the carbon used during the performance test, if the Permittee elects not to specify and use the brand and type of carbon used during the comprehensive performance test, as required by 40 C.F.R. § 63.1209(k)(6)(iii).
- (xvi) If its source is equipped with a dry scrubber to control hydrogen chloride and chlorine gas, the Permittee must document in the comprehensive performance test plan key parameters that affect adsorption, and the limits the Permittee establishes for those parameters based on the sorbent used during the performance test, if the Permittee elects not to specify and use the brand and type of sorbent used during the comprehensive performance test, as required by 40 C.F.R. § 63.1209(o)(4)(iii)(A);
- (xvii) For purposes of calculating SVM, LVM, mercury, total chlorine (organic and inorganic), and ash feedrate limits, a description of how the Permittee will handle performance test feedstream analytical

results that determine these constituents are not present at detectable levels; and

(xviii) Such other information as the Administrator reasonably finds necessary to determine whether to approve the performance test plan.

(b) Content of confirmatory test plan.

In addition to the requirements of 40 C.F.R. § 63.7(c)(2)(i)–(iii) and (v) regarding the content of the test plan, the Permittee must include the following information in the confirmatory test plan:

- (i) A description of the Permittee's normal hydrocarbon or carbon monoxide operating levels, as specified in 40 C.F.R. § 63.1207(g)(2)(i), and an explanation of how these normal levels were determined;
- (ii) A description of the Permittee's normal applicable operating parameter levels, as specified in 40 C.F.R. § 63.1207(g)(2)(ii), and an explanation of how these normal levels were determined;
- (iii) A description of the Permittee's normal chlorine operating levels, as specified in 40 C.F.R. § 63.1207(g)(2)(iii), and an explanation of how these normal levels were determined;
- (iv) A description of the Permittee's normal cleaning cycle of the particulate matter control device for Unit 4, as specified in 40 C.F.R. § 63.1207(g)(2)(iv), and an explanation of how these normal levels were determined;
- (v) A detailed description of sampling and monitoring procedures including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis;
- (vi) A detailed test schedule for each hazardous waste for which the performance test is planned, including date(s), duration, quantity of hazardous waste to be burned, and other relevant factors;
- (vii) A detailed test protocol, including, for each hazardous waste identified, the ranges of hazardous waste feedrate for each feed system, and, as appropriate, the feedrates of other fuels and feedstocks, and any other relevant parameters that may affect the

ability of the hazardous waste combustor to meet the dioxin/furan emission standard;

- (viii) A description of, and planned operating conditions for, any emission control equipment that will be used;
- (ix) Procedures for rapidly stopping the hazardous waste feed and controlling emissions in the event of an equipment malfunction; and
- (x) Such other information as the Administrator reasonably finds necessary to determine whether to approve the confirmatory test plan.

12. Operating conditions during testing. [40 C.F.R. § 63.1207(g)]

The Permittee must comply with the provisions of 40 C.F.R. § 63.7(e). Conducting performance testing under operating conditions representative of the extreme range of normal conditions is consistent with the requirement of 40 C.F.R. § 63.7(e)(1) to conduct performance testing under representative operating conditions.

- (a) Comprehensive performance testing. [40 C.F.R. § 63.1207(g)(1)]
  - (i) Operations during testing.

For the following parameters, the Permittee must operate the combustor during the performance test under normal conditions (or conditions that will result in higher than normal emissions):

- A. Chlorine feedrate. The Permittee must feed normal (or higher) levels of chlorine during the dioxin/furan performance test;
- B. Ash feedrate. For hazardous waste incinerators, the Permittee must conduct the following tests when feeding normal (or higher) levels of ash: The SVM and LVM performance tests; and the dioxin/furan and mercury performance tests if activated carbon injection or a carbon bed is used; and
- C. Cleaning cycle of the particulate matter control device. The Permittee must conduct the following tests when the particulate matter control device undergoes its normal (or more frequent) cleaning cycle: The particulate matter, SVM, and LVM performance tests; and the dioxin/furan and mercury performance tests if activated carbon injection or a carbon bed is used.

(ii) Modes of operation.

Given that the Permittee must establish limits for the applicable operating parameters specified in 40 C.F.R. § 63.1209 based on operations during the comprehensive performance test, the Permittee may conduct testing under two or more operating modes to provide operating flexibility.

(iii) Steady-state conditions.

Prior to obtaining performance test data, the Permittee must operate under performance test conditions until the Permittee reaches steady-state operations with respect to emissions of pollutants the Permittee must measure during the performance test and operating parameters under 40 C.F.R. § 63.1209 for which the Permittee must establish limits. During system conditioning, the Permittee must ensure that each operating parameter for which the Permittee must establish a limit is held at the level planned for the performance test. The Permittee must include documentation in the performance test plan under 40 C.F.R. § 63.1207(f) justifying the duration of system conditioning.

(b) Confirmatory performance testing. [40 C.F.R. § 63.1207(g)(2)]

The Permittee must conduct confirmatory performance testing for dioxin/furan under normal operating conditions for the following parameters:

- (i) Carbon monoxide (or hydrocarbon) CEMS emissions levels must be within the range of the average value to the maximum value allowed, except as provided by 40 C.F.R. § 63.1207(g)(2)(v). The average value is defined as the sum of the hourly rolling average values recorded (each minute) over the previous 12 months, divided by the number of rolling averages recorded during that time. The average value must not include calibration data, startup data, shutdown data, malfunction data, and data obtained when not burning hazardous waste;
- (ii) Each operating limit (specified in 40 C.F.R. § 63.1209) established to maintain compliance with the dioxin/furan emission standard must be held within the range of the average value over the previous 12 months and the maximum or minimum, as appropriate, that is allowed, except as provided by 40 C.F.R. § 63.1207(g)(2)(v). The average value is defined as the sum of the rolling average values

recorded over the previous 12 months, divided by the number of rolling averages recorded during that time. The average value must not include calibration data, startup data, shutdown data, malfunction data, and data obtained when not burning hazardous waste;

- (iii) The Permittee must feed chlorine at normal feedrates or greater; and
- (iv) If the combustor is equipped with carbon injection or carbon bed, normal cleaning cycle of the particulate matter control device.
- (v) The Administrator may approve an alternative range to that required by 40 C.F.R. § 63.1207(g)(2)(i) and (ii) if the Permittee documents in the confirmatory performance test plan that it may be problematic to maintain the required range during the test. In addition, when making the finding of compliance, the Administrator may consider test conditions outside of the range specified in the test plan based on a finding that the Permittee could not reasonably maintain the range specified in the test plan and considering factors including whether the time duration and level of the parameter when operations were out of the specified range were such that operations during the confirmatory test are determined to be reasonably representative of normal operations. In addition, the Administrator will consider the proximity of the emission test results to the standard.

13. Operating conditions during subsequent testing. [40 C.F.R. § 63.1207(h)]

- (a) Current operating parameter limits established under 40 C.F.R. § 63.1209 are waived during subsequent comprehensive performance testing.
- (b) Current operating parameter limits are also waived during pretesting prior to comprehensive performance testing for an aggregate time not to exceed 720 hours of operation (renewable at the discretion of the Administrator) under an approved test plan or if the source records the results of the pretesting. Pretesting means:
  - (i) Operations when stack emissions testing for dioxin/furan, mercury, SVM, LVM, particulate matter, or hydrogen chloride/chlorine gas is being performed; and
  - (ii) Operations to reach steady-state operating conditions prior to stack emissions testing under 40 C.F.R. § 63.1207(g)(1)(iii).

14. Test methods. [40 C.F.R. § 63.1208]

The Permittee must use the following test methods to determine compliance with the emissions standards of 40 C.F.R. Part 63, Subpart EEE:

- (a) Dioxins and furans. [40 C.F.R. § 63.1208(b)(1)]
  - (i) To determine compliance with the emission standard for dioxins and furans, the Permittee must use:
    - A. Method 0023A, Sampling Method for Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans emissions from Stationary Sources, EPA Publication SW-846 (incorporated by reference—*see* 40 C.F.R. § 63.14); or
    - B. Method 23, provided in 40 C.F.R. Part 60, Appendix A, after approval by the Administrator.
      - I. The Permittee may request approval to use Method 23 in the performance test plan required under 40 C.F.R. § 63.1207(e)(1)(i) and (ii).
      - II. In determining whether to grant approval to use Method 23, the Administrator may consider factors including whether dioxin/furan were detected at levels substantially below the emission standard in previous testing, and whether previous Method 0023 analyses detected low levels of dioxin/furan in the front half of the sampling train.
      - III. Sources that emit carbonaceous particulate matter, such as coal-fired boilers, and sources equipped with activated carbon injection, will be deemed not suitable for use of Method 23 unless the Permittee documents that there would not be a significant improvement in quality assurance with Method 0023A.
  - (ii) The Permittee must sample for a minimum of 3 hours, and collect a minimum sample volume of 2.5 dscm;
  - (iii) The Permittee may assume that non-detects are present at zero concentration.
- (b) Mercury. [40 C.F.R. § 63.1208(b)(2)]

The Permittee must use Method 29, provided in 40 C.F.R. Part 60, Appendix A, to demonstrate compliance with the emission standard for mercury.

- (c) Cadmium and lead. [40 C.F.R. § 63.1208(b)(3)]

The Permittee must use Method 29, provided in 40 C.F.R. Part 60, Appendix A, to determine compliance with the emission standard for cadmium and lead (combined).

- (d) Arsenic, beryllium, and chromium. [40 C.F.R. § 63.1208(b)(4)]

The Permittee must use Method 29, provided in 40 C.F.R. Part 60, Appendix A, to determine compliance with the emission standard for arsenic, beryllium, and chromium (combined).

- (e) Hydrogen chloride and chlorine gas. [40 C.F.R. § 63.1208(b)(5)]

- (i) Compliance with MACT standards. To determine compliance with the emission standard for hydrogen chloride and chlorine gas (combined), the Permittee must use:

A. Method 26/26A as provided in 40 C.F.R. Part 60, Appendix A; or

B. Methods 320 or 321 as provided in 40 C.F.R. Part 63, Appendix A; or

C. ASTM D 6735–01, Standard Test Method for Measurement of Gaseous Chlorides and Fluorides from Mineral Calcining Exhaust Sources—Impinger Method to measure emissions of hydrogen chloride, and Method 26/26A to measure emissions of chlorine gas, provided that the Permittee follows the following provisions of 40 C.F.R. § 63.1208(b)(5)(C)(1) through (6):

I. A test must include three or more runs in which a pair of samples is obtained simultaneously for each run according to section 11.2.6 of ASTM Method D6735–01.

II. The Permittee must calculate the test run standard deviation of each set of paired samples to quantify data precision, according to Equation 1 in 40 C.F.R. § 63.1208(b)(5)(C)(2).

- III. The Permittee must calculate the test average relative standard deviation ( $RSD_{TA}$ ) according to Equation 2 in 40 C.F.R. § 63.1208(b)(5)(i)(C)(3).
  - IV. If  $RSD_{TA}$  is greater than 20 percent, the data are invalid and the test must be repeated.
  - V. The post-test analyte spike procedure of section 11.2.7 of ASTM Method D6735–01 is conducted, and the percent recovery is calculated according to section 12.6 of ASTM Method D6735–01.
  - VI. If the percent recovery is between 70 percent and 130 percent, inclusive, the test is valid. If the percent recovery is outside of this range, the data are considered invalid, and the test must be repeated.
- (ii) Compliance with risk-based limits under 40 C.F.R. § 63.1215. To demonstrate compliance with emission limits established under § 63.1215, the Permittee must use Method 26/26A as provided in 40 C.F.R. Part 60, Appendix A, Method 320 as provided in 40 C.F.R. Part 63, Appendix A, Method 321 as provided in 40 C.F.R. Part 63, Appendix A, or ASTM D 6735–01, Standard Test Method for Measurement of Gaseous Chlorides and Fluorides from Mineral Calcining Exhaust Sources—Impinger Method (following the provisions of 40 C.F.R. § 63.1208(b)(5)(C)(1) through (6)), except that for incinerators, boilers, and lightweight aggregate kilns, the Permittee must use Methods 320 or 321 as provided in 40 C.F.R. Part 63, Appendix A, or ASTM D 6735–01 to measure hydrogen chloride, and Method 26/26A as provided in 40 C.F.R. Part 60, Appendix A, to measure total chlorine, and calculate chlorine gas by difference if:
- A. The bromine/chlorine ratio in feedstreams is greater than 5 percent; or
  - B. The sulfur/chlorine ratio in feedstreams is greater than 50 percent.
- (f) Particulate matter. [40 C.F.R. § 63.1208(b)(6)]

The Permittee must use Methods 5 or 5I, provided in 40 C.F.R. Part 60, Appendix A, to demonstrate compliance with the emission standard for particulate matter.

(g) Other Test Methods. [40 C.F.R. § 63.1208(b)(7)]

The Permittee may use applicable test methods in EPA Publication SW-846, as necessary to demonstrate compliance with requirements of this subpart, except as otherwise specified in 40 C.F.R. § 63.1208(b)(2)–(b)(6).

(h) Feedstream analytical methods. [40 C.F.R. § 63.1208(b)(8)]

The Permittee may use any reliable analytical method to determine feedstream concentrations of metals, chlorine, and other constituents. It is the Permittee's responsibility to ensure that the sampling and analysis procedures are unbiased, precise, and that the results are representative of the feedstream.

(i) Opacity. [40 C.F.R. § 63.1208(b)(9)]

The Permittee must use EPA Reference Method 9, provided in 40 C.F.R. Part 60, Appendix A.

(j) Nitrogen oxides. [40 C.F.R. § 71.6(a)(3)(i)(B)]

The Permittee must measure the nitrogen oxides emission concentration using EPA Reference Method 7 or 7E in Appendix A to 40 C.F.R. Part 60, or ASTM D6522–00 (IBR, *see* 40 C.F.R. § 63.14(b)).

(k) Volatile organic compounds. [40 C.F.R. § 71.6(a)(3)(i)(B)]

The Permittee must measure the volatile organic compounds emission concentration using EPA Reference Method 18 and either Method 25 or 25A.

(l) Sulfur dioxide. [40 C.F.R. § 71.6(a)(3)(i)(B)]

The Permittee must measure the sulfur dioxide emission concentration using EPA Reference Methods 6 or 6C.

**(E) Recordkeeping and Reporting. [40 C.F.R. § 71.6(a)(3)]**

1. Summary of notification requirements. [40 C.F.R. § 63.1210(a)]

(a) The Permittee must submit the following notifications to EPA:

<b>Reference</b>	<b>Notification</b>
40 C.F.R. § 63.9(d)	Notification that the source is subject to special compliance requirements
40 C.F.R. § 63.9(j)	Notification and documentation of any change in information already provided under 40 C.F.R. § 63.9
40 C.F.R. § 63.1206(b)(5)(i)	Notification of changes in design, operation, or maintenance
40 C.F.R. § 63.1206(c)(8)(iv)	Notification of excessive number of bag leak detection system exceedances
40 C.F.R. §§ 63.1207(e), 63.9(e), 63.9(g)(1) and (3)	Notification of performance test and continuous monitoring system evaluation, including the performance test plan and CMS performance evaluation plan*
40 C.F.R. §§ 63.1210(d), 63.1207(j), 63.1207(k), 63.1207(l), 63.9(h), 63.10(d)(2), 63.10(e)(2)	Notification of compliance, including results of performance tests and continuous monitoring system performance evaluations

\* The Permittee may also be required on a case-by-case basis to submit a feedstream analysis plan under 40 C.F.R. § 63.1209(c)(3).

- (b) The Permittee must submit the following notifications to EPA if the Permittee requests or elects to comply with alternative requirements:

<b>Reference</b>	<b>Notification, request, petition, or application</b>
40 C.F.R. § 63.9(i)	The Permittee may request an adjustment of time periods or postmark deadlines for submittal and review of required information.
40 C.F.R. § 63.10(e)(3)(ii)	The Permittee may request approval to reduce the frequency of excess emissions and CMS performance reports.
40 C.F.R. § 63.10(f)	The Permittee may request approval to waive recordkeeping or reporting requirements.
40 C.F.R. § 63.1206(b)(5)(i)(C)	The Permittee may request approval to burn hazardous waste for more than 720 hours and for purposes other than testing or pretesting after making a change in the design or operation that could affect compliance with emission standards and prior to submitting a revised NOC.

<b>Reference</b>	<b>Notification, request, petition, or application</b>
40 C.F.R. § 63.1206(b)(8)(iii)(B)	If the Permittee elects to conduct particulate matter CEMS correlation testing and wishes to have federal particulate matter and opacity standards and associated operating limits waived during the testing, the Permittee must notify the Administrator by submitting the correlation test plan for review and approval.
40 C.F.R. § 63.1206(b)(8)(v)	The Permittee may request approval to have the particulate matter and opacity standards and associated operating limits and conditions waived for more than 96 hours for a correlation test.
40 C.F.R. § 63.1206(c)(2)(ii)(C)	The Permittee may request approval to make changes to the startup, shutdown, and malfunction plan.
40 C.F.R. § 63.1206(c)(5)(i)(C)	The Permittee may request an alternative means of control to provide control of combustion system leaks.
40 C.F.R. § 63.1206(c)(5)(i)(D)	The Permittee may request other techniques to prevent fugitive emissions without use of instantaneous pressure limits.
40 C.F.R. § 63.1207(d)(3)	The Permittee may request more than 60 days to complete a performance test if additional time is needed for reasons beyond its control.
40 C.F.R. §§ 63.1207(e)(3), 63.7(h)	The Permittee may request a time extension if the Administrator fails to approve or deny its test plan.
40 C.F.R. § 63.1207(h)(2)	The Permittee may request approval to waive current operating parameter limits during pretesting for more than 720 hours.
40 C.F.R. § 63.1207(f)(1)(ii)(D)	The Permittee may request approval to perform a reduced hazardous waste feedstream analysis for organic hazardous air pollutants if the reduced analysis continues to be representative of organic hazardous air pollutants in its hazardous waste feedstreams.
40 C.F.R. § 63.1207(g)(2)(v)	The Permittee may request approval to operate under a wider operating range for a parameter during confirmatory performance testing.
40 C.F.R. § 63.1207(i)	The Permittee may request up to a 1-year time extension for conducting a performance test (other than the initial comprehensive performance test) to consolidate testing with other state or federally-required testing.

<b>Reference</b>	<b>Notification, request, petition, or application</b>
40 C.F.R. § 63.1207(j)(4)	The Permittee may request more than 90 days to submit a NOC after completing a performance test if additional time is needed for reasons beyond its control.
40 C.F.R. § 63.1207(l)(3)	After failure of a performance test, the Permittee may request approval to burn hazardous waste for more than 720 hours and for purposes other than testing or pretesting.
40 C.F.R. §§ 63.1209(a)(5), 63.8(f)	The Permittee may request: (1) approval of alternative monitoring methods for compliance with standards that are monitored with a CEMS; and (2) approval to use a CEMS in lieu of operating parameter limits.
40 C.F.R. § 63.1209(g)(1)	The Permittee may request approval of: (1) alternatives to operating parameter monitoring requirements, except for standards that the Permittee must monitor with a CEMS and except for requests to use a CEMS in lieu of operating parameter limits; or (2) a waiver of an operating parameter limit.
40 C.F.R. § 63.1209(l)(1)	The Permittee may request approval to extrapolate mercury feedrate limits.
40 C.F.R. § 63.1209(n)(2)	The Permittee may request approval to extrapolate SVM and LVM feedrate limits.
40 C.F.R. § 63.1211(d)	The Permittee may request approval to use data compression techniques to record data on a less frequent basis than required by 40 C.F.R. § 63.1209.

2. Notification of Compliance. [40 C.F.R. § 63.1210(d)]

- (a) The NOC status requirements of 40 C.F.R. § 63.9(h) apply, except that:
- (i) The notification is an NOC, rather than compliance status;
  - (ii) The notification is required for the initial comprehensive performance test and each subsequent comprehensive and confirmatory performance test; and
  - (iii) The Permittee must postmark the notification before the close of business on the 90th day following completion of relevant compliance demonstration activity specified in 40 C.F.R. Part 63, Subpart EEE, rather than the 60th day as required by 40 C.F.R. § 63.9(h)(2)(ii).

- (b) Upon postmark of the NOC, the Permittee shall comply with the OPLs identified in the NOC, and the limits identified in the DOC or a previous NOC are no longer applicable, except as provided in condition 2.1(C)(2).
- (c) The NOC requirements of 40 C.F.R. § 63.1207(j) also apply.

3. Summary of reporting requirements. [40 C.F.R. § 63.1211(a)]

The Permittee must submit the following reports to the Administrator:

Reference	Report
40 C.F.R. § 63.10(d)(5)(i)	Periodic startup, shutdown, and malfunction reports
40 C.F.R. § 63.10(d)(5)(ii)	Immediate startup, shutdown, and malfunction reports
40 C.F.R. § 63.10(e)(3)	Excess emissions and continuous monitoring system performance report and summary report
40 C.F.R. § 63.1206(c)(2)(ii)(B)	Startup, shutdown, and malfunction plan
40 C.F.R. § 63.1206(c)(3)(vi)	Report on excessive number of exceedances during malfunctions
40 C.F.R. § 63.1206(c)(4)(iv)	Emergency safety vent opening reports
40 C.F.R. § 63.1206(c)(8)(iv)	Reports on excessive number of exceedances from the bag leak detection systems

4. Automatic waste feed cutoff excessive exceedance reporting. [40 C.F.R. § 63.1206(c)(3)(vi)]

- (a) For each set of 10 exceedances of an emission standard or operating requirement while hazardous waste remains in the combustion chamber (i.e., when the hazardous waste residence time has not transpired since the hazardous waste feed was cut off) during a 60-day block period, the Permittee must submit to the Administrator, within 5 calendar days of the tenth exceedance, a written report documenting the exceedances, the results of the investigation, and the corrective measures taken.
- (b) On a case-by-case basis, the Administrator may require reporting on excessive number of exceedances when fewer than 10 exceedances occur during a 60-day block period.

5. Notification of excessive number of exceedances from bag leak detection system. [40 C.F.R. § 63.1206(c)(8)(iv)]

If the Permittee operates the combustor when the detector response exceeds the alarm set-point or the bag leak detection system is malfunctioning more than 5 percent of the time during any 6-month block time period, the Permittee must submit a notification to the Administrator within 30 days of the end of the 6-month block time period that describes the causes of the exceedances and bag leak detection system malfunctions and the revisions to the design, operation, or maintenance of the combustor, baghouse, or bag leak detection system the Permittee is taking to minimize exceedances and bag leak detection system malfunctions. To document compliance with these requirements the Permittee must:

- (a) keep records of the date, time, and duration of each alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken;
- (b) record the percent of the operating time during each 6-month period that the alarm sounds;
- (c) not count the alarm time in calculating the operating time percentage, if inspection of the fabric filter demonstrates that no corrective action is required; and
- (d) count each alarm as a minimum of 1 hour if corrective action is required.

6. ESV reporting requirements. [40 C.F.R. § 63.1206(c)(4)]

The Permittee must submit to the Administrator within 5 days of an ESV opening that results in failure to meet the emission standards of this subpart (as determined in 40 C.F.R. § 63.1206(c)(4)(i)) a written report documenting the result of the investigation and corrective measures taken.

7. Periodic startup, shutdown, and malfunction reports. [40 C.F.R. § 63.10(d)(5)(ii)]

If actions taken by the Permittee during a startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction (including actions taken to correct a malfunction) of an affected source are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan (*see* 40 C.F.R. § 63.6(e)(3)), the Permittee shall state such information in a startup, shutdown, and malfunction report. Actions taken to minimize emissions during such startups, shutdowns, and malfunctions shall be summarized in the report and may be done in checklist form; if actions taken are the same for each event, only one checklist is necessary. Such a report shall also include the number, duration, and a brief

description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. Reports shall be required only if a startup or shutdown caused the source to exceed any applicable emission limitation in the relevant emission standards, or if a malfunction occurred during the reporting period. The startup, shutdown, and malfunction report shall consist of a letter containing the name, title, and signature of the Permittee or other responsible official who is certifying its accuracy, that shall be submitted to the Administrator semiannually (or on a more frequent basis if specified otherwise in a relevant standard or as established otherwise by the permitting authority in the source's title V permit). The startup, shutdown, and malfunction report shall be delivered or postmarked by the 30th day following the end of each calendar half or other calendar reporting period, as appropriate. If the Permittee is required to submit excess emissions and continuous monitoring system performance (or other periodic) reports under this part, the startup, shutdown, and malfunction reports required under this paragraph may be submitted simultaneously with the excess emissions and continuous monitoring system performance (or other) reports. If startup, shutdown, and malfunction reports are submitted with excess emissions and continuous monitoring system performance (or other periodic) reports, and the Permittee receives approval to reduce the frequency of reporting for the latter under 40 C.F.R. § 63.10(e), the frequency of reporting for the startup, shutdown, and malfunction reports also may be reduced if the Administrator does not object to the intended change. The procedures to implement the allowance in the preceding sentence shall be the same as the procedures specified in 40 C.F.R. § 63.10(e)(3).

8. Immediate startup, shutdown, and malfunction reports. [40 C.F.R. § 63.10(d)(5)(ii)]

Notwithstanding the allowance to reduce the frequency of reporting for periodic startup, shutdown, and malfunction reports under 40 C.F.R. § 63.10(d)(5)(i), any time an action taken by the Permittee during a startup or shutdown that caused the source to exceed any applicable emission limitation in the relevant emission standards, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the Permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event. The immediate report required under 40 C.F.R. § 63.10(d)(5)(ii) shall consist of a telephone call (or facsimile (FAX) transmission) to the Administrator within 2 working days after commencing actions inconsistent with the plan, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event, that contains the name, title, and signature of the Permittee or other responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and

malfunction plan, describing all excess emissions and/or parameter monitoring exceedances which are believed to have occurred (or could have occurred in the case of malfunctions), and actions taken to minimize emissions in conformance with 40 C.F.R. § 63.6(e)(1)(i).

9. Notification of changes in design, operation, or maintenance specified by condition 2.1(C)(4). [40 C.F.R. § 63.1206(b)(5)]

(a) The Permittee must notify the Administrator at least 60 days prior to a change (as defined at 40 C.F.R. § 63.1206(b)(5)(iii)) to the design, operation, or maintenance practices of the source in a manner that may adversely affect compliance with any emission standard that is not monitored with a CEMS, unless the Permittee documents circumstances that dictate that such prior notice is not reasonably feasible. The notification must include:

- (i) A description of the changes and which emission standards may be affected; and
- (ii) A comprehensive performance test schedule and test plan under the requirements of 40 C.F.R. § 63.1207(f) that will document compliance with the affected emission standard(s).

[40 C.F.R. § 63.1206(b)(5)(i)(A)]

(b) If the Permittee determines that a change will not adversely affect compliance with the emission standards or operating requirements, the Permittee must document the change in the operating record upon making such change. The Permittee must revise as necessary the performance test plan, DOC, NOC, and start-up, shutdown, and malfunction plan to reflect these changes. [40 C.F.R. § 63.1206(b)(5)(ii)]

(c) Nothing in this permit exempts any changes made pursuant to this provision from any applicable requirements under Title I of the CAA. [40 C.F.R. § 71.6(a)(1)]

10. Notification of performance test and CMS performance evaluation, and approval of test plan and CMS performance evaluation plan. [40 C.F.R. § 63.1207(e)]

(a) The provisions of 40 C.F.R. §§ 63.7(b) and (c) and 63.8(e) apply, except:

- (i) Comprehensive performance test. The Permittee must submit to the Administrator a notification of its intention to conduct a comprehensive performance test and CMS performance evaluation along with a site-specific test plan and CMS performance evaluation

test plan at least 1 year before the performance test and performance evaluation are scheduled to begin.

- A. The Administrator will notify the Permittee of approval or intent to deny approval of the site-specific test plan and CMS performance evaluation test plan within 9 months after receipt of the original plan.
  - B. The Permittee must submit to the Administrator a notification of its intention to conduct the comprehensive performance test at least 60 calendar days before the test is scheduled to begin.
- (ii) Confirmatory performance test. The Permittee must submit to the Administrator a notification of its intention to conduct a confirmatory performance test and CMS performance evaluation along with a site-specific test plan and CMS performance evaluation test plan at least 60 calendar days before the performance test is scheduled to begin. The Administrator will notify the Permittee of approval or intent to deny approval of the site-specific test plan and CMS performance evaluation test plan within 30 calendar days after receipt of the original test plans.
- (b) The Permittee must make its site-specific test plan and CMS performance evaluation test plan available to the public for review no later than 60 calendar days before initiation of the test. The Permittee must issue a public notice to all persons on its facility/public mailing list (developed pursuant to 40 C.F.R. §§ 71.11(d)(3)(i)(E) and 124.10(c)(1)(ix)) announcing the availability of the test plans and the location where the test plans are available for review. The test plans must be accessible to the public for 60 calendar days, beginning on the date that the Permittee issues its public notice. The location must be unrestricted and provide access to the public during reasonable hours and provide a means for the public to obtain copies. The notification must include the following information at a minimum:
- (i) The name and telephone number of the source's contact person;
  - (ii) The name and telephone number of the regulatory agency's contact person;
  - (iii) The location where the test plans and any necessary supporting documentation can be reviewed and copied;
  - (iv) The time period for which the test plans will be available for public review; and

- (v) An expected time period for commencement and completion of the performance test and CMS performance evaluation test.
- (c) Petitions for time extension if Administrator fails to approve or deny test plans. The Permittee may petition the Administrator under 40 C.F.R. § 63.7(h) to obtain a “waiver” of any performance test - initial or periodic performance test; comprehensive or confirmatory test. The “waiver” would be implemented as an extension of time to conduct the performance test at a later date.
  - (i) Qualifications for the waiver.
    - A. The Permittee may not petition the Administrator for a waiver under condition 2.1(E)(10)(c) if the Administrator has issued a notification of intent to deny its test plans under 40 C.F.R. § 63.7(c)(3)(i)(B);
    - B. The Permittee must submit a site-specific emissions testing plan and a continuous monitoring system performance evaluation test plan at least 1 year before a comprehensive performance test is scheduled to begin as required by 40 C.F.R. § 63.1207(c)(1), or at least 60 days before a confirmatory performance test is scheduled to begin as required by 40 C.F.R. § 63.1207(d). The test plans must include all required documentation, including the substantive content requirements of 40 C.F.R. §§ 63.1207(f) and 63.8(e); and
    - C. The Permittee must make a good faith effort to accommodate the Administrator's comments on the test plans.
  - (ii) Procedures for obtaining a waiver and duration of the waiver:
    - A. The Permittee must submit to the Administrator a waiver petition or request to renew the petition under 40 C.F.R. § 63.7(h) separately for each source at least 60 days prior to the scheduled date of the performance test.
    - B. The Administrator will approve or deny the petition within 30 days of receipt and notify the Permittee promptly of the decision.
    - C. The Administrator will not approve an individual waiver petition for a duration exceeding 6 months. The Administrator will include a sunset provision in the waiver ending the waiver within 6 months.

- D. The Permittee may submit a revised petition to renew the waiver under 40 C.F.R. § 63.7(h)(3)(iii) at least 60 days prior to the end date of the most recently approved waiver petition.
- E. The Administrator may approve a revised petition for a total waiver period up to 12 months.

(iii) Content of the waiver.

- A. The Permittee must provide documentation to enable the Administrator to determine that the source is meeting the relevant standard(s) on a continuous basis, as required by 40 C.F.R. § 63.7(h)(2). For extension requests for the initial comprehensive performance test, the Permittee must submit its DOC to assist the Administrator in making this determination.
- B. The Permittee must include in the petition information justifying its request for a waiver, such as the technical or economic infeasibility, or the impracticality, of the affected source performing the required test, as required by 40 C.F.R. § 63.7(h)(3)(iii).

(iv) Public notice.

At the same time that the Permittee submits its petition to the Administrator, the Permittee must notify the public (e.g., distribute a notice to the facility/public mailing list developed pursuant to 40 C.F.R. §§ 71.11(d)(3)(i)(E) and 124.10(c)(1)(ix)) of its petition to waive a performance test. The notification must include all of the following information at a minimum:

- A. The name and telephone number of the source's contact person;
- B. The name and telephone number of the regulatory agency's contact person;
- C. The date the source submitted its site-specific performance test plan and CMS performance evaluation test plans; and
- D. The length of time requested for the waiver.

11. Time extension for subsequent performance tests. [40 C.F.R. § 63.1207(i)]

After the initial comprehensive performance test, the Permittee may request up to a 1-year time extension for conducting a comprehensive or confirmatory performance test to consolidate performance testing with other state or federally required emission testing, or for other reasons deemed acceptable by the Administrator. If the Administrator grants a time extension for a comprehensive performance test, the deadlines for commencing the next comprehensive and confirmatory tests are based on the date that the subject comprehensive performance test commences.

- (a) The Permittee must submit in writing to the permitting authority any request for a time extension for conducting a performance test.
- (b) The Permittee must include in the request for an extension for conducting a performance test the following:
  - (i) A description of the reasons for requesting the time extension;
  - (ii) The date by which the Permittee will commence performance testing.

12. Notification of Compliance. [40 C.F.R. § 63.1207(j)]

- (a) Comprehensive performance test.
  - (i) Except as provided by 40 C.F.R. § 63.1207(j)(4) and (j)(5), within 90 days of completion of a comprehensive performance test, the Permittee must mail to the Administrator, with a postmark to document the submission date, a NOC documenting compliance with the emission standards and continuous monitoring system requirements, and identifying operating parameter limits under 40 C.F.R. § 63.1209.
  - (ii) On and after the date of the postmark of the NOC, the Permittee must comply with all operating requirements specified in the NOC in lieu of the limits specified in the DOC required under 40 C.F.R. § 63.1211(c).
- (b) Confirmatory performance test. Except as provided by 40 C.F.R. § 63.1207(j)(4), within 90 days of completion of a confirmatory performance test, the Permittee must mail to the Administrator, with a postmark to document the submission date, a NOC documenting compliance or noncompliance with the applicable dioxin/furan emission standard.

- (c) The Permittee must comply with the additional requirements pertaining to the NOC (e.g., the Permittee must include results of performance tests in the NOC) at 40 C.F.R. §§ 63.7(g), 63.9(h), and 63.1210(d).
- (d) Time extension. The Permittee may submit a written request to the Administrator for a time extension documenting that, for reasons beyond its control, the Permittee may not be able to meet the 90-day deadline for submitting the NOC after completion of testing. The Administrator will determine whether a time extension is warranted.
- (e) Early compliance. If the Permittee conducts the initial comprehensive performance test prior to the compliance date, the Permittee must postmark the NOC within 90 days of completion of the performance test or by the compliance date, whichever is later.

13. Failure to submit a timely NOC. [40 C.F.R. § 63.1207(k)]

- (a) If the Permittee fails to mail to the Administrator a NOC by the specified date, with a postmark meeting the requirements of this permit, the Permittee immediately must cease burning hazardous waste.
- (b) Prior to submitting a revised NOC as provided by 40 C.F.R. § 63.1207(k)(3), the Permittee may burn hazardous waste only for the purpose of pretesting or comprehensive performance testing and only for a maximum of 720 hours (renewable at the discretion of the Administrator).
- (c) The Permittee must submit to the Administrator a NOC subsequent to a new comprehensive performance test before resuming hazardous waste burning.

14. Failure of performance test. [40 C.F.R. § 63.1207(l)]

- (a) Comprehensive performance test.

The provisions of 40 C.F.R. § 63.1207(l) do not apply to the initial comprehensive performance test if the Permittee conducts the test prior to its compliance date.

- (i) If the Permittee determines (based on CEM recordings, results of analyses of stack samples, or results of CMS performance evaluations) that the Permittee has exceeded any emission standard during a comprehensive performance test for a mode of operation, the Permittee must cease hazardous waste burning immediately under that mode of operation. The Permittee must make this

determination within 90 days following completion of the performance test.

- (ii) If the Permittee has failed to demonstrate compliance with the emission standards for any mode of operation:
  - A. Prior to submitting a revised NOC as provided by 40 C.F.R. § 63.1207(l)(1)(ii)(C), the Permittee may burn hazardous waste only for the purpose of pretesting or comprehensive performance testing under revised operating conditions, and only for a maximum of 720 hours (renewable at the discretion of the Administrator), except as provided by 40 C.F.R. § 63.1207(l)(3);
  - B. The Permittee must conduct a comprehensive performance test under revised operating conditions following the requirements for performance testing of 40 C.F.R. § 63.1207; and
  - C. The Permittee must submit to the Administrator a NOC subsequent to the new comprehensive performance test.

(b) Confirmatory performance test.

The Permittee must determine within 90 days of the completion of a performance test whether it has complied with the dioxin/furan emission standard. If the Permittee determines (based on CEM recordings, results of analyses of stack samples, or results of CMS performance evaluations) that it has failed the dioxin/furan emission standard during a confirmatory performance test, the Permittee immediately must cease burning hazardous waste. To burn hazardous waste following the failure to comply with the dioxin/furan emission standard:

- (i) The Permittee must submit to the Administrator for review and approval a test plan to conduct a comprehensive performance test to identify revised limits on the applicable dioxin/furan operating parameters specified in 40 C.F.R. § 63.1209(k);
- (ii) The Permittee must submit to the Administrator a NOC with the dioxin/furan emission standard under the provisions of 40 C.F.R. § 63.1207(j), (k) and (l). The Permittee must include in the NOC the revised limits on the applicable dioxin/furan operating parameters specified in 40 C.F.R. § 63.1209(k); and
- (iii) Until the NOC is submitted, the Permittee must not burn hazardous waste except for purposes of pretesting or confirmatory performance testing, and for a maximum of 720 hours (renewable at the discretion

of the Administrator), except as provided by 40 C.F.R. § 63.1207(1)(3).

- (c) The Permittee may petition the Administrator to obtain written approval to burn hazardous waste prior to submitting a NOC for purposes other than testing or pretesting. The Permittee must specify operating requirements, including limits on operating parameters, that the Permittee determines will ensure compliance with the emission standards of this subpart based on available information including data from the failed performance test. The Administrator will review, modify as necessary, and approve if warranted the interim operating requirements. An approval of interim operating requirements will include a schedule for submitting a NOC.

15. Summary of recordkeeping requirements. [40 C.F.R. § 63.1211(b)]

The Permittee must retain the following in the operating records applicable to the Hazardous Waste Incinerators operated at this site:

<b>Reference</b>	<b>Document, Data, or Information</b>
40 C.F.R. §§ 63.1200, 63.10(b) and (c)	Information required to document and maintain compliance with the regulations of 40 C.F.R. Part 63, Subpart EEE, including data recorded by CMSs, and copies of all notifications, reports, plans, and other documents submitted to the Administrator
40 C.F.R. § 63.1206(b)(1)(ii)	If the Permittee elects to comply with all applicable requirements and standards promulgated under authority of the Act, including Sections 112 and 129, in lieu of the requirements of 40 C.F.R. Part 63, Subpart EEE, when not burning hazardous waste, it must document in the operating record that it is in compliance with those requirements.
40 C.F.R. § 63.1206(b)(5)(ii)	Documentation that a change will not adversely affect compliance with the emission standards or operating requirements
40 C.F.R. § 63.1206(b)(11)	Calculation of hazardous waste residence time
40 C.F.R. § 63.1206(c)(2)	Startup, shutdown, and malfunction plan (SSMP)
40 C.F.R. § 63.1206(c)(2)(v)(A)	Documentation of the Permittee's investigation and evaluation of excessive number of exceedances during malfunctions
40 C.F.R. § 63.1206(c)(3)(v)	Corrective measures for any automatic waste feed cutoff that results in an exceedance of an emission standard or OPL

Reference	Document, Data, or Information
40 C.F.R. § 63.1206(c)(3)(vii)	Documentation and results of the automatic waste feed cutoff operability testing
40 C.F.R. § 63.1206(c)(4)(ii)	Emergency safety vent operating plan
40 C.F.R. § 63.1206(c)(4)(iii)	Corrective measures for any emergency safety vent opening
40 C.F.R. § 63.1206(c)(5)(ii)	Method used for control of combustion system leaks
40 C.F.R. § 63.1206(c)(6)	Operator training and certification program
40 C.F.R. § 63.1206(c)(7)(i)(D)	Operation and maintenance plan
40 C.F.R. § 63.1209(c)(2)	Feedstream analysis plan
40 C.F.R. § 63.1209(k)(6)(iii), (k)(7)(ii), (k)(9)(ii), (o)(4)(iii)	Documentation that a substitute activated carbon, dioxin/furan formation reaction inhibitor, or dry scrubber sorbent will provide the same level of control as the original material
40 C.F.R. § 63.1209(k)(7)(i)(C)	Results of carbon bed performance monitoring
40 C.F.R. § 63.1209(q)	Documentation of changes in modes of operation
40 C.F.R. § 63.1211(c)	DOC

16. Documentation of Compliance. [40 C.F.R. § 63.1211(c)]

- (a) The Permittee must develop and include in the operating record a DOC. The Permittee is not subject to this requirement, however, if the Permittee submits a NOC under 40 C.F.R. § 63.1207(j) prior to the compliance date. Upon inclusion of the DOC in the operating record, hazardous waste burning incinerators are no longer subject to compliance with the previously applicable NOC.
- (b) The DOC must identify the applicable emission standards under 40 C.F.R. Part 63, Subpart EEE, and the limits on the operating parameters under 40 C.F.R. § 63.1209 that will ensure compliance with those emission standards.
- (c) The Permittee must include a signed and dated certification in the DOC that:

- (i) Required CEMS and CMS are installed, calibrated, and continuously operating in compliance with the requirements of 40 C.F.R. Part 63, Subpart EEE; and
- (ii) Based on an engineering evaluation prepared under the Permittee's direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information and supporting documentation, and considering at a minimum the design, operation, and maintenance characteristics of the combustor and emissions control equipment, the types, quantities, and characteristics of feedstreams, and available emissions data:
  - A. The Permittee is in compliance with the emission standards of this subpart; and
  - B. The limits on the operating parameters under 40 C.F.R. § 63.1209 ensure compliance with the emission standards of 40 C.F.R. Part 63, Subpart EEE.
- (d) The Permittee must comply with the emission standards and operating parameter limits specified in the DOC.

17. Calculation of hazardous waste residence time. [40 C.F.R. § 63.1206(b)(11)]

The Permittee must calculate the hazardous waste residence time and include the calculation in the performance test plan under 40 C.F.R. § 63.1207(f) and the operating record. The Permittee must also provide the hazardous waste residence time in the DOC under 40 C.F.R. § 63.1211(c) and the NOC under 40 C.F.R. §§ 63.1207(j) and 63.1210(d).

18. Documenting compliance with the standards based on performance testing. [40 C.F.R. § 63.1206(b)(12)]

- (a) The Permittee must conduct a minimum of three runs of a performance test required under 40 C.F.R. § 63.1207 to document compliance with the emission standards of this subpart.
- (b) The Permittee must document compliance with the emission standards based on the arithmetic average of the emission results of each run, except that the Permittee must document compliance with the DRE standard for each run of the comprehensive performance test individually.

19. Compliance with the carbon monoxide and hydrocarbon emission standards. [40 C.F.R. § 1206(b)(6)]

If the Permittee elects to comply with the carbon monoxide and hydrocarbon emissions standards of 40 C.F.R. Part 63, Subpart EEE, by documenting continuous compliance with the carbon monoxide standard using a continuous emissions monitoring system and documenting compliance with the hydrocarbon standard during the DRE performance test or its equivalent, and a DRE test performed pursuant to 40 C.F.R. § 63.1207(c)(2) is acceptable as documentation of compliance with the DRE standard, the Permittee may use the highest hourly rolling average hydrocarbon level achieved during the DRE test runs to document compliance with the hydrocarbon standard. An acceptable DRE test is any test for which the data and results are determined to meet quality assurance objectives (on a site-specific basis) such that the results adequately demonstrate compliance with the DRE standard.

20. Compliance with the Destruction and Removal Efficiency standard. [40 C.F.R. § 63.1206(b)(7)]

- (a) The Permittee must document compliance with the DRE standard under this subpart only once provided that the Permittee does not modify the source after the DRE test in a manner that could affect the ability of the source to achieve the DRE standard.
- (b) The Permittee may use any DRE test data that documents that its source achieves the required level of DRE provided:
  - (i) The Permittee has not modified the design or operation of its source in a manner that could affect the ability of its source to achieve the DRE standard since the DRE test was performed; and,
  - (ii) The DRE test data meet quality assurance objectives determined on a site-specific basis.

21. The Permittee shall maintain all records for five calendar years and make them available at all times for inspection by EPA, Illinois EPA, local agencies, or their duly authorized representatives. [40 C.F.R. § 71.6(a)(3)(i)(B)]

## **2.2. MATERIAL PROCESSING AREAS**

### **(A) Emission Limitations and Standards [40 C.F.R. § 71.6(a)(1)]**

1. National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations. [40 C.F.R. Part 63, Subpart DD]

For a container having a design capacity greater than 0.1 m<sup>3</sup> and less than or equal to 0.46 m<sup>3</sup>, the Permittee must control air emissions from the container in accordance with the standards for Container Level 1 controls as specified in 40 C.F.R. Part 63, Subpart PP, National Emission Standards for Containers. [40 C.F.R. § 63.688(b)(1)(i)]

2. National Emission Standards for Containers. [40 C.F.R. Part 63, Subpart PP]

40 C.F.R. § 63.922(b)(1) through (3) define Container Level 1 controls as one of the following:

- (a) A container that meets the applicable U.S. Department of Transportation (U.S. DOT) regulations on packaging hazardous materials for transportation as specified in paragraph 40 C.F.R. § 63.922(f);
- (b) A container equipped with a cover and closure devices that form a continuous barrier over the container openings such that when the cover and closure devices are secured in the closed position there are no visible holes, gaps, or other open spaces into the interior of the container. The cover may be a separate cover installed on the container (e.g., a lid on a drum, a suitably secured tarp on a roll-off box) or may be an integral part of the container structural design (e.g., a bulk cargo container equipped with a screw-type cap); or
- (c) An open-top container in which an organic vapor-suppressing barrier is placed on or over the regulated-material in the container such that no regulated-material is exposed to the atmosphere. One example of such a barrier is application of a suitable organic-vapor suppressing foam.

3. Organic material emissions limitations. [35 IAC 219.301]

The Permittee shall not cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 219.302, 219.303 or 219.304 and the following exception: If no odor nuisance exists this limitation shall apply only to photochemically reactive material.

4. Visible emissions limitations.

- (a) Except as provided in condition 2.2(A)(4)(b), below, the Permittee shall not cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent. [35 IAC 212.123(a)]
- (b) The emission of smoke or other particulate matter from any such emission source may have an opacity greater than 30 percent but not greater than 60

percent for a period or periods aggregating 8 minutes in any 60 minute period, provided that such more opaque emissions permitted during any 60-minute period shall occur from only one such emission source located within a 305 m (1000 ft) radius from the center point of any other such emission source owned or operated by such person, and provided further that such more opaque emissions permitted from each such emission source shall be limited to 3 times in any 24 hour period. [35 IAC 212.123(b)]

**(B) Nonapplicable Regulations [40 C.F.R. § 71.6(f)(1)]**

1. Units MP-1, MP-2, and the Lab Pack Repack are not subject to 40 C.F.R. Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because they do not use an add-on control device to achieve compliance with an emission limitation or standard. [40 C.F.R. § 64.2(a)]
2. The conveyor systems associated with MP-1 and MP-2 are not subject to the requirements of 40 C.F.R. Part 63, Subpart DD, for transfer systems, because this equipment is used in the conveyance of material using a container. [40 C.F.R. § 63.681]
3. Units MP-1, MP-2 and the Lab Pack Repack are not subject to the requirements of 40 C.F.R. Part 61, Subpart BB, because this source is not part of a benzene production facility. [40 C.F.R. § 61.300]

**(C) Work Practice and Operational Requirements [40 C.F.R. § 71.6(a)(1)]**

The affected waste processing units are subject to the following control requirements and work practices established by 40 C.F.R. § 63.922(c), (d) and (e):

1. A container used to meet the requirements of either 40 C.F.R. § 63.922(b)(2) or (b)(3) shall be equipped with covers and closure devices, as applicable to the container, that are composed of suitable materials to minimize exposure of the regulated-material to the atmosphere and to maintain the equipment integrity for as long as it is in service. Factors to be considered when selecting the materials for and designing the cover and closure devices shall include: organic vapor permeability; the effects of contact with the material or its vapor managed in the container; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for container on which the cover is installed. [40 C.F.R. § 63.922(c)]
2. Whenever a regulated-material is in a container using Container Level 1 controls, the Permittee shall install all covers and closure devices for the container, and secure and maintain each closure device in the closed position except as follows:
  - (a) Opening of a closure device or cover is allowed for the purpose of adding material to the container as follows:

- (i) When the container is filled to the intended final level in one continuous operation, the Permittee shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.
  - (ii) When discrete quantities or batches of material intermittently are added to the container over a period of time, the Permittee shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either: the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaves the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.
- (b) Opening of a closure device or cover is allowed for the purpose of removing material from the container as follows:
  - (i) For the purpose of meeting the requirements of condition 2.2(C)(2), an empty container as defined in 40 C.F.R. § 63.921 may be open to the atmosphere at any time (e.g., covers and closure devices are not required to be secured in the closed position on an empty container).
  - (ii) When discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container as defined in 40 C.F.R. § 63.921, the Permittee shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes, or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.
- (c) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of regulated-material. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the Permittee shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.

- (d) Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the container internal pressure in accordance with the container design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the container internal pressure is within the internal pressure operating range determined by the Permittee based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the container internal pressure exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations.
- (e) Opening of a safety device, as defined in 40 C.F.R. § 63.921, is allowed at any time conditions require it to avoid an unsafe condition. [40 C.F.R. § 63.922(d)]

3. Inspection of containers using Container Level 1 controls [40 C.F.R. § 63.922(e)]:

The Permittee shall inspect containers using Container Level 1 controls in accordance with the procedures specified in 40 C.F.R. § 63.926(a).

4. Containers that meet the applicable U.S. DOT regulations on packaging hazardous materials for transportation [40 C.F.R. § 63.922(f)]:

For the purpose of compliance with 40 C.F.R. § 63.922(b)(1), the Permittee shall use containers that meet the applicable U.S. DOT regulations on packaging hazardous materials for transportation as follows:

- (a) The container must meet the applicable requirements specified in 49 C.F.R. Part 178 “Specifications for Packagings” or 49 C.F.R. Part 179 “Specifications for Tank Cars.”
- (b) Regulated-material is managed in the container in accordance with the applicable requirements specified in 49 C.F.R. Part 107, Subpart B, “Exemptions;” 49 C.F.R. Part 172, “Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements;” 49 C.F.R. Part 173, “Shippers—

General Requirements for Shipments and Packaging;” and 49 C.F.R. Part 180, “Continuing Qualification and Maintenance of Packagings.”

- (c) For the purpose of complying with 40 C.F.R. Part 63, Subpart PP, no exceptions to the 49 C.F.R. Part 178 or Part 179 regulations are allowed, except as provided in condition 2.2(C)(4)(iv) of this permit, below.
- (d) For a lab pack that is managed in accordance with the requirements of 49 C.F.R. Part 178 for the purpose of complying with 40 C.F.R. Part 63, Subpart PP, the Permittee may comply with the exceptions for those packagings specified in 49 C.F.R. § 173.12(b).

**(D) Monitoring and Testing [40 C.F.R. § 71.6(a)(3)(i)(A)]**

1. Procedures to determine that there are no detectable organic emissions for the purpose of complying with 40 C.F.R. Part 63, Subpart PP. [40 C.F.R. § 63.925(a)]
  - (a) The Permittee shall conduct the test annually in accordance with the procedures specified in Method 21 of 40 C.F.R. Part 60, Appendix A. The Permittee shall check each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to: the interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure-relief valve. [40 C.F.R. § 63.925(a)(1)]
  - (b) The Permittee shall perform the test when the unit contains a material having a total organic concentration representative of the range of concentrations for the materials expected to be managed in the unit. During the test, the cover and closure devices shall be secured in the closed position. [40 C.F.R. § 63.925(a)(2)]
  - (c) The detection instrument shall meet the performance criteria of Method 21 of 40 C.F.R. Part 60, Appendix A, except the instrument response factor criteria in section 3.1.2(a) of Method 21 shall be the criteria for the average composition of the organic constituents in the material placed in the unit, not for each individual organic constituent. [40 C.F.R. § 63.925(a)(3)]
  - (d) The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 C.F.R. Part 60, Appendix A. [40 C.F.R. § 63.925(a)(4)]
  - (e) Calibration gases shall be as follows: [40 C.F.R. § 63.925(a)(5)]

- (i) Zero air (less than 10 ppmv hydrocarbon in air); and
  - (ii) A mixture of methane or n-hexane in air at a concentration of approximately, but less than 10,000 ppmv.
- (f) The Permittee may choose to adjust or not adjust the detection instrument readings to account for the background organic concentration level. If the Permittee chooses to adjust the instrument readings for the background level, the background level value must be determined according to the procedures in Method 21 of 40 C.F.R. Part 60, Appendix A. [40 C.F.R. § 63.925(a)(6)]
- (g) The Permittee must check each potential leak interface by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Method 21. When the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface shall be sampled. When the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn (e.g., some pressure relief devices), the instrument probe inlet shall be placed at approximately the center of the exhaust area to the atmosphere. [40 C.F.R. § 63.925(a)(7)]
- (h) The Permittee must determine if a potential leak interface operates with no detectable emissions using the applicable procedure specified in condition 2.2(D)(8)(a) or (b), below. [40 C.F.R. § 63.925(a)(8)]
- (i) If the Permittee chooses not to adjust the detection instrument readings for the background organic concentration level, then the maximum organic concentration value measured by the detection instrument is compared directly to the applicable value for the potential leak interface as specified in 40 C.F.R. § 63.925(a)(9).
  - (ii) If the Permittee chooses to adjust the detection instrument readings for the background organic concentration level, the value of the arithmetic difference between the maximum organic concentration value measured by the instrument and the background organic concentration value as determined in 40 C.F.R. § 63.925(a)(6) is compared with the applicable value for the potential leak interface as specified in paragraph 40 C.F.R. § 63.925 (a)(9).
- (i) A potential leak interface is determined to operate with no detectable emissions using the applicable criteria specified in condition 2.2(D)(9)(a) and (b), below. [40 C.F.R. § 63.925(a)(9)]

- (i) For a potential leak interface other than a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in condition 2.2(D)(8), above, is less than 500 ppmv.
  - (ii) For a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in condition 2.2(D)(8), above, is less than 10,000 ppmv.
2. Procedure for determining a container to be vapor-tight for the purpose of complying with 40 C.F.R. Part 63, Subpart PP. [40 C.F.R. § 63.925(b)]
  - (a) The Permittee shall perform the test in accordance with Method 27 of 40 C.F.R. Part 60, Appendix A.
  - (b) The Permittee shall use a pressure measurement device that has a precision of  $\pm 2.5$  mm water and that is capable of measuring above the pressure at which the container is to be tested for vapor tightness.
  - (c) If the test results determined by Method 27 indicate that the container sustains a pressure change less than or equal to 750 Pascals within 5 minutes after it is pressurized to a minimum of 4,500 Pascals, then the container is determined to be vapor-tight.
3. The Permittee shall inspect each container that uses either Container Level 1 or Container Level 2 controls and its cover and closure devices as described in conditions 2.2(D)(3)(a)-(c), below: [40 C.F.R. § 63.926]
  - (a) When a regulated-material already is in the container at the time the Permittee first accepts possession of the container at the facility site and the container is not emptied (i.e., does not meet the conditions for an empty container as defined in 63.921) within 24 hours after the container has been accepted at the facility site, the Permittee shall visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. This inspection of the container must be conducted on or before the date that the container is accepted at the facility (i.e., the date that the container becomes subject to the standards under this subpart). For the purpose of this requirement, the date of acceptance is the date of signature of the Permittee on the manifest or shipping papers accompanying the container. If a defect is detected, the Permittee shall repair the defect in accordance with the requirements of 40 C.F.R. § 63.926(a)(3).

- (b) When a container filled or partially filled with regulated-material remains unopened at the facility site for a period of 1 year or more, the Permittee shall visually inspect the container and its cover and closure devices initially and thereafter, at least once every calendar year, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the Permittee shall repair the defect in accordance with the requirements of paragraph 40 C.F.R. § 63.926(a)(3).
  - (c) When a defect is detected for the container, cover, or closure devices, the Permittee must either empty the regulated-material from the defective container in accordance with 40 C.F.R. § 63.926(a)(3)(i) or repair the defective container in accordance with 40 C.F.R. § 63.926(a)(3)(ii).
    - (i) If the Permittee elects to empty the regulated-material from the defective container, the Permittee must remove the regulated-material from the defective container to meet the conditions for an empty container (as defined in 40 C.F.R. § 63.921) and transfer the removed regulated-material to either a container that meets the applicable standards under this subpart or to a tank, process, or treatment unit that meets the applicable standards under the subpart referencing this subpart. Transfer of the regulated-material must be completed no later than 5 calendar days after detection of the defect. The emptied defective container must be repaired, destroyed, or used for purposes other than management of regulated-material.
    - (ii) If the Permittee elects not to empty the regulated-material from the defective container, the Permittee must repair the defective container. First efforts at repair of the defect must be made no later than 24 hours after detection and repair must be completed as soon as possible but no later than 5 calendar days after detection. If repair of a defect cannot be completed within 5 calendar days, then the regulated-material must be emptied from the container and the container must not be used to manage regulated-material until the defect is repaired.
4. The Permittee shall visually survey units MP-1, MP-2, and the Lab Pack Repack each day for the presence of visible emissions or fugitive emissions of particulate matter. [40 C.F.R. § 71.6(a)(3)(i)(B)]
- (a) If the Permittee identifies any visible emissions or fugitive emissions of particulate matter by visual observation, the Permittee shall:

- (i) Immediately, upon conclusion of the visual observation, investigate the source and reason for the presence of visible emissions or fugitive emissions; and
  - (ii) As soon as practicable, take appropriate corrective action.
- (b) If the corrective actions undertaken do not eliminate the visible or fugitive emissions, the Permittee shall, within 24 hours of the initial survey, conduct a test using EPA Reference Method 9 at 40 C.F.R. Part 60, Appendix A.
- (i) If any of the visible emissions observations indicate visible emissions greater than 20 percent opacity, the Permittee shall conduct daily visible emissions observations, for 30 minutes, of the emission point in question until 2 consecutive daily observations indicate visible emissions of 20 percent opacity or less.
  - (ii) If the Method 9 visible emissions observations, or if 2 consecutive daily observations, indicate visible emissions of 20 percent opacity or less, the Permittee shall conduct weekly visible emissions observations of the emission point for 3 additional weeks.

**(E) Recordkeeping and Reporting [40 C.F.R. §71.6(a)(3)]**

1. The Permittee shall promptly notify the permitting authority of deviations of the affected waste processing units with the permit requirements, pursuant to 40 C.F.R. § 71.6(a)(3)(iii)(B). Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.  
[40 C.F.R. § 71.6(a)(3)(iii)(B)]
2. The Permittee shall maintain the following records of the fugitive emissions:
  - (a) Details of each visual survey or visible emissions observation, including date, time, observer and results for each emission unit and any other pollutant emitting activity;
  - (b) Date, time and type of any investigation conducted;
  - (c) Findings of the investigation, including the reasons for the presence of visible emissions or fugitive emissions of particulate matter;
  - (d) Date, time and type of corrective actions taken; and
  - (e) Results of any Method 9 visible emissions observations conducted on the source of visible or fugitive emissions.

[40 C.F.R. § 71.6(a)(3)(i)(B)]

3. VOM/HAP emissions from waste processing operations located at MP-1, MP-2 and the Lab Pack Repack areas shall be calculated using the Emission Inventory Improvement Program's surface evaporation model for calculating emissions from surface evaporation of VOM from open or partially covered mixing tanks during coating mixing operations, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Volume II: Chapter 8, Equation 8.4-22 (February 2005 or later version). In addition, the Permittee shall use the most recent version of the TANKS program or the equations and algorithms specified in Chapter 7 of AP-42 for estimating any VOM or HAPs emitted from any enclosed waste containers located in MP-1, MP-2 and the Lab Pack Repack areas. [40 C.F.R. § 71.6(a)(3)(i)(B)]

## 2.3 DRUM CRUSHER

### (A) Emission Limitations and Standards [40 C.F.R. § 71.6(a)(1)]

1. The Permittee shall not cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, which exceeds the allowable emission rates specified in 35 IAC 212.321(c). [35 IAC 212.321(a)]
2. The Permittee shall not cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 219.302, 219.303, and 219.304 and the following exception: If no odor nuisance exists this limitation shall apply only to photochemically reactive material. [35 IAC 219.301]
3. Pursuant to 35 IAC 212.123(a), the Permittee shall not cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124. [35 IAC 212.123(a)]

### (B) Nonapplicable Regulations [40 C.F.R. § 71.6(f)(1)]

The drum crusher is not subject to 40 C.F.R. Part 64, Compliance Assurance Monitoring for Major Stationary Sources, because it does not use an add-on control

device to achieve compliance with an emission limitation or standard. [40 C.F.R. § 64.2(a)]

**(C) Work Practice and Operational Requirements [40 C.F.R. § 71.6(a)(1)]**

[Reserved]

**(D) Monitoring and Testing [40 C.F.R. § 71.6(a)(3)(i)(A)]**

1. The Permittee shall visually survey the drum crusher each day for the presence of visible emissions or fugitive emissions of particulate matter. [40 C.F.R. § 71.6(a)(3)(i)(B)]
2. If the observations conducted identify any visible emissions or fugitive emissions of particulate matter, the Permittee shall:
  - (a) Immediately, upon conclusion of the visual observation, investigate the source and reason for the presence of visible emissions or fugitive emissions; and
  - (b) As soon as practicable, take appropriate corrective action.

[40 C.F.R. § 71.6(a)(3)(i)(B)]

3. If the corrective actions undertaken pursuant to condition 2.3(D)(2), above, do not eliminate the visible or fugitive emissions, the Permittee shall, within 24 hours of the initial survey, conduct a test using EPA Reference Method 9 at 40 C.F.R. Part 60, Appendix A.
  - (a) If any of the visible emissions observations indicate visible emissions greater than 20 percent opacity, the Permittee shall conduct Method 9 visible emissions observations of the emission point in question for 30 minutes each day, until 2 consecutive daily observations indicate visible emissions of 20 percent opacity or less.
  - (b) If the Method 9 visible emissions observation or if 2 consecutive daily observations indicate visible emissions of 20 percent opacity or less, the Permittee shall conduct weekly visible emissions observations of the emission point for 3 additional weeks.

[40 C.F.R. § 71.6(a)(3)(i)(B)]

**(E) Recordkeeping and Reporting [40 C.F.R. § 71.6(a)(3)]**

1. The Permittee shall maintain records of the total number of drums crushed (drums/hour and drums/year) for the drum crusher. [40 C.F.R. § 71.6(a)(i)(3)(B)]
2. The Permittee shall calculate and keep records of VOM emissions from the drum crusher based on the emission factor equal to 0.0221 lb VOM per drum crushed. This emission factor is based on a characterization of the drum residue as containing the most prevalent organics at the concentrations present in the waste received during 2007- 2011. [40 C.F.R. § 71.6(a)(i)(3)(B)]
3. The Permittee shall maintain the following records of the fugitive emissions:
  - (a) Details of each visual survey or visible emissions observation, including date, time, observer and results for each emission unit and any other pollutant emitting activity;
  - (b) Date, time and type of any investigation conducted;
  - (c) Findings of the investigation, including the reasons for the presence of visible emissions or fugitive emissions of particulate matter;
  - (d) Date, time and type of corrective actions taken; and
  - (e) Results of any Method 9 visible emissions observations conducted on the source of visible or fugitive emissions.

[40 C.F.R. § 71.6(a)(3)(i)(B)]

**2.4 LIQUID WASTE STORAGE TANKS**

**(A) Emission Limitations and Standards [40 C.F.R. § 71.6(a)(1)]**

1. National Emission Standards for Hazardous Air Pollutants for Benzene Waste Operations. [40 C.F.R. Part 61, Subpart FF]
  - (a) Each affected liquid waste storage tank is subject to the emission standards and requirements established in 40 C.F.R. Part 61, Subpart FF, National Emission Standards for Hazardous Air Pollutants for Benzene Waste Operations, when benzene-containing waste is stored in the tank. [40 C.F.R. § 61.340]
  - (b) For each affected liquid waste storage tank, the Permittee shall install, operate, and maintain a fixed-roof and closed-vent system that routes all

organic vapors vented from the tank to a control device, pursuant to 40 C.F.R. §§ 61.343 and 61.349.

- (i) The fixed roof shall meet the following requirements: [40 C.F.R. § 61.343(a)(1)]
  - A. The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) shall be designed to operate with no detectable emissions as indicated by an instrument reading less than 500 parts per million by volume (ppmv) above background, as determined initially, and thereafter at least once per year, by the methods specified in 40 C.F.R. § 61.355(h).
  - B. Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the tank except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.
- (ii) The closed-vent system and control device shall be designed and operated in accordance with the following requirements of 40 C.F.R. § 61.349:
  - A. The closed-vent system shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially, and thereafter at least once per year, by the methods specified in 40 C.F.R. § 61.355(h).
  - B. The control device shall be designed and operated in accordance with the following conditions: A vapor recovery system (e.g., a carbon adsorption system or a condenser) shall recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater, or shall recover or control the benzene emissions vented to it with an efficiency of 98 weight percent or greater.
  - C. The Permittee shall operate each closed-vent system and control device used to comply with 40 C.F.R. Part 61, Subpart FF, at all times that waste is placed in the waste management unit vented to the control device, except when maintenance or repair of the waste management unit cannot be completed without a shutdown of the control device.

2. National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations. [40 C.F.R. Part 63, Subpart DD]
  - (a) Each affected liquid waste storage tank is subject to the emission standards and requirements established in 40 C.F.R. Part 63, Subpart DD, National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations, when non-benzene waste is stored in the tank. [40 C.F.R. § 63.680]
  - (b) Although the affected waste liquid storage tanks are subject to 40 C.F.R. Part 63, Subpart DD, the tanks (defined by 40 C.F.R. Part 63, Subpart DD, as off-site material management units) are exempted from the control requirements of 40 C.F.R. § 63.683(b)(1) if such units are subject to another subpart or 40 C.F.R. Part 63 or 61 and the HAP emissions (identified in Table 1 of 40 C.F.R. Part 63, Subpart DD) are controlled. [40 C.F.R. § 63.683(b)(2)(i)]
3. Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. [40 C.F.R. Part 60, Subpart Kb]
  - (a) The affected liquid waste storage tanks #300, #302, #304, #306, #308 and #310, each of which has a capacity greater than 75 cubic meters (19,813 gallons), are subject to the emission standards and requirements established in 40 C.F.R. Part 60, Subpart Kb. [40 C.F.R. § 60.110b(a)]
  - (b) The Permittee shall equip each applicable storage tank with a closed vent system and control device meeting the following specifications: [40 C.F.R. § 60.112b(a)(3)]
    - (i) The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in 40 C.F.R. § 60.485(b).
    - (ii) The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater.
4. Organic material emissions limitation from Construction Permit 88030101:  
  
Emissions of organic material from Tank Farm #3 shall not exceed 2.5 tons per year. [Construction Permit 88030101]

5. Each affected liquid waste storage tank is subject to 35 IAC 219.129(f) and 35 IAC 219.122(b):
  - (a) The Permittee shall maintain readily accessible records of the dimension and analysis of the capacity of each affected liquid waste storage tank. [35 IAC 219.129(f)]
  - (b) Each affected liquid waste storage tank should be equipped with a permanent submerged loading pipe. [35 IAC 219.122(b)]

**(B) Nonapplicable Regulations [40 C.F.R. § 71.6(f)(1)]**

1. The affected liquid waste storage tanks are not subject to the control requirements of 35 IAC 219.120, 219.121 and 219.123 because these storage tanks have less than 151 m<sup>3</sup> (40,000 gal) capacity. [35 IAC 219.119, 219.121, 219.123(a)(2)]
2. The affected liquid waste storage tanks are not subject to 40 C.F.R. Part 64, Compliance Assurance Monitoring for Major Stationary Sources (CAM), because:
  - (a) The affected liquid waste storage tanks are required to comply with a NESHAP proposed after November 15, 1990. Emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act are exempt from CAM. [40 C.F.R. § 64.2(b)(1)(i)]
  - (b) Each affected liquid waste storage tank has potential pre-control device emissions of the applicable regulated air pollutants that are less than major source levels as defined in 40 C.F.R. § 64.2(a)(3). [40 C.F.R. § 64.2(a)(3)]

**(C) Work Practice and Operational Requirements [40 C.F.R. § 71.6(a)(1)]**

[Reserved]

**(D) Monitoring and Testing [40 C.F.R. § 71.6(a)(3)(i)(A)]**

1. Pursuant to 40 C.F.R. § 61.343(a)(1), the Permittee must test annually the cover and all opening components of each fixed-roof storage tank using the methods specified in 40 C.F.R. § 61.355(h) in the absence of the detectable emissions. If the cover and closed-vent system operate such that the tank is maintained at a pressure less than atmospheric pressure, the Permittee must monitor the pressure continuously to ensure that the pressure in the tank remains below atmospheric pressure.

2. Pursuant to requirements of 40 C.F.R. § 61.349, the Permittee must test annually the closed-vent using the methods specified in 40 C.F.R. § 61.355(h).
3. The Permittee shall comply with the following monitoring requirements as established in 40 C.F.R. § 61.354(d):

For a carbon adsorption system that does not regenerate the carbon bed directly on site in the control device (e.g., a carbon canister), the Permittee must monitor on a regular schedule either the concentration level of the organic compounds or the concentration level of benzene in the exhaust vent stream from the carbon adsorption system, and must replace the existing carbon with fresh carbon immediately when carbon breakthrough is indicated. The Permittee must monitor the device on a daily basis or at intervals no greater than 20 percent of the design carbon replacement interval, whichever is greater. As an alternative to conducting this monitoring, the Permittee may replace the carbon in the carbon adsorption system with fresh carbon at a regular predetermined time interval that is less than the carbon replacement interval that is determined by the maximum design flow rate and either the organic concentration or the benzene concentration in the gas stream vented to the carbon adsorption system.

4. If a breakthrough does not occur within 365 days of operation on a high BTU tank, the Permittee must replace the carbon. If a breakthrough does not occur within 3 years of operation on a low BTU tank, the Permittee must replace the carbon. [40 C.F.R. § 71.6(a)(3)(i)(B)]
5. The Permittee shall comply with the following inspection requirements as established in 40 C.F.R. § 61.349(f) and (g):
  - (a) The Permittee must visually inspect each closed-vent system and control device quarterly. The visual inspection shall include inspection of ductwork and piping and connections to covers and control devices for evidence of visible defects, such as holes in ductwork or piping and loose connections.
  - (b) Except as provided in 40 C.F.R. § 61.350, if the Permittee observes visible defects during an inspection, or if the Permittee identifies other problems or measures detectable emissions, the Permittee must make a first effort to repair the closed-vent system and control device as soon as practicable, but no later than 5 calendar days after detection. The Permittee must complete the repair no later than 15 calendar days after the emissions are detected or the visible defect is observed.
6. The Permittee shall also inspect the presence and condition of the submerged loading pipes from the top during the quarterly inspections and must conduct a

physical inspection of the submerged loading pipes every 5 years. [40 C.F.R. § 71.6(a)(3)(i)(B)]

**(E) Recordkeeping and Reporting [40 C.F.R. § 71.6(a)(3)]**

1. Requirements of 40 C.F.R. § 61.356 (benzene waste operations):

- (a) The Permittee shall maintain engineering design documentation for all control equipment used in accordance with 40 C.F.R. §§ 61.343 through 61.347 that is installed on the waste management unit. The Permittee shall retain the documentation for the life of the control equipment. The Permittee shall maintain the control device records required by 40 C.F.R. § 61.356(f). [40 C.F.R. § 61.356(d)]
- (b) The Permittee shall maintain the following records on a closed-vent system and control device used in accordance with 40 C.F.R. § 61.349. The Permittee shall retain the documentation for the life of the control device: [40 C.F.R. § 61.356(f)]
  - (i) A statement signed and dated by the Permittee certifying that the closed-vent system and control device is designed to operate at the documented performance level when the waste management unit vented to the control device is or would be operating at the highest load or capacity expected to occur.
  - (ii) Specifications, drawings, schematics, and piping and instrumentation diagrams prepared by the Permittee, or the control device manufacturer or vendor that describe the control device design based on acceptable engineering texts. The design analysis shall address the following vent stream characteristics and control device operating parameters:

For a carbon adsorption system that does not regenerate the carbon bed directly on-site in the control device, such as a carbon canister, the design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level or the design exhaust vent stream benzene concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

- (c) For each control device, the Permittee shall maintain documentation that includes the following information regarding the control device operation [40 C.F.R. § 61.356(j)]:
- (i) Dates of startup and shutdown of the closed-vent system and control device.
  - (ii) A description of the operating parameter (or parameters) to be monitored to ensure that the control device will be operated in conformance with these standards and the control device's design specifications and an explanation of the criteria used for selection of that parameter (or parameters). The Permittee shall keep this documentation for the life of the control device.
  - (iii) Periods when the closed-vent system and control device are not operated as designed including all periods and the duration when:
    - A. Any valve car-seal or closure mechanism required under 40 C.F.R. § 61.349(a)(1)(ii) is broken or the by-pass line valve position has changed.
    - B. The flow monitoring devices required under 40 C.F.R. § 61.349(a)(1)(ii) indicate that vapors are not routed to the control device as required.
  - (iv) If the Permittee uses a carbon adsorber that is not regenerated directly on site in the control device, then the Permittee shall maintain records of dates and times when the control device is monitored, when breakthrough is measured, and shall record the date and time that the existing carbon in the control device is replaced with fresh carbon.

2. Requirements of 40 C.F.R. § 60.115b(c):

The Permittee must keep the following records on control equipment installed in accordance with 40 C.F.R. § 60.112b (a)(3) or (b)(1) (closed vent system and control device other than a flare) for the life of the control equipment:

A copy of the operating plan and a record of the measured values of the parameters monitored in accordance with 40 C.F.R. § 60.113b(c)(2). The Permittee must operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with 40 C.F.R. § 60.113b(c)(1), unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies.

3. Other requirements: [40 C.F.R. § 71.6(a)(3)]

The Permittee must maintain the following records:

- (a) Total organic liquid wastes processed in gallons per month and gallons per year;
- (b) Average VOM/HAP content of received wastes (percent by weight);
- (c) Average vapor pressure of received liquid wastes;
- (d) Records of the size (capacity) of the affected liquid wastes storage tanks;
- (e) Monthly and annual VOM emissions as calculated using the most recent version of the TANKS program or the equations and algorithms specified in Chapter 7 of AP-42; and
- (f) Records of all inspections performed.

## 2.5 BULK SOLID WASTE STORAGE FACILITY

### (A) Emission Limitations and Standards [40 C.F.R. § 71.6(a)(1)]

- 1. National Emission Standards for Hazardous Air Pollutants for Benzene Waste Operations. [40 C.F.R. Part 61, Subpart FF]
  - (a) The affected bulk solid waste storage facility is subject to 40 C.F.R. Part 61, Subpart FF, National Emission Standards for Hazardous Air Pollutants for Benzene Waste Operations, when the storage pits are in “benzene” service. [40 C.F.R. § 61.340]
  - (b) For the affected bulk solid waste storage facility, the Permittee shall install, operate, and maintain a fixed-roof and closed-vent system that routes all organic vapors vented from the tank to a control device. [40 C.F.R. §§ 61.343 and 61.349].
    - (i) The Permittee must install, operate, and maintain an enclosure and closed-vent system that routes all organic vapors vented from the tank, located inside the enclosure, to a control device. [40 C.F.R. § 61.343(a)(2)]

- (ii) The Permittee must meet the following requirements for its control device that controls air pollutant emissions by using an enclosure vented through a closed-vent system to the control device: [ 40 C.F.R. § 61.343(e)(1) through (4)]
  - A. The tank must be located inside a total enclosure. The enclosure must be designed and operated in accordance with the criteria for a permanent total enclosure as specified in “Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure” in 40 C.F.R. § 52.741, Appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The Permittee must perform the verification procedure for the enclosure as specified in section 5.0 of Procedure T initially when the enclosure is first installed and, thereafter, annually. A facility that has conducted an initial compliance demonstration and that performs annual compliance demonstrations in accordance with the requirements for Tank Level 2 control requirements at 40 C.F.R. §§ 264.1084(i) or 265(i) is not required to make repeat demonstrations of initial and continuous compliance for the purposes of this subpart.
  - B. The enclosure must be vented through a closed-vent system to a control device that is designed and operated in accordance with the standards for control devices specified in 40 C.F.R. § 61.349.
  - C. The Permittee may install and operate safety devices, as defined in 40 C.F.R. Part 61, Subpart FF, as necessary, on any enclosure, closed-vent system, or control device used to comply with the requirements of 40 C.F.R. § 61.343(e)(1) and (e)(2).
- (iii) The Permittee must design and operate the closed-vent system and control device in accordance with the following requirements of 40 C.F.R. § 61.349:
  - A. The Permittee must design the closed-vent system to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background.

- B. The Permittee must design and operate the control device so that the vapor recovery system (e.g., a carbon adsorption system or a condenser) shall recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater, or shall recover or control the benzene emissions vented to it with an efficiency of 98 weight percent or greater.
  - C. The Permittee shall operate each closed-vent system and control device used to comply with 40 C.F.R. Part 61, Subpart FF, at all times when waste is placed in the waste management unit, except when maintenance or repair of the waste management unit cannot be completed without a shutdown of the control device.
2. National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations. [40 C.F.R. Part 63, Subpart DD]
- (a) The bulk solid waste storage facility is subject to 40 C.F.R. Part 63, Subpart DD, National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations, wherever any waste is stored in the storage pits. [40 C.F.R. § 63.680]
  - (b) Although the bulk solid waste storage facility (defined by Subpart DD as an off-site material management unit) is subject to 40 C.F.R. Part 63, Subpart DD, it is exempt from the control requirements of 40 C.F.R. § 63.683(b)(1) if the unit is subject to another subpart under 40 C.F.R. Part 61 or 63, and the Permittee is controlling the HAPs listed in Table 1 of 40 C.F.R. Part 63, Subpart DD, that are emitted from the unit in compliance with the provisions specified in the other applicable subpart of 40 C.F.R. Part 61 or 63. [40 C.F.R. § 63.683(b)(2)(i)]
3. Particulate matter emission limitation: [35 IAC 212.321(a)]

The Permittee shall not cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, that exceeds the allowable emission rates specified in 35 IAC 212.321(c).

4. Visible emissions limitation: [35 IAC 212.123(a)]

The Permittee shall not cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any

emission unit other than those emission units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124.

5. Organic material emissions limitations:

- (a) The Permittee shall not cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source, except as provided in 35 IAC 219.302, 35 IAC 219.303, 35 IAC 219.304 and the following exception: If no odor nuisance exists the limitation of this subpart shall apply only to photochemically reactive material. [35 IAC 219.301]
- (b) Emissions of organic material in excess of those permitted by 35 IAC 219.301 are allowable if such emissions are controlled by a vapor recovery system which adsorbs at least 85 percent of the total uncontrolled organic material that would otherwise be emitted to the atmosphere. [35 IAC 219.302(b)]

**(B) Nonapplicable Regulations [40 C.F.R. § 71.6(f)(1)]**

The affected bulk solid waste storage facility is not subject to 40 C.F.R. Part 64, Compliance Assurance Monitoring for Major Stationary Sources, at this time because the potential pre-control device emissions are less than major source levels as defined in 40 C.F.R. § 64.2(a)(3).

**(C) Work Practice and Operational Requirements [40 C.F.R. § 71.6(a)(1)]**

1. Except during times when bulk solid wastes are unloaded into the pits, all doors of the building shall be closed and all operations shall be enclosed inside the building. [40 C.F.R. § 71.6(a)(1)]
2. The enclosed building where bulk solid waste is accumulated shall be operated under permanent negative pressure. [40 C.F.R. § 71.6(a)(1)]

**(D) Monitoring and Testing [40 C.F.R. § 71.6(a)(3)(i)(A)]**

1. The Permittee must test annually the cover and all opening components of each fixed-roof storage tank using the methods specified in 40 C.F.R. § 61.355(h) in the absence of the detectable emissions. [40 C.F.R. § 61.343(a)(1)]
2. The Permittee must test annually the closed-vent using the methods specified in 40 C.F.R. § 61.355(h). [40 C.F.R. § 61.349]
3. The Permittee shall visually survey the bulk solid waste storage building each day for the presence of visible emissions or fugitive emissions of particulate

matter. [40 C.F.R. § 71.6(a)(3)(i)(B)]

- (a) If the Permittee identifies through observations any visible emissions or fugitive emissions of particulate matter, the Permittee shall:
    - (i) Immediately, upon conclusion of the visual observation, investigate the source and reason for the presence of visible emissions or fugitive emissions; and
    - (ii) As soon as practicable, take appropriate corrective action.
  - (b) If the corrective actions undertaken do not eliminate the visible or fugitive emissions, the Permittee, within 24 hours of the initial survey, shall conduct a test using EPA Reference Method 9 (*see* 40 C.F.R. Part 60, Appendix A).
    - (i) If any of the visible emissions observations indicate visible emissions greater than 20 percent opacity, the Permittee shall conduct daily visible emissions observations, for 30 minutes, of the emission point in question until 2 consecutive daily observations indicate visible emissions of 20 percent opacity or less.
    - (ii) If the Method 9 visible emissions observation, or if 2 consecutive daily observations, indicate visible emissions of 20 percent opacity or less, the Permittee shall conduct weekly visible emissions observations of the emission point for 3 additional weeks.
4. The Permittee must design and operate the enclosure for the affected bulk solid waste storage facility in accordance with the criteria for a permanent total enclosure as specified in “Procedure T - Criteria for and Verification of a Permanent or Temporary Total Enclosure” in 40 C.F.R. § 52.741, Appendix B. The Permittee must perform annually the verification procedure for the enclosure as specified in section 5.0 of Procedure T. [40 C.F.R. § 61.343(e)]
  5. The Permittee shall perform the following monitoring procedures, as required by 40 C.F.R. § 61.354(c):
    - (a) The Permittee, on the basis of being subject to the requirements in 40 C.F.R. § 61.349, shall install, calibrate, maintain, and operate according to the manufacturer’s specifications, a device to continuously monitor the control device operation as specified below.
    - (b) For a carbon adsorption system that does not regenerate the carbon bed directly on site in the control device (e.g., a carbon canister), the concentration level of the organic compounds or the concentration level of

benzene in the exhaust vent stream from the carbon adsorption system shall be monitored on a regular schedule, and the existing carbon shall be replaced with fresh carbon immediately when carbon breakthrough is indicated. The device shall be monitored on a daily basis or at intervals no greater than 20 percent of the design carbon replacement interval, whichever is greater.

6. The Permittee shall maintain an average facial velocity of at least 200 ft/min flowing into the enclosure at all natural draft openings in the building. The Permittee shall annually demonstrate the facial velocity according to Procedure T – Criteria for and Verification of a Permanent or Temporary Total Enclosure, 40 C.F.R. § 52.741, Appendix B. [40 C.F.R. § 71.6(a)(3)(i)(B)]
7. Closed-vent system and control device monitoring procedures. [40 C.F.R. § 61.349]

The Permittee shall perform the following monitoring procedures:

- (a) The Permittee shall visually inspect each closed-vent system and control device upon the effective date of this permit and quarterly thereafter. The visual inspection shall include inspection of ductwork and piping and connections to covers and control devices for evidence of visible defects, such as holes in ductwork or piping and loose connections. [40 C.F.R. § 61.349(f)]
- (b) Except as provided in 40 C.F.R. § 61.350, if the Permittee observes visible defects during an inspection, or if the Permittee identifies other problems or measures detectable emissions, the Permittee must make a first effort to repair the closed-vent system and control device as soon as practicable, but no later than 5 calendar days after detection. The Permittee shall complete repairs no later than 15 calendar days after the emissions are detected or the visible defect is observed. [40 C.F.R. § 61.349(g)].
- (c) The Permittee shall monitor any control device used to comply with 40 C.F.R. § 61.349(h)] in accordance with 40 C.F.R. § 61.354(c). [40 C.F.R. § 61.349(h)]

**(E) Recordkeeping and Reporting [40 C.F.R. § 71.6(a)(3)]**

1. Recordkeeping required by 40 C.F.R. § 61.356:
  - (a) The Permittee shall maintain for the life of the control device the following records for the closed-vent system and control device it uses in accordance with 40 C.F.R. § 61.349(f):

- (i) A statement signed and dated by the Permittee certifying that the closed-vent system and control device is designed to operate at the documented performance level when the waste management unit vented to the control device is or would be operating at the highest load or capacity expected to occur. [40 C.F.R. § 61.356(f)]
- (ii) If the Permittee uses engineering calculations to determine control device performance in accordance with 40 C.F.R. § 61.349(c), then a design analysis for the control device that includes, for example: specifications, drawings, schematics, and piping and instrumentation diagrams prepared by the Permittee, or the control device manufacturer or vendor that describe the control device design based on acceptable engineering texts. The design analysis shall address the following vent stream characteristics and control device operating parameters:

For a carbon adsorption system that does not regenerate the carbon bed directly on-site in the control device, such as a carbon canister, the design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level or the design exhaust vent stream benzene concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule. [40 C.F.R. § 61.356(f)]

- (iii) The Permittee shall maintain a record for each visual inspection required by 40 C.F.R. §§ 61.343 through 61.347 that identifies a problem (such as a broken seal, gap or other problem) which could result in benzene emissions. The record shall include the date of the inspection, waste management unit and control equipment location where the problem is identified, a description of the problem, a description of the corrective action taken, and the date the corrective action was completed. [40 C.F.R. § 61.356(g)]
- (iv) The Permittee shall maintain a record for each test of no detectable emissions required by 40 C.F.R. §§ 61.343 through 61.347 and 61.349. The record shall include the following information: date the test is performed, background level measured during test, and maximum concentration indicated by the instrument reading measured for each potential leak interface. If detectable emissions are measured at a leak interface, then the record shall also include the waste management unit, control equipment, and leak interface

location where detectable emissions were measured, a description of the problem, a description of the corrective action taken, and the date the corrective action was completed. [40 C.F.R. § 61.356(h)]

- (v) For each control device, the Permittee shall maintain documentation that includes the following information regarding the control device operation: [40 C.F.R. § 61.356(j)]
  - A. Dates of startup and shutdown of the closed-vent system and control device;
  - B. A description of the operating parameter (or parameters) to be monitored to ensure that the control device will be operated in conformance with these standards and the control device's design specifications and an explanation of the criteria used for selection of that parameter (or parameters). The Permittee shall keep this documentation for the life of the control device; and
  - C. Periods when the closed-vent system and control device are not operated as designed, including all periods and the duration when:
    - I. Any valve car-seal or closure mechanism required under 40 C.F.R. § 61.349(a)(1)(ii) is broken or the by-pass line valve position has changed.
    - II. The flow monitoring devices required under 40 C.F.R. § 61.349(a)(1)(ii) indicate that vapors are not routed to the control device as required.
- (vi) If the Permittee uses a carbon adsorber that is not regenerated directly on site in the control device, then the Permittee shall maintain records of dates and times when the control device is monitored and when breakthrough is measured, and shall record the date and time that the existing carbon in the control device is replaced with fresh carbon. [40 C.F.R. § 61.356(j)]
- (b) The Permittee must keep the following records required by 40 C.F.R. § 61.356 (n)(1) and (2) when using a total enclosure to comply with control requirements for tanks in 40 C.F.R. § 61.343. The Permittee may use records as required in 40 C.F.R. §§ 264.1089(b)(2)(iv) or 265.1090(b)(2)(iv) for a tank to meet the recordkeeping requirement in 40 C.F.R. § 61.356(n)(1). The Permittee must make the records of each

verification of a total enclosure available for inspection by EPA upon request:

- (i) Records of the most recent set of calculations and measurements performed to verify that the enclosure meets the criteria of a permanent total enclosure as specified in “Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure” in 40 C.F.R. § 52.741, Appendix B; and
- (ii) Records required for a closed-vent system and control device according to the requirements in 40 C.F.R. § 61.356(d), (f), and (j).

2. Other recordkeeping requirements: [40 C.F.R. § 71.6(a)(3)(i)(B)]

The Permittee shall keep the following records:

- (a) Amount of accepted solid wastes, in tons per month and tons per year;
- (b) A log of maintenance and repair of air pollution control devices with the dates of service/repair made, and inspection conducted;
- (c) Records of the pressure being maintained inside the building; and
- (d) Monthly and annual VOM/HAP emissions. VOM/HAP emissions from waste processing operations located at the bulk solid waste storage facility shall be calculated using the Emission Inventory Improvement Program’s surface evaporation model for calculating emissions from surface evaporation of VOM from open or partially covered mixing tanks during coating mixing operations, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Volume II: Chapter 8, Equation 8.4-22 (February 2005 or later version).

3. The Permittee shall maintain the following records of the fugitive emissions: [40 C.F.R. § 71.6(a)(3)(i)(B)]

- (a) Details of each visual survey or visible emissions observation, including date, time, observer and results for each emission unit and any other pollutant emitting activity;
- (b) Date, time and type of any investigation conducted;
- (c) Findings of the investigation, including the reasons for the presence of visible emissions or fugitive emissions of particulate matter;
- (d) Date, time and type of corrective actions taken; and

- (e) Results of any Method 9 visible emissions observations conducted on the source of visible or fugitive emissions.

## **2.6 GASOLINE STORAGE TANK**

### **(A) Emission Limitations and Standards [40 C.F.R. § 71.6(a)(1)]**

1. The Permittee shall not cause or allow the loading of any organic material in any stationary tank having a storage capacity of greater than 946 liters (250 gallons), unless such tank is equipped with a permanent submerged loading pipe or an equivalent device approved by the IEPA according to the provisions of 35 IAC 201, and further processed consistent with 35 IAC 219.108, or unless such tank is a pressure tank as described in 35 IAC 219.121(a) or is fitted with a recovery system as described in 35 IAC 219.121(b)(2). [35 IAC 219.122(b)]
2. The Permittee shall not cause or allow the transfer of gasoline from any delivery vessel into the stationary storage tank at a gasoline dispensing operation unless the tank is equipped with a submerged loading pipe. [35 IAC 219.583(a)(1)]

### **(B) Nonapplicable Regulations [40 C.F.R. § 71.6(f)(1)]**

1. The affected gasoline storage tank is not subject to the requirements of 35 IAC 219.583(a)(2),(3),(4) pursuant to 35 IAC 219.583(b)(3), because the tank has a capacity of less than 575 gallons. [35 IAC 219.583(b)(3)]
2. The gasoline storage tank is not subject to the requirements of 40 C.F.R. Part 60, Subpart Kb, because the design capacity of the storage tank is less than 40 cubic meters (10,576 gallons). [40 C.F.R. § 60.110b(a)]
3. The gasoline storage tank is not subject to the requirements of 35 IAC 219.121 because the tank has a capacity of less than 40,000 gallons. [35 IAC 219.121]
4. The gasoline storage tank is not subject to the requirements of 35 IAC 219.120 because the tank stores petroleum liquids. [35 IAC 219.119(e)]
5. The gasoline storage tank is not subject to 40 C.F.R. Part 64, Compliance Assurance Monitoring, because the tank does not use an add-on control device to achieve compliance with an emission limitation or standard. [40 C.F.R. § 64.2]

### **(C) Work Practice and Operational Requirements [40 C.F.R. § 71.6(a)(1)]**

[Reserved]

**(D) Monitoring and Testing [40 C.F.R. § 71.6(a)(3)(i)(A)]**

On an annual basis, the Permittee shall conduct an inspection of the gasoline storage tank to review its physical condition and ability to comply with conditions 2.6(A)(1) and (2). [40 C.F.R. § 71.6(a)(i)(3)(B)]

**(E) Recordkeeping and Reporting [40 C.F.R. § 71.6(a)(3)]**

1. The Permittee shall keep current a file for the gasoline storage tank, which contains design information on the capacity of the tank and documents the presence of a permanent submerged loading pipe. [40 C.F.R. § 71.6(a)(3)(i)(B)]
2. The Permittee shall maintain an inspection, maintenance and repair log or other records for the storage tank that, at a minimum, includes information related to any repair or replacement of the submerged loading pipe. [40 C.F.R. § 71.6(a)(3)(i)(B)]
3. The Permittee must maintain records of the amount of gasoline dispensed from the gasoline storage tank (gallons/month and gallons/year). [40 C.F.R. § 71.6(a)(3)(i)(B)]

**2.7 BOILER**

**(A) Emission Limitations and Standards [40 C.F.R. § 71.6(a)(1)]**

1. The Permittee shall not cause or allow the emission of carbon monoxide into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air. [35 IAC 216.121]
2. Emissions and operation of this boiler shall not exceed the following limits:

Fuel	Operating	NO <sub>x</sub>		CO	
	Hours	(Lb/Hr)	(Ton/Yr)	(Lb/Hr)	(Ton/Yr)
Natural Gas	8,760	1.46	6.41	2.1	9.2

These limits are based upon the maximum firing rate for the boiler, and standard emission factors. [Construction Permit 95080025]

3. The Permittee shall not cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of

35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124. [35 IAC 212.123(a)]

4. Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. [40 C.F.R. Part 60, Subpart Dc]

The 10.46 mmBtu/hr natural gas-fired boiler (Boiler #1) is subject to 40 C.F.R. Part 60, Subpart Dc. However, there are no numerical emission limits that apply to Boiler #1 because Boiler #1 only burns natural gas as defined at 40 C.F.R. § 60.41c. [40 C.F.R. § 60.40c(a)]

5. National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. [40 C.F.R. Part 63, Subpart DDDDD]

- (a) Boiler #1 is subject to 40 C.F.R. Part 63, Subpart DDDDD; however, no numerical emission limits apply to Boiler #1. This is because Boiler #1 is a unit designed to burn gas 1 (natural gas) as defined at 40 C.F.R. § 63.7575. [40 C.F.R. § 63.7485]

- (b) The Permittee must comply with the applicable requirements of 40 C.F.R. Part 63, Subpart DDDDD, for Boiler #1 no later than January 31, 2016, unless the Administrator has granted an extension of compliance consistent with 40 C.F.R. § 63.6(i). [40 C.F.R. § 63.7495]

**(B) Nonapplicable Regulations [40 C.F.R. § 71.6(f)(1)]**

1. Boiler #1 is not subject to 35 IAC 217.121, emissions of nitrogen oxides from new fuel combustion emission sources, because the actual heat input of the affected boiler is less than 73.2 MW (250 mmBtu/hr). [35 IAC 217.121]
2. Boiler #1 is not subject to 35 IAC 219.301 because fuel combustion emission units are not subject to 35 IAC 219.301. [35 IAC 219.303]
3. Boiler #1 is not subject to 35 IAC 214.122 because solid or liquid fuels are not exclusively burned in the affected boiler. [35 IAC 214.122]
4. Boiler #1 is not subject to the National Emission Standards for Hazardous Air Pollutants for Industrial-Commercial-Institutional Boilers Area Sources, 40 C.F.R. Part 63, Subpart JJJJJ, because Boiler #1 is a gas-fired boiler as defined at 40 C.F.R. § 63.11237. [40 C.F.R. § 63.11195(e)]
5. Boiler #1 is not subject to Standards of Performance for Electric Utility Steam Generating Units, 40 C.F.R. Part 60, Subpart Da, because Boiler #1 is not capable of combusting more than 73 MW (250 mmBtu/hr) heat input of fossil

fuel (either alone or in combination with any other fuel). [40 C.F.R. § 60.40Da(a)(1)]

6. Boiler #1 is not subject to Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, 40 C.F.R. Part 60, Subpart Db, because Boiler #1 has a heat input capacity from fuels combusted in the unit of less than 29 MW (100 mmBtu/hr). [40 C.F.R. § 60.40b(a)]
7. Boiler #1 is not subject to 40 C.F.R. Part 64, Compliance Assurance Monitoring, because it does not use an add-on control device to achieve compliance with an emission limitation or standard. [40 C.F.R. § 64.2(a)]

**(C) Work Practice and Operational Requirements [40 C.F.R. § 71.6(a)(1)]**

1. Natural gas shall be the only fuel fired. [Construction Permit 95080025]
2. Total natural gas consumption shall not exceed 7.6 mmscf/month and 91.1 mmscf/year. [40 C.F.R. § 71.6(a)(3)(i)(B)]
3. The Permittee must conduct an annual tune-up of Boiler #1 as specified in condition 2.7(D)(2), below, as a work practice for all regulated emissions under 40 C.F.R. Part 63, Subpart DDDDD. [40 C.F.R. § 63.7500 and Appendix to 40 C.F.R. Part 63, Subpart DDDDD, Table 3 (Item 3)]
4. By January 31, 2016, the Permittee must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in Table 3 to 40 C.F.R. Part 63, Subpart DDDDD, satisfies the energy assessment requirement. A facility that operates under an energy management program compatible with ISO 50001 that includes the affected units also satisfies the energy assessment requirement. The energy assessment must include the following with extent of the evaluation for items (a) to (e) appropriate for the on-site technical hours listed in 40 C.F.R. § 63.7575:
  - (a) A visual inspection of the boiler system;
  - (b) An evaluation of operating characteristics of the boiler systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints;
  - (c) An inventory of major energy use systems consuming energy from the affected boiler and which are under the control of the Permittee;
  - (d) A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage;

- (e) A list of cost-effective energy conservation measures that are within the facility's control;
- (f) A list of cost-effective energy conservation measures that are within the facility's control;
- (g) A list of the energy savings potential of the energy conservation measures identified; and
- (h) A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

[40 C.F.R. § 63.7500 and Appendix to 40 C.F.R. Part 63, Subpart DDDDD, Table 3 (Item 4)]

5. At all times, the Permittee must operate and maintain Boiler #1, including any associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 C.F.R. § 63.7500(a)(3)]

**(D) Monitoring and Testing [40 C.F.R. § 71.6(a)(3)]**

1. The Permittee shall perform an annual Method 9 test to ensure compliance with the opacity limit. [40 C.F.R. § 71.6(a)(3)(i)(B)]
2. The Permittee must conduct an annual tune-up of Boiler #1 to demonstrate continuous compliance with the work practice standards of 40 C.F.R. Part 63, Subpart DDDDD, as specified below:
  - (a) Inspect the burner, and clean or replace any components of the burner as necessary. The Permittee may delay the burner inspection until the next scheduled unit shutdown; [40 C.F.R. § 63.7540(a)(10)(i)]
  - (b) Inspect the flame pattern, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available; [40 C.F.R. § 63.7540(a)(10)(ii)]
  - (c) Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly. The Permittee may delay the inspection until the next scheduled unit shutdown; [40 C.F.R. § 63.7540(a)(10)(iii)]

- (d) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOx requirement to which Boiler #1 is subject; and [40 C.F.R. § 63.7540(a)(10)(iv)]
  - (e) Measure the concentrations in the effluent stream of CO and NOx 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 portable CO and NOx analyzers. [40 C.F.R. § 63.7540(a)(10)(v); 40 C.F.R. § 71.6(a)(3)(i)(B)]
3. If Boiler #1 is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [40 C.F.R. § 63.7540(a)(13)]
4. The Permittee must conduct performance tests for CO and NOx from the affected boiler at a frequency of no less than once every 5 years to demonstrate compliance with the CO and NOx emission limits in condition 2.7(A)(2). Each performance test must be conducted between 48 and 60 months after the previous performance test. The Permittee must do the following during the performance tests:
- (a) Select the sampling ports location and the number of traverse points using Method 1 in 40 C.F.R. Part 60, Appendix A;
  - (b) Determine oxygen and carbon dioxide concentrations of the stack gas using Method 3A or 3B in 40 C.F.R. Part 60, Appendix A, or ASTM D6522-00 (IBR, *see* 40 C.F.R. § 63.14(b)), or ASME PTC 19, Part 10 (1981) (IBR, *see* 40 C.F.R. § 63.14(i));
  - (c) Measure the moisture content of the stack gas using Method 4 in 40 C.F.R. Part 60, Appendix A;
  - (d) Measure the NOx emission concentration using Method 7 or 7E in Appendix A to 40 C.F.R. Part 60, or ASTM D6522-00 (IBR, *see* 40 C.F.R. § 63.14(b)); and
  - (e) Measure the CO emission concentration using Method 10, 10A, or 10B in Appendix A to 40 C.F.R. Part 60, or ASTM D6522-00 (IBR, *see* 40 C.F.R. § 63.14(b)) when the fuel is natural gas.

[40 C.F.R. § 71.6(a)(3)(i)(B)]

**(E) Recordkeeping and Reporting [40 C.F.R. § 71.6(a)(3)]**

1. The Permittee must record and maintain onsite:
  - (a) Monthly records of natural gas usage; [40 C.F.R. § 60.48c(g)]
  - (b) Annual records of natural gas usage (million standard cubic feet per year); [Construction Permit 95080025]
  - (c) An annual report containing the following information:
    - (i) The concentrations of CO and NO<sub>x</sub> 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; and
    - (ii) A description of any corrective actions taken as a part of the tune-up.  
[40 C.F.R. § 63.7540(a)(10)(vi); 40 C.F.R. § 71.6(a)(3)(i)(B)]
  - (d) A summary of the results of all required performance tests. [40 C.F.R. § 71.6(a)(3)(i)(B)]
2. The Permittee must submit annually a compliance report which contains:
  - (a) Company name and address;
  - (b) 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;
  - (c) Date of report and beginning and ending dates of the reporting period;
  - (d) A summary of the results of the annual tune-ups, including 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. The Permittee shall make actual tune-up results available to the Administrator upon request;
  - (e) A summary of the results of performance tests conducted during the reporting period if applicable. The Permittee shall make actual test results available to the Administrator upon request;
  - (f) The hours of operation for the boiler for each calendar month within the reporting period; and

- (g) The amount of natural gas used during the reporting period (million standard cubic feet per year).

[40 C.F.R. § 63.7550(c)(1); 40 C.F.R. § 71.6(a)(3)(i)(B)]

3. The Permittee shall notify the IEPA prior to any change in the types of fuel used in the boiler. [Construction Permit 95080025]

## **2.8 EMERGENCY GENERATORS**

### **(A) Emission Limitations and Standards [40 C.F.R. § 71.6(a)(1)]**

The two diesel fuel-fired emergency generators, each with a site rating of less than 112 HP, are subject to the NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE), 40 C.F.R. Part 63, Subpart ZZZZ. However, there are no numerical emission limitations that apply. [40 C.F.R. §§ 63.6585, 63.6602]

### **(B) Nonapplicable Regulations [40 C.F.R. § 71.6(f)(1)]**

1. The emergency generators are not subject to the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart IIII, because construction of the emergency generator engines did not commence, as defined at 40 C.F.R. § 60.4200(a), after July 11, 2005 and the engines have not been modified or reconstructed after July 11, 2005. [40 C.F.R. § 60.4200]
2. The emergency generators are not subject to the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart JJJJ, because the emergency generator engines are not spark ignition engines as defined at 40 C.F.R. § 60.4248. [40 C.F.R. § 60.4230]
3. The emergency generators are not subject to 40 C.F.R. Part 64, Compliance Assurance Monitoring, because the emergency generators do not use an add-on control device to achieve compliance with an emission limitation or standard. [40 C.F.R. § 64.2(a)]

### **(C) Work Practice and Operational Requirements [40 C.F.R. § 71.6(a)(1)]**

1. In order for each engine to be considered an emergency stationary RICE under 40 C.F.R. Part 63, Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in condition 2.8(C)(2), below, is prohibited. If the Permittee does not operate the engine according to the requirements in condition 2.8(C)(2), below, the engine will not be considered

an emergency engine and must meet all requirements for non-emergency engines in 40 C.F.R. Part 63, Subpart ZZZZ. [40 C.F.R. § 63.6640(f)]

2. The Permittee must operate each emergency generator according to the following requirements: [40 C.F.R. § 63.6640(f)]
  - (a) There is no time limit on the use of the emergency generators in emergency situations.
  - (b) The Permittee may operate each emergency generator for any combination of the purposes specified in (i) through (iii), below, for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by condition 2.8(C)(2)(c), below, counts as part of the 100 hours per calendar year.
    - (i) The Permittee may operate each emergency generator for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that federal, state, or local standards require maintenance and testing of the emergency generator beyond 100 hours per calendar year.
  - (c) The Permittee may operate each emergency generator for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in condition 2.8(C)(2)(b), above. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 C.F.R. § 63.6640(f)(3)]
3. The Permittee shall perform the following work practices for each emergency generator except during periods of startup. The Permittee can petition the Administrator pursuant to 40 C.F.R. § 63.6(g) for alternative work practices.
  - (a) Change oil and filter every 500 hours of operation or annually, whichever comes first. The Permittee has the option to utilize an oil analysis program as described in condition 2.8(C)(6), below.

- (b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.
- (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

[Table 2c, Item 1, to 40 C.F.R. Part 63, Subpart ZZZZ]

4. During periods of startup, the Permittee minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. The Permittee can petition the Administrator pursuant to 40 C.F.R. § 63.6(g) for alternative work practices. [Table 2c, Item 1, to 40 C.F.R. Part 63, Subpart ZZZZ]
5. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in condition 2.8(C)(3), above, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. [Table 2c to 40 C.F.R. Part 63, Subpart ZZZZ, footnote 1]
6. The Permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in condition 2.8(C)(3), above. The oil analysis must be performed at the same frequency specified for changing the oil in condition 2.8(C)(3), above. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the Permittee is not required to change the oil. If any of the limits are exceeded, the Permittee must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the Permittee must change the oil within 2 business days or before commencing operation, whichever is later. The Permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 C.F.R. § 63.6625(i)]

7. The Permittee shall operate and maintain each emergency generator and after-treatment control device (if any) according to the manufacturer's emission-related operation and maintenance instructions; or develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of each engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 C.F.R. § 63.6625(e); Table 6, Item 9, to 40 C.F.R. Part 63, Subpart ZZZZ]
8. The Permittee must be in compliance with the applicable emission limitations, operating limitations, and other requirements in 40 C.F.R. Part 63, Subpart ZZZZ, at all times. [40 C.F.R. § 63.6605(a)]
9. At all times the Permittee must operate and maintain each emergency generator, including associated air pollution control equipment and monitoring equipment (if any), in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 C.F.R. § 63.6605(b)]
10. Beginning January 1, 2015, if the emergency generator operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 C.F.R. § 63.6640(f)(4)(ii), the Permittee must use diesel fuel that meets the following requirements of 40 C.F.R. § 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted:
  - (a) Sulfur content of 15 ppm maximum for nonroad diesel fuel.
  - (b) Cetane index or aromatic content, as follows:
    - (i) A minimum cetane index of 40; or
    - (ii) A maximum aromatic content of 35 volume percent.

[40 C.F.R. § 63.6604(b)]
11. The Permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply. [40 C.F.R. § 63.6625(h)]

**(D) Monitoring and Testing [40 C.F.R. § 71.6(a)(3)]**

1. The Permittee must install a non-resettable hour meter on each emergency generator if one is not already installed. [40 C.F.R. § 63.6625(f)]
2. Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, the Permittee must operate any required monitors continuously at all times that the emergency generator is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [40 C.F.R. § 63.6635(b)]
3. The Permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. The Permittee must, however, use all the valid data collected during all other periods. [40 C.F.R. § 63.6635(c)]

**(E) Recordkeeping and Reporting [40 C.F.R. § 71.6(a)(3)]**

1. The Permittee must report each instance in which the Permittee did not meet each operating limitation in condition 2.8(C), above, and the applicable requirements in Table 8 of 40 C.F.R. Part 63, Subpart ZZZZ. These instances are deviations from the emission and operating limitations in 40 C.F.R. Part 63, Subpart ZZZZ. The Permittee must report such deviations according to condition 3.2(B). [40 C.F.R. §§ 63.6640(b) and (e), 63.6650(b)(5)]
2. The Permittee must keep onsite, and make available to the Administrator upon request, the following information:
  - (a) A copy of each notification and report that the Permittee submitted to EPA to comply with 40 C.F.R. Part 63, Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that the Permittee submitted, according to the requirement in 40 C.F.R. § 63.10(b)(2)(xiv). [40 C.F.R. § 63.6655(a)(1)]
  - (b) Operation and maintenance plan, which includes either the manufacturer's emission-related operation and maintenance instructions or the Permittee's own maintenance plan that provides to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 C.F.R. § 63.6655(d)]

- (c) Records of any maintenance conducted on the emergency generator in order to demonstrate that the Permittee operated and maintained the engine and after-treatment control device (if any) according to the Permittee's maintenance plan. [40 C.F.R. § 63.6655(e)]
  - (d) Records of all required maintenance performed on the air pollution control and monitoring equipment. [40 C.F.R. § 63.6655(a)(4)]
  - (e) Hours of operation of the engine as recorded through the non-resettable hour meter. The Permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in 40 C.F.R. § 63.6640(f)(4)(ii), the Permittee must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. [40 C.F.R. § 63.6655(f)]
  - (f) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. [40 C.F.R. § 63.6655(a)(2)]
  - (g) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 C.F.R. § 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 C.F.R. § 63.6655(a)(5)]
3. The Permittee must report according to condition 3.2(B) any failure to perform the work practices on the schedule required in condition 2.8(C)(3) as a result of the circumstances specified in condition 2.8(C)(5) and the federal, state or local law under which the risk was deemed unacceptable. [Table 2c to 40 C.F.R. Part 63, Subpart ZZZZ, footnote 1]
4. The Permittee must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 C.F.R. § 63.6660]

## 2.9 FUGITIVE EMISSIONS

### (A) Emission Limitations and Standards [40 C.F.R. § 71.6(a)(1)]

1. Any leaking equipment is subject to the following requirements of 35 IAC Part 219, Subpart C:

- (a) Pumps and Compressors: [35 IAC 219.142]

The Permittee shall not cause or allow the discharge of more than 32.8 ml (2 cu in) of VOL with vapor pressure of 17.24 kilo pascals (2.5 pounds per square inch absolute) or greater at 294.3 °K (70 °F) into the atmosphere from any pump or compressor in any 15 minute period at standard conditions.

- (b) Vapor Blowdown: [35 IAC 219.143]

The Permittee shall not cause or allow the emission of organic material into the atmosphere from any vapor blowdown system or any safety relief valve, except such safety relief valves not capable of causing an excessive release, unless such emission is controlled:

- (i) To 10 ppm equivalent methane (molecular weight 16.0) or less; or
- (ii) By combustion in a smokeless flare; or
- (iii) By other air pollution control equipment approved by the IEPA according to provisions of 35 IAC 201 and further processed consistent with 35 IAC 219.108.

2. National Emissions Standards for Equipment Leaks [40 C.F.R. Part 61, Subparts J and V]

Any affected equipment that is a source of fugitive emissions of benzene or other volatile hazardous air pollutants (leaking equipment) is subject to 40 C.F.R. Part 61, Subparts V and J. The Permittee shall comply with the standards and requirements of 40 C.F.R. Part 61, Subpart V, for pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, and control devices or systems required by 40 C.F.R. Part 61, Subpart V. [40 C.F.R. § 61.112(a)]

### (B) Nonapplicable Regulations [40 C.F.R. § 71.6(f)(1)]

1. The leaking equipment is not subject to the New Source Performance Standards (NSPS) for the Synthetic Organic Chemicals Manufacturing Industry, 40 C.F.R.

Part 60, Subparts VV, III, NNN, and RRR; and the NESHAP for the Synthetic Organic Chemicals Manufacturing Industry, 40 C.F.R. Part 63, Subparts F, G, H, and I, because it is not associated with the manufacture or production of the affected organic chemicals. [40 C.F.R. §§ 60.480; 60.610; 60.660; 60.700; 63.100; 63.110; 63.160]

2. The leaking equipment is not subject to 40 C.F.R. Part 64, Compliance Assurance Monitoring, because it does not use add-on control devices to achieve compliance with an emission limitation or standard. [40 C.F.R. § 64.2(a)]

**(C) Work Practice and Operational Requirements [40 C.F.R. § 71.6(a)(1)]**

The Permittee shall comply with the following standards of 40 C.F.R. Part 61, Subpart V:

1. General: [40 C.F.R. § 61.242-1]
  - (a) The Permittee shall demonstrate compliance with the requirements of 40 C.F.R. §§ 61.242-1 to 61.242-11 for each new and existing source as required in 40 C.F.R. § 61.05, except as provided in 40 C.F.R. §§ 61.243 and 61.244.
  - (b) Compliance with 40 C.F.R. Part 61, Subpart V, will be determined by review of records, review of performance test results, and inspection using the methods and procedures specified in 40 C.F.R. § 61.245.
  - (c) The Permittee shall mark each piece of equipment to which 40 C.F.R. Part 61, Subpart V, applies in such a manner that it can be distinguished readily from other pieces of equipment.
2. Pumps: [40 C.F.R. § 61.242-2]
  - (a) The Permittee shall monitor each pump monthly to detect leaks by the methods specified in 40 C.F.R. § 61.245(b), except as provided in 40 C.F.R. §§ 61.242-1(c) and 61.242-2(d), (e), (f) and (g).
  - (b) The Permittee shall check each pump by visual inspection each calendar week for indications of liquids dripping from the pump seal.
  - (c) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
  - (d) If there are indications of liquids dripping from the pump seal, a leak is detected.

- (e) When a leak is detected, the Permittee shall repair it as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 C.F.R. § 61.242-10.
- (f) The Permittee shall make a first attempt at repair no later than 5 calendar days after each leak is detected.
- (g) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of conditions 2.8(C)(2)(a) through (d) of this permit, provided the following requirements are met:
  - (i) Each dual mechanical seal system is:
    - A. Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or
    - 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 40 C.F.R. § 61.242-11; or
    - C. Equipped with a system that purges the barrier fluid into a process stream with zero volatile hazardous air pollutant (VHAP) emissions to atmosphere.
  - (ii) The barrier fluid is not in VHAP service and, if the pump is covered by standards under 40 C.F.R. Part 60, is not in VOC service.
  - (iii) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.
  - (iv) Each pump is checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.
    - A. If there are indications of liquid dripping from the pump seal at the time of the weekly inspection, the Permittee shall monitor the pump as specified in 40 C.F.R. § 61.245 to determine the presence of VOC and VHAP in the barrier fluid.
    - B. If the monitor reading (taking into account any background readings) indicates the presence of VHAP, a leak is detected. For the purpose of this paragraph, the monitor may be calibrated with VHAP, or may employ a gas chromatography

column to limit the response of the monitor to VHAP, at the option of the Permittee.

- C. If an instrument reading of 10,000 ppm or greater (total VOC) is measured, a leak is detected.
- (v) The Permittee must check each sensor as described in 40 C.F.R. § 61.242-2(d)(3) daily unless it is equipped with an audible alarm.
- (vi) The Permittee must determine, 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.
- (vii) If indications of liquids dripping from the pump seal exceed the criteria established in condition 2.8(C)(2)(g)(vi) of this permit, or if, based on the criteria established in condition 2.8(C)(2)(g)(vi) of this permit, the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected.
- (viii) When a leak is detected, the Permittee shall repair it as soon as practicable, but no later than 15 calendar days after it is detected, except as provided in 40 C.F.R. § 61.242-10.
- (ix) The Permittee shall make a first attempt at repair no later than 5 calendar days after each leak is detected.
- (x) Any pump that is designated, as described in 40 C.F.R. § 61.246(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a), (c), and (d) if the pump:
  - A. Has no externally actuated shaft penetrating the pump housing;
  - B. Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 C.F.R. § 61.245(c); and
  - C. Is tested for compliance with paragraph 40 C.F.R. § 61.242-2(e)(2) initially upon designation, annually, and at other times requested by the Administrator.
- (xi) If any pump is 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 40 C.F.R. § 61.242-11, it is exempt from the requirements of 40 C.F.R. § 61.242-2(a) through (e).

- (xii) Any pump that is designated, as described in 40 C.F.R. § 61.246(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 C.F.R. § 61.242-2(a) and (d)(4) through (6) if:
  - A. The Permittee demonstrates that the pump is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 C.F.R. § 61.242-2(a); and
  - B. The Permittee has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 C.F.R. § 61.242-2(c) if a leak is detected.
- (xiii) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of 40 C.F.R. § 61.242-2(a)(2) and (d)(4), and the daily requirements of 40 C.F.R. § 61.242-2(d)(5), provided that the Permittee visually inspects each pump as often as practicable and at least monthly.

3. Compressors: [40 C.F.R. § 61.242-3]

- (a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to atmosphere, except as provided in 40 C.F.R. §§ 61.242-1(c) and 61.242-3(h) and (i).
- (b) Each compressor seal system required in paragraph 2.8(C)(3)(a), above, shall be:
  - (i) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or
  - (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 40 C.F.R. § 61.242-11; or

- (iii) Equipped with a system that purges the barrier fluid into a process stream with zero VHAP emissions to atmosphere.
- (c) The barrier fluid shall not be in VHAP service and, if the compressor is covered by standards under 40 C.F.R. Part 60, shall not be in VOC service.
- (d) The Permittee shall equip each barrier fluid system as described in 40 C.F.R. § 61.242-3(a)-(c) with a sensor that will detect failure of the seal system, barrier fluid system, or both.
- (e) The Permittee shall check each sensor as required in 40 C.F.R. § 61.242-3(d) daily or shall equip the sensor with an audible alarm unless the compressor is located within the boundary of an unmanned plant site.
- (f) The Permittee shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.
- (g) If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under paragraph (e)(2) of 40 C.F.R. § 61.242-3, a leak is detected.
- (h) When a leak is detected, the Permittee shall repair it as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 C.F.R. § 61.242-10.
- (i) The Permittee shall make a first attempt at repair no later than 5 calendar days after each leak is detected.
- (j) A compressor is exempt from the requirements of 40 C.F.R. § 61.242-3(a) and (b) if it is equipped with a closed-vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of 40 C.F.R. § 61.242-11, except as provided in 40 C.F.R. § 61.242-3(i).
- (k) Any compressor that is designated, as described in 40 C.F.R. § 61.246(e)(2), for no detectable emission as indicated by an instrument reading of less than 500 ppm above background is exempt from the requirements of 40 C.F.R. § 61.242-3(a)-(h) if the compressor:
  - (i) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 C.F.R. § 61.245(c); and is tested for compliance with 40 C.F.R. § 61.242-

3(i)(1) initially upon designation, annually, and at other times requested by the Administrator.

4. Open-ended valves or lines: [40 C.F.R. § 61.242-6]

- (a) The Permittee shall equip each open-ended valve or line with a cap, blind flange, plug, or a second valve, except as provided in 40 C.F.R. § 61.242-1(c).
- (b) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.
- (c) The Permittee shall operate each open-ended valve or line equipped with a second valve in a manner such that the valve on the process fluid end is closed before the second valve is closed.
- (d) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with 40 C.F.R. § 61.242-6(a) at all other times.
- (e) 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 40 C.F.R. § 61.242-6(a), (b) and (c).
- (f) 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 40 C.F.R. § 61.242-6(a) through (c) are exempt from the requirements of 40 C.F.R. § 61.242-6(a) through (c).

5. Valves: [40 C.F.R. § 61.242-7]

- (a) The Permittee shall monitor each valve monthly to detect leaks by the method specified in 40 C.F.R. § 61.245(b) and shall comply with 40 C.F.R. § 61.242-7(b)-(e), except as provided in 40 C.F.R. §§ 61.242-7(f), (g), and (h), 61.243-1 or 61.243-2, and 61.242-1(c).
- (b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- (c) The Permittee may monitor any valve for which a leak is not detected for 2 successive months the first month of every quarter, beginning with the next quarter, until a leak is detected.

- (d) If a leak is detected, the Permittee shall monitor the valve monthly until a leak is not detected for 2 successive months.
- (e) When a leak is detected, the Permittee shall repair it as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 C.F.R. § 61.242-10.
- (f) The Permittee shall make a first attempt at repair no later than five calendar days after each leak is detected.
- (g) First attempts at repair include, but are not limited to, the following best practices where practicable:
  - (i) Tightening of bonnet bolts;
  - (ii) Replacement of bonnet bolts;
  - (iii) Tightening of packing gland nuts; and
  - (iv) Injection of lubricant into lubricated packing.
- (h) Any valve that is designated, as described in 40 C.F.R. § 61.246(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 C.F.R. § 61.242-7(a) if the valve:
  - (i) Has no external actuating mechanism in contact with the process fluid;
  - (ii) Is operated with emissions less than 500 ppm above background, as measured by the method specified in 40 C.F.R. § 61.245(c); and
  - (iii) Is tested for compliance with 40 C.F.R. § 61.242-7(f)(2) initially upon designation, annually, and at other times requested by the Administrator.
- (i) Any valve that is designated, as described in 40 C.F.R. § 61.246(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 C.F.R. § 61.242-7(a) if:
  - (i) The Permittee demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 C.F.R. § 61.242-7(a); and

- (ii) The Permittee has a written plan that requires monitoring of the valve as frequent as practicable during safe-to-monitor times.
  - (j) Any valve that is designated, as described in 40 C.F.R. § 61.246(f)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) of 40 C.F.R. § 61.242-7 if:
    - (i) The Permittee demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface;
    - (ii) The process unit within which the valve is located is an existing process unit; and
    - (iii) The Permittee follows a written plan that requires monitoring of the valve at least once per calendar year.
- 6. Alternative standards for valves in VHAP service - allowable percentage of valves leaking: [40 C.F.R. § 61.243-1]
  - (a) The Permittee may elect to have all valves within a process unit comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.
  - (b) The following requirements shall be met if the Permittee decides to comply with an allowable percentage of valves leaking:
    - (i) The Permittee must notify the Administrator that it has elected to have all valves within a process unit comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in 40 C.F.R. § 61.247(d).
    - (ii) The Permittee conducts a performance test as specified in 40 C.F.R. § 61.243-1(c) initially upon designation, annually, and at other times requested by the Administrator.
    - (iii) If a valve leak is detected, the Permittee shall repair it in accordance with 40 C.F.R. § 61.242-7(d) and (e).

- (c) The Permittee shall conduct performance tests in the following manner:
    - (i) The Permittee shall monitor all valves in VHAP service within the process unit within 1 week by the methods specified in 40 C.F.R. § 61.245(b).
    - (ii) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
    - (iii) The Permittee shall determine the leak percentage by dividing the number of valves in VHAP service for which leaks are detected by the number of valves in VHAP service within the process unit.
  - (d) If the Permittee elects to have all valves comply with this alternative standard, no process unit shall have a leak percentage greater than 2.0 percent.
  - (e) If the Permittee decides no longer to comply with 40 C.F.R. § 61.243-1, the Permittee must notify the Administrator in writing that it will follow the work practice standard described in 40 C.F.R. § 61.242-7(a)-(e).
7. Alternative standards for valves in VHAP service: [40 C.F.R. § 61.243-2]
- (a) The Permittee may elect for all valves within a process unit to comply with one of the alternative work practices specified in 40 C.F.R. § 61.243-2(b)(2) and (3).
  - (b) The Permittee must notify the Administrator before implementing one of the alternative work practices, as specified in 40 C.F.R. § 61.247(d).
  - (c) The Permittee shall comply initially with the requirements for valves, as described in 40 C.F.R. § 61.242-7.
  - (d) After two consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2.0, the Permittee may begin to skip one of the quarterly leak detection periods for the valves in VHAP service.
  - (e) After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2.0, the Permittee may begin to skip three of the quarterly leak detection periods for the valves in VHAP service.
  - (f) If the percentage of valves leaking is greater than 2.0, the Permittee shall comply with the requirements as described in 40 C.F.R. § 61.242-7, but may again elect to use 40 C.F.R. § 61.243-2.

**(D) Monitoring and Testing [40 C.F.R. § 71.6(a)(3)(i)(A)]**

1. The Permittee shall comply with the following test methods and procedures requirements of 40 C.F.R. § 61.245:
  - (a) The Permittee shall monitor, as required in 40 C.F.R. §§ 61.242, 61.243, 61.244, and 61.135, as follows:
    - (i) The Permittee shall monitor as required by Method 21 of 40 C.F.R. Part 60, Appendix A.
    - (ii) The detection instrument shall meet the performance criteria of Method 21.
    - (iii) The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21.
    - (iv) Calibration gases shall be:
      - A. Zero air (less than 10 ppm of hydrocarbon in air); and
      - B. A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.
    - (v) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible, as described in Method 21 of 40 C.F.R. Part 60, Appendix A.
  - (b) When equipment is tested for compliance with or monitored for no detectable emissions, the Permittee shall comply with the following requirements:
    - (i) The Permittee shall test equipment as required by 40 C.F.R. § 61.245(b)(1) through (4).
    - (ii) The background level shall be determined, as set forth in Method 21 of 40 C.F.R. Part 60, Appendix A.
    - (iii) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21 of 40 C.F.R. Part 60, Appendix A.

- (iv) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.
  - (c) Each piece of equipment within a process unit that can conceivably contain equipment in VHAP service is presumed to be in VHAP service unless the Permittee demonstrates that the piece of equipment is not in VHAP service. For a piece of equipment to be considered not in VHAP service, it must be determined that the percent VHAP content can be reasonably expected never to exceed 10 percent by weight. For purposes of determining the percent VHAP content of the process fluid that is contained in or contacts equipment, the Permittee shall use procedures that conform to the methods described in ASTM Method D-2267 (incorporated by reference as specified in 40 C.F.R. § 61.18).
  - (d) The Permittee may use engineering judgment rather than the procedures in 40 C.F.R. § 61.245(d)(1) to demonstrate that the percent VHAP content does not exceed 10 percent by weight, provided that the engineering judgment demonstrates that the VHAP content clearly does not exceed 10 percent by weight. When the Permittee and the Administrator do not agree on whether a piece of equipment is not in VHAP service, however, the Permittee shall use the procedures in 40 C.F.R. § 61.245(d)(1).
  - (e) If the Permittee determines that a piece of equipment is in VHAP service, the determination can be revised only after following the procedures in paragraph 40 C.F.R. § 61.245(d)(1).
  - (f) Samples used in determining the percent VHAP content shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.
2. Requirements of 40 C.F.R. § 61.246:
- (a) The Permittee may comply with the recordkeeping requirements for multiple process units subject to the provisions of 40 C.F.R. Part 61, Subpart V, in one recordkeeping system if the system identifies each record by each process unit.
  - (b) When each leak is detected as specified in 40 C.F.R. §§ 61.242-2, 61.242-3, 61.242-7, and 61.242-8, the following requirements apply:
    - (i) The Permittee shall attach a weatherproof and readily visible identification, marked with the equipment identification number, to the leaking equipment.

- (ii) The Permittee may remove the identification on a valve after it has monitored the valve for 2 successive months as specified in 40 C.F.R. § 242-7(c) and no leak has been detected during those 2 months.
  - (iii) The Permittee may remove the identification on equipment, except on a valve, after it has repaired the equipment.
- (c) When the Permittee has detected each leak as specified in 40 C.F.R. §§ 61.242-2, 61.242-3, 61.242-7, 61.242-8, and 61.135, the Permittee shall record the following information in a log and shall keep the information for 2 years in a readily accessible location:
  - (i) The instrument and operator identification numbers and the equipment identification number;
  - (ii) The date the leak was detected and the dates of each attempt to repair the leak;
  - (iii) Repair methods applied in each attempt to repair the leak;
  - (iv) “Above 10,000” if the maximum instrument reading measured by the methods specified in 40 C.F.R. § 61.245(a) after each repair attempt is equal to or greater than 10,000 ppm;
  - (v) “Repair delayed” and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak;
  - (vi) The signature of the responsible official whose decision it was that repair could not be affected without a process shutdown;
  - (vii) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days;
  - (viii) Dates of process unit shutdowns that occur while the equipment is unrepaired; and
  - (ix) The date of successful repair of the leak.
- (d) The Permittee shall record in a log and keep in a readily accessible location the following information pertaining to all equipment to which a standard applies:
  - (i) A list of identification numbers for equipment (except welded fittings) subject to the requirements of 40 C.F.R. Part 61, Subpart V;

- (ii) A list of identification numbers for equipment that the Permittee elects to designate for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background;
  - (iii) The designation of this equipment for no detectable emissions shall be signed by a responsible official;
  - (iv) The dates of each compliance test required in 40 C.F.R. §§ 61.242-2(e), 61.242-3(i), 61.242-4, and 61.242-7(f);
  - (v) The background level measured during each compliance test; and
  - (vi) The maximum instrument reading measured at the equipment during each compliance test.
- (e) The Permittee shall record in a log and keep in a readily accessible location the following information pertaining to all valves subject to the requirements of 40 C.F.R. § 61.242-7(g) and (h) and to all pumps subject to the requirements of 40 C.F.R. § 61.242-2(g):
- (i) A list of identification numbers for valves and pumps that are designated as unsafe to monitor, an explanation for each valve or pump stating why the valve or pump is unsafe to monitor, and the plan for monitoring each valve or pump; and
  - (ii) A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.
- (f) The Permittee shall record and keep in a readily accessible location the following information:
- (i) Design criterion required in 40 C.F.R. §§ 61.242-2(d)(5) and 61.242-3(e)(2), and an explanation of the design criterion; and
  - (ii) Any changes to this criterion and the reasons for the changes.
- (g) Hours of operation of each component.
- (h) Emissions of VOC.

**(E) Recordkeeping and Reporting [40 C.F.R. § 71.6(a)(3)]**

1. The Permittee shall promptly notify the permitting authority of deviations of the affected leaking equipment from the permit requirements. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken. [40 C.F.R. § 71.6(a)(3)(iii)(B)]
2. Requirements of 40 C.F.R. § 61.247:
  - (a) The Permittee shall submit a statement in writing notifying the Administrator that it is implementing the requirements of 40 C.F.R. §§ 61.242, 61.245, 61.246, and 61.247.
  - (b) In the case of an existing source or a new source which has an initial startup date preceding the effective date, the Permittee shall submit the statement to the Administrator along with the information required under 40 C.F.R. § 61.10 within 90 days of the effective date, unless a waiver of compliance is granted under 40 C.F.R. § 60.11. If a waiver of compliance is granted, the Permittee must submit the statement on a date scheduled by the Administrator.
  - (c) The Permittee must include the following information for each source in the statement:
    - (i) Equipment identification number and process unit identification;
    - (ii) Type of equipment (for example, a pump or pipeline valve);
    - (iii) Percent by weight VHAP in the fluid at the equipment;
    - (iv) Process fluid state at the equipment (gas/vapor or liquid); and
    - (v) Method of compliance with the standard (for example, “monthly leak detection and repair” or “equipped with dual mechanical seals”).
  - (d) The Permittee shall submit to the Administrator a report, semiannually starting 6 months after the initial report required in 40 C.F.R. § 61.247(a), that includes the following information:
    - (i) Process unit identification;
    - (ii) For each month during the semiannual reporting period:

- A. Number of valves for which leaks were detected as described in 40 C.F.R. §§ 61.242-7(b) or 61.243-2;
- B. Number of valves for which leaks were not repaired as required in 40 C.F.R. § 61.242-7(d);
- C. Number of pumps for which leaks were detected as described in 40 C.F.R. § 61.242-2(b) and (d)(6);
- D. Number of pumps for which leaks were not repaired as required in 40 C.F.R. § 61.242-2(c) and (d)(6);
- E. Number of compressors for which leaks were detected as described in 40 C.F.R. § 61.242-3(f);
- F. Number of compressors for which leaks were not repaired as required in 40 C.F.R. § 61.242-3(g); and
- G. The facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible.

## **2.10 INSIGNIFICANT EMISSION UNITS AND ACTIVITIES**

### **(A) List of Insignificant Emission Units and Activities [40 C.F.R. § 71.5(c)(11)]**

The following are insignificant emission units and activities at the facility:

1. One 2.5 mmBtu/hr Tioga portable boiler;
2. One horizontal 550-gallon kerosene tank;
3. One horizontal 550-gallon No. 2 diesel fuel tank;
4. Ash handling;
5. Handling of spent dry scrubber solids;
6. Lime unloading and proportioning;
7. Gasoline storage and dispensing;
8. Use of absorbent material;
9. General vehicle maintenance and servicing (assumed to include diesel fuel handling);
10. Laboratory (chemical and physical analysis);
11. Piping and storage system for natural gas;
12. Non-halogenated cold cleaning degreasers;
13. Internal combustion engines of motor vehicles; and
14. Storage and handling of closed drums.

**(B) Applicable Requirements [40 C.F.R. § 71.6(a)(1)]**

1. For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322 and 35 IAC Part 266. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110. [35 IAC 212.321 or 212.322 and 35 IAC Part 266]
2. For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, which requires that organic material emissions not exceed 8.0 pounds per hour or, if no odor nuisance exists, do not qualify as photochemically reactive material as defined in 35 IAC 211.4690. [35 IAC 215.301]
3. For each open burning activity, the Permittee shall comply with 35 IAC Part 237, including the requirement to obtain a permit for open burning in accordance with 35 IAC 237.201, if necessary. [35 IAC Part 237]

**(C) Compliance with Applicable Requirements [40 C.F.R. § 71.6(a)(3)]**

1. The Permittee shall keep current a file for the affected insignificant emission units, which may contain estimated emissions, throughput, inspection, maintenance and repair log, and other information necessary to demonstrate compliance with the applicable requirements and classification of the units as insignificant emissions units. [40 C.F.R. § 71.6(a)(3)(i)(B)]
2. The Permittee must maintain records of results of any emissions testing conducted on the affected emission units. [40 C.F.R. § 71.6(a)(3)(i)(B)]

### **3.0 FACILITY-WIDE PERMIT REQUIREMENTS**

#### **3.1. GENERAL PART 71 RECORDKEEPING**

##### **(A) Required Records [40 C.F.R. § 71.6(a)(3)(ii)]**

The Permittee shall keep records of required monitoring information that include the following:

1. The date, place, and time of sampling or measurements;
2. The date(s) analyses were performed;
3. The company or entity that performed the analyses;
4. The analytical techniques or methods used;
5. The results of such analyses; and
6. The operating conditions existing at the time of sampling or measurement.

##### **(B) Record Retention Schedule [40 C.F.R. § 71.6(a)(3)(ii)]**

The Permittee shall retain records of all required monitoring data and support information for a period of at least 5 calendar years from the date of the monitoring sample, measurement, report, or application. Support information includes, but is not limited to, all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

##### **(C) Emissions Calculation Methodology [40 C.F.R. § 71.6(a)(3)(i)(B)]**

1. If an applicable requirement contained in this permit does not require the use of a specific methodology for calculating emissions, the Permittee must follow the following hierarchy (in order of preference) when selecting the appropriate methodology for calculating emissions:
  - (a) CEM data from the stationary source;
  - (b) Performance test data from the stationary source;
  - (c) Manufacturer's emissions performance guarantee;
  - (d) CEM data from a similar stationary source or sources;
  - (e) Performance test data from a similar stationary source or sources;
  - (f) Industry-derived emission factors;

- (g) Emission factors published in the latest version of EPA's Compilation of Air Pollutant Emission Factors (AP-42), with "A"-rated AP-42 emission factors being considered before the lower rated emission factors;
  - (h) Engineering judgment.
2. The Permittee must document that it reviewed the hierarchy in condition 3.1(C)(1), above, before selecting the emissions calculation methodology including a demonstration of the selected emission factors' appropriateness for the specific emission units from which emissions are being calculated.
  3. The Permittee's choice of emission calculation methodology pursuant to condition 3.1(C)(1), above, does not preclude any person, such as EPA, the public and other regulatory agencies, from using other credible evidence to establish compliance or noncompliance with applicable requirements as provided by the Act. [42 U.S.C. § 7413]

### **3.2. GENERAL PART 71 REPORTING [40 C.F.R. § 71.6(a)(3)(iii)]**

#### **(A) Semi-annual Reports**

1. The Permittee shall submit to EPA semi-annual reports of all required monitoring for each six month reporting period from January 1 to June 30 and from July 1 to December 31. All reports shall be submitted to the EPA and shall be postmarked by the 30th day following the end of the reporting period. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with condition 4.8(A)(1) of this permit. [40 C.F.R. § 71.6(a)(3)(iii)(A)]
2. A monitoring report submitted pursuant to condition 3.2(A)(1) must include the following:
  - (a) The company name and address;
  - (b) The beginning and ending dates of the reporting period;
  - (c) The emissions unit or activity being monitored;
  - (d) The emissions limitation or standard, including operational requirements and limitations (such as parameter ranges), specified in the permit for which compliance is being monitored;
  - (e) All instances of deviations from permit requirements whether demonstrated by referenced test method, monitoring, or through any other credible

evidence, including those attributable to upset conditions as defined in this permit, and the date on which each deviation occurred;

- (f) The total time when monitoring required by this permit was not performed during the reporting period and, at the source's discretion, either the total duration of deviations indicated by such monitoring or the actual records of deviations;
- (g) All other monitoring results, data, or analyses required to be reported by the applicable requirement; and
- (h) The name, title, and signature of the responsible official who is certifying to the truth, accuracy, and completeness of the report.
- (i) Any report required by an applicable requirement that provides the same information described in conditions 3.2(A)(2)(a) through (h), above, shall satisfy the requirement under condition 3.2(A)(1).

[40 C.F.R. § 71.6(a)(3)(iii)(A)]

## **(B) Deviations**

1. "Deviation" means any situation in which an emissions unit fails to meet a permit term or condition. A deviation is not always a violation. A deviation can be determined by observation or through review of data obtained from any testing, monitoring, or record keeping established in accordance with 40 C.F.R. § 71.6(a)(3)(i) and (ii). For a situation lasting more than 24 hours, each 24-hour period is considered a separate deviation. "Deviations" includes, but is not limited to, any of the following: [40 C.F.R. § 71.6(a)(3)(iii)(C)]
  - (a) A situation when emissions exceed an emission limitation or standard;
  - (b) A situation where process or emissions control device parameter values indicate that an emission limitation or standard has not been met; and
  - (c) A situation in which observations or data collected demonstrates noncompliance with an emission limitation or standard or any work practice or operating condition required by the permit.
2. The Permittee shall promptly report to the EPA deviations from permit requirements, including those attributed to malfunction, emergency or other upset conditions, the probable cause of such deviations, and any corrective actions or preventive measures taken. "Prompt" is defined as follows: [40 C.F.R. § 71.6(a)(3)(iii)(B)]

- (a) Any definition of “prompt” or specific timeframe for reporting deviations provided in an underlying applicable requirement (as identified in this permit); or
  - (b) Where the underlying applicable requirement does not define prompt or provide a timeframe for reporting deviations, reports of deviations will be submitted based on the following schedule:
    - (i) For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.
    - (ii) For emissions of any regulated pollutant excluding a hazardous air pollutant or a toxic air pollutant that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.
    - (iii) For all other deviations from permit requirements, the report shall be submitted with the semi-annual monitoring report required in condition 3.2(A)(1) of this permit.
3. If any of the requirements in condition 3.2(B)(1)(a) through (c), above, are met, the Permittee must notify EPA by telephone or facsimile based on the timetable listed. A written notice, certified consistent with condition 4.8(A), must be submitted within 10 working days of the occurrence. All deviations reported under this condition must also be identified in the semi-annual report required under condition 3.2(A)(1), above.

### **3.3. PERFORMANCE TESTING [40 C.F.R. § 71.6(a)(3)(i)]**

The Permittee shall provide performance testing facilities that include the following:

- (A) Sampling ports adequate for the applicable test methods;
- (B) Safe sampling platform(s);
- (C) Safe access to sampling platform(s); and
- (D) Utilities for sampling and testing equipment.

### **3.4. FACILITY-WIDE APPLICABLE REQUIREMENTS**

#### **(A) Fugitive Particulate Matter Restrictions [35 IAC 212.301]**

The Permittee shall not cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity that is visible by an observer looking generally toward the zenith at a point beyond the property line of the emission source.

#### **(B) Open Burning Prohibitions [35 IAC 237.102]**

1. The Permittee shall not cause or allow open burning, except as provided in 35 IAC 237.
2. The Permittee shall not cause or allow open burning of any refuse in any chamber or apparatus, unless such chamber or apparatus is designed for the purpose of disposing of the class of refuse being burned.

#### **(C) Visible Emissions [35 IAC 212.123(a)]**

The Permittee shall not cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 35 IAC 212.124.

#### **(D) Recycling and Emissions Reduction [40 C.F.R. Part 82, Subpart F]**

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for motor vehicle air conditioners in 40 C.F.R. Part 82, Subpart B:

1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 C.F.R. § 82.156.
2. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.
3. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

**(E) Risk Management Plan (RMP) [40 C.F.R. § 68.215(a)(2)(i) and (ii)]**

Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to the federal regulations for Chemical Accident Prevention in 40 C.F.R. Part 68, then the Permittee shall submit the items below:

1. A compliance schedule for meeting the requirements of 40 C.F.R. Part 68 by the date provided in 40 C.F.R. § 68.10(a); or
2. A certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68, including the registration and submission of the RMP, as part of the annual compliance certification.

**(F) Episode Action Plans [35 IAC 244, Subpart C]**

The Permittee shall maintain at the source and have on file with the IEPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144 and is incorporated by reference into this permit.

**(G) Annual Benzene Waste Quantity Determination [40 C.F.R. § 61.355]**

The Permittee shall determine the total annual benzene quantity from facility waste by the following procedure:

1. For each waste stream subject to 40 C.F.R. Part 61, Subpart FF, having a flow weighted annual average water content greater than 10 percent water, on a volume basis as total water, or which is mixed with water or other wastes at any time and the resulting mixture has an annual average water content greater than 10 percent as specified in 40 C.F.R. § 61.342(a), the Permittee shall:
  - (a) Determine the annual waste quantity for each waste stream using the procedures specified in 40 C.F.R. § 61.355(b).
  - (b) Determine the flow-weighted annual average benzene concentration for each waste stream using the procedures specified in 40 C.F.R. § 61.355(c).
  - (c) Calculate the annual benzene quantity for each waste stream by multiplying the annual waste quantity of the waste stream times the flow-weighted annual average benzene concentration.
  - (d) Total annual benzene quantity from facility waste is calculated by adding together the annual benzene quantity for each waste stream generated

during the year and the annual benzene quantity for each process unit turnaround waste annualized according to 40 C.F.R. § 61.355(b)(4).

2. If the total annual benzene quantity from facility waste is equal to or greater than 10 megagram per year (11 ton/yr), then the Permittee shall comply with the requirements of 40 C.F.R. § 61.342(c), (d), or (e).

**(H) General Prohibition on Air Pollution [35 IAC 201.141]**

No person shall cause or threaten or allow the discharge or emission of any contaminant into the environment in any State so as, either alone or in combination with contaminants from other sources, to cause or tend to cause air pollution in Illinois, or so as to violate the provisions of 35 IAC, Subtitle B, Chapter I, or so as to prevent the attainment or maintenance of any applicable ambient air quality standard. [35 IAC 201.141]

**(I) Facility-wide Testing [40 C.F.R. § 71.6(a)(3)(i)]**

1. Testing Required by 35 IAC 201.282.

Every emission source and all air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

- (a) Testing by the Permittee. The IEPA may require the Permittee to conduct tests in accordance with procedures adopted by the IEPA, at such reasonable times as may be specified by the IEPA and at the expense of the Permittee. The IEPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and formats, and revisions thereto, shall not become effective until filed with the Index Division of the Office of the Secretary of State as Required by "An Act concerning administrative rules," approved June 14, 1951, as amended. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The IEPA shall have the right to observe all aspects of such tests.
- (b) Testing by the IEPA. The IEPA shall have the right to conduct such tests at any time at its own expense. Upon request of the IEPA, the Permittee shall provide, without charge to the IEPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

2. Determination of annual benzene waste quantity for off-site wastes [40 C.F.R. § 61.355]
  - (a) The determination of annual benzene waste quantity for the off-site wastes received by the Permittee shall be made by using the methods and procedures established in 40 C.F.R. § 61.355 along with the following:
  - (b) For the purposes of the calculation required by 40 C.F.R. § 61.355(a), the Permittee shall determine the flow-weighted annual average benzene concentration in a manner that meets the requirements given in 40 C.F.R. § 61.355(c)(1) using either of the methods given in 40 C.F.R. § 61.355(c)(2) and (c)(3).
    - (i) The determination for wastes that are received from off-site shall be made at the point where the waste enters the hazardous waste treatment, storage, or disposal facility.
    - (ii) Knowledge of the waste. The Permittee shall provide sufficient information to document the flow-weighted annual average benzene concentration of each waste stream. Examples of information that could constitute knowledge include material balances, records of chemicals purchases, or previous test results provided the results are still relevant to the current waste stream conditions. If test data are used, then the Permittee shall provide documentation describing the testing protocol and the means by which sampling variability and analytical variability were accounted for in the determination of the flow-weighted annual average benzene concentration for the waste stream. When the Permittee and the Administrator do not agree on determinations of the flow-weighted annual average benzene concentration based on knowledge of the waste, the procedures under 40 C.F.R. § 61.355(c)(3) shall be used.
    - (iii) Measurements of the benzene concentration in the waste stream in accordance with the following procedures:
      - A. Collect a minimum of three representative samples from each waste stream. Where feasible, samples shall be taken from an enclosed pipe prior to the waste being exposed to the atmosphere.
      - B. For waste in enclosed pipes, the following procedures shall be used:

- I. Samples shall be collected prior to the waste being exposed to the atmosphere in order to minimize the loss of benzene prior to sampling.
  - II. A static mixer shall be installed in the process line or in a by-pass line unless the Permittee demonstrates that installation of a static mixer in the line is not necessary to accurately determine the benzene concentration of the waste stream.
  - III. The sampling tap shall be located within two pipe diameters of the static mixer outlet.
  - IV. Prior to the initiation of sampling, sample lines and cooling coil shall be purged with at least four volumes of waste.
  - V. After purging, the sample flow shall be directed to a sample container and the tip of the sampling tube shall be kept below the surface of the waste during sampling to minimize contact with the atmosphere.
  - VI. Samples shall be collected at a flow rate such that the cooling coil is able to maintain a waste temperature less than 10°C (50°F).
  - VII. After filling, the sample container shall be capped immediately (within 5 seconds) to leave a minimum headspace in the container.
  - VIII. The sample containers shall immediately be cooled and maintained at a temperature below 10°C (50°F) for transfer to the laboratory.
- C. When sampling from an enclosed pipe is not feasible, a minimum of three representative samples shall be collected in a manner to minimize exposure of the sample to the atmosphere and loss of benzene prior to sampling.
- D. Each waste sample shall be analyzed using one of the following test methods for determining the benzene concentration in a waste stream:
- I. Method 8020, Aromatic Volatile Organics, in "Test Methods for Evaluating Solid Waste, Physical/Chemical

Methods,” EPA Publication No. SW-846 (incorporation by reference as specified in 40 C.F.R. § 61.18);

- II. Method 8021, Volatile Organic Compounds in Water by Purge and Trap Capillary Column Gas Chromatography with Photoionization and Electrolytic Conductivity Detectors in Series, in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,” EPA Publication No. SW-846 (incorporation by reference as specified in 40 C.F.R. § 61.18);
- III. Method 8240, Gas Chromatography/Mass Spectrometry for Volatile Organics, in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,” EPA Publication No. SW-846 (incorporation by reference as specified in 40 C.F.R. § 61.18);
- IV. Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics: Capillary Column Technique, in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,” EPA Publication No. SW-846 (incorporated by reference as specified in 40 C.F.R. § 61.18);
- V. Method 602, Purgeable Aromatics, as described in 40 C.F.R. Part 136, Appendix A, Test Procedures for Analysis of Organic Pollutants, for wastewaters for which this is an approved EPA methods; or
- VI. Method 624, Purgeables, as described in 40 C.F.R. Part 136, Appendix A, Test Procedures for Analysis of Organic Pollutants, for wastewaters for which this is an approved EPA method.

- E. The Permittee shall calculate the flow-weighted annual average benzene concentration by averaging the results of the sample analyses as follows:

$$\bar{C} = \frac{1}{Q_t} \times \sum_{i=1}^n (Q_i)(C_i)$$

Where:

$\bar{C}$  = Flow-weighted annual average benzene concentration for waste stream, ppmw.

$Q_t$  = Total annual waste quantity for waste stream, kg/yr (lb/yr).

$n$  = Number of waste samples (at least 3).

$Q_i$  = Annual waste quantity for waste stream represented by  $C_i$ , kg/yr (lb/yr).

$C_i$  = Measured concentration of benzene in waste sample  $i$ , ppmw.

**(J) Facility-wide Recordkeeping [40 C.F.R. § 71.6(a)(3)(i)(B)]**

1. If testing is required by condition 3.4(I), the Permittee shall keep records of the testing, including the test date, conditions, methodologies, calculations, test results, and any discrepancies between the test results.
2. Reporting requirements established by 40 C.F.R. Part 61, Subpart FF: [40 C.F.R. § 61.357]

If the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 ton/yr), then the Permittee shall submit to the Administrator the following reports:

- (a) The Permittee shall submit annually to the Administrator a report that updates the information listed in 40 C.F.R. § 61.357(a)(1) through (a)(3). If the information in the annual report required by 40 C.F.R. § 61.357(a)(1) through (a)(3) is not changed in the following year, the Permittee may submit a statement to that effect.
- (b) The Permittee must include the following information in the annual report: [40 C.F.R. § 61.357(a)(1) through (a)(3)]
  - (i) Total annual benzene quantity from facility waste determined in accordance with 40 C.F.R. § 61.355(a).
  - (ii) A table identifying each waste stream and whether or not the waste stream will be controlled for benzene emissions in accordance with the requirements of 40 C.F.R. Part 61, Subpart FF.

- (iii) For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of 40 C.F.R. Part 61, Subpart FF, the Permittee shall add the following information to the table:
  - A. Whether or not the water content of the waste stream is greater than 10 percent;
  - B. Whether or not the waste stream is a process wastewater stream, product tank drawdown, or landfill leachate;
  - C. Annual waste quantity for the waste stream;
  - D. Range of benzene concentrations for the waste stream;
  - E. Annual average flow-weighted benzene concentration for the waste stream; and
  - F. Annual benzene quantity for the waste stream.
- (c) Beginning 3 months after the date that the equipment necessary to comply with 40 C.F.R. Part 61, Subpart FF, has been certified in accordance with 40 C.F.R. § 61.357(d)(1), the Permittee shall submit quarterly to the Administrator a certification that all of the required inspections have been carried out in accordance with the requirements of 40 C.F.R. Part 61, Subpart FF.
- (d) Beginning 3 months after the date that the equipment necessary to comply with 40 C.F.R. Part 61, Subpart FF, has been certified in accordance with 40 C.F.R. § 61.357(d)(1), the Permittee shall submit a report quarterly to the Administrator that includes:
  - (i) If a treatment process or wastewater treatment system unit is monitored in accordance with 40 C.F.R. § 61.354(a)(1), then each period of operation during which the concentration of benzene in the monitored waste stream exiting the unit is equal to or greater than 10 parts per million by weight.
  - (ii) If a treatment process or wastewater treatment system unit is monitored in accordance with 40 C.F.R. § 61.354(a)(2), then each 3-hour period of operation during which the average value of the monitored parameter is outside the range of acceptable values or during which the unit is not operating as designed.

- (iii) If a treatment process or wastewater treatment system unit is monitored in accordance with 40 C.F.R. § 61.354(b), then each period of operation during which the flow-weighted annual average concentration of benzene in the monitored waste stream entering the unit is equal to or greater than 10 ppmw and/or the total annual benzene quantity is equal to or greater than 1.0 mg/yr.
  - (iv) For a control device monitored in accordance with 40 C.F.R. § 61.354(c), each period of operation monitored during which any of the conditions established by 40 C.F.R. § 61.357(d)(7)(iv) occur, as applicable to the control device.
  - (v) For a cover and closed-vent system monitored in accordance with 40 C.F.R. § 61.354(g), the Permittee shall submit a report quarterly to the Administrator that identifies any period in which the pressure in the waste management unit is equal to or greater than atmospheric pressure.
3. The Permittee shall submit annually to the Administrator a report that summarizes all inspections required by 40 C.F.R. §§ 61.342 through 61.354 during which detectable emissions are measured or a problem (such as a broken seal, gap or other problem) that could result in benzene emissions is identified, including information about the repairs or corrective action taken.

## **4.0 GENERAL PART 71 REQUIREMENTS**

### **4.1. DEFINITIONS [40 C.F.R. § 71.2]**

Terms and conditions not otherwise defined in this permit have the meaning assigned to them in 40 C.F.R. Part 71 unless other regulations or statutes are referenced.

### **4.2. ANNUAL FEE PAYMENT [40 C.F.R. §§ 71.6(a)(7) and 71.9]**

- A. The Permittee shall pay an annual permit fee in accordance with the procedures outlined below. [40 C.F.R. § 71.9(a)]
- B. The Permittee shall submit an annual report of its actual emissions for the preceding calendar year, a fee calculation work sheet (based on the report), and full payment of the annual fee each year. The Permittee shall submit the annual report and pay the annual permit fee each year on or before the anniversary date (3 months from the issuance of this permit) of its initial fee calculation work sheet.

The Permittee shall submit the annual report to:

Air Permits Section (AR-18J)  
Air and Radiation Division  
EPA Region 5  
77 West Jackson Boulevard  
Chicago, Illinois 60604

- C. The fee payment shall be in United States currency and shall be paid by money order, bank draft, certified check, corporate check, or electronic funds transfer payable to the order of the U.S. Environmental Protection Agency.
- D. The Permittee shall send fee payment and a completed fee filing form to:

U.S. Environmental Protection Agency  
FOIA and Miscellaneous Payments,  
Cincinnati Finance Center,  
P.O. Box 979078,  
St. Louis, MO 63197-9000

- E. The Permittee shall send an updated fee calculation worksheet form and a photocopy of each fee payment check (or other confirmation of actual fee paid) submitted annually by the same deadline as required for fee payment to the address listed in condition 4.8(B) of this permit. (The Permittee should note that an annual emissions report, required at the same time as the fee calculation worksheet by 40 C.F.R. § 71.9(h), has been incorporated into the fee calculation worksheet form as a convenience.)

F. Basis for calculating annual fee:

1. The annual emissions fee shall be calculated by multiplying the total tons of actual emissions of all regulated pollutants (for fee calculation) emitted from the source, including fugitive emissions by the presumptive emissions fee (in dollars/ton) in effect at the time of calculation.
  - (a) “Actual emissions” means the actual rate of emissions in tons per year of any “regulated pollutant (for fee calculation)” emitted from a Part 71 source over the preceding calendar year. Actual emissions shall be calculated using each emissions unit’s actual operating hours, production rates, in-place control equipment, and types of materials processed, stored, or combusted during the preceding calendar year. [40 C.F.R. § 71.9(c)(6)]
  - (b) Actual emissions shall be computed using methods required by the permit for determining compliance, such as monitoring or source testing data. [40 C.F.R. § 71.9(h)(3)]
  - (c) If actual emissions cannot be determined using the compliance methods in the permit, the Permittee shall use other federally recognized procedures. [40 C.F.R. § 71.9(e)(2)]
  - (d) The term “regulated pollutant (for fee calculation)” is defined in 40 C.F.R. § 71.2.
  - (e) Prior to the start of each calendar year, EPA will revise for inflation rate and make available the presumptive fee amount.
2. The Permittee shall exclude the following emissions from the calculation of fees:
  - (a) The amount of actual emissions of each regulated pollutant (for fee calculation) that the source emits in excess of 4,000 tons per year; [40 C.F.R. § 71.9(c)(5)(I)]
  - (b) Actual emissions of any regulated pollutant (for fee calculation) already included in the fee calculation; [40 C.F.R. § 71.9(c)(5)(ii)] and
  - (c) The quantity of actual emissions (for fee calculation) of insignificant activities [defined in 40 C.F.R. § 71.5(c)(11)(i)] or of insignificant emissions levels from emissions units identified in the Permittee’s application [pursuant to 40 C.F.R. § 71.5(c)(11)(ii)]. [40 C.F.R. § 71.9(c)(5)(iii)]

- G. Fee calculation worksheets shall be certified as to truth, accuracy, and completeness by a responsible official in accordance with condition 4.8(A). (The Permittee should note that the fee calculation worksheet incorporates a section to help meet this responsibility.)
- H. The Permittee shall retain fee calculation worksheets and other emissions-related data used to determine fee payment for 5 years following submittal of fee payment. Emission-related data include, for example, emissions-related forms provided by the EPA and used by the Permittee for fee calculation purposes, emissions-related spreadsheets, and emissions-related data, such as records of emissions monitoring data and related support information required to be kept in accordance with 40 C.F.R. § 71.6(a)(3)(ii). [40 C.F.R. § 71.9(I)]
- I. Failure of the Permittee to pay fees in a timely manner shall subject the Permittee to assessment of penalties and interest in accordance with 40 C.F.R. § 71.9(l).
- J. When notified by the EPA of underpayment of fees, the Permittee shall remit full payment within 30 days of receipt of notification. [40 C.F.R. § 71.9(j)(1) and (2)]
- K. A Permittee who believes that the EPA assessed fee is in error and who wishes to challenge such fee shall provide a written explanation of the alleged error to the EPA along with full payment of the EPA assessed fee. [40 C.F.R. § 71.9(j)(3)]

#### **4.3. COMPLIANCE STATEMENT [40 C.F.R. § 71.6(a)(6)]**

- (A) The Permittee must comply with all conditions of this Part 71 permit. Any noncompliance with this permit constitutes a violation of the CAA and is grounds for: [40 C.F.R. § 71.6(a)(6)(I)]
  - 1. Enforcement action;
  - 2. Permit termination, revocation and reissuance, or modification; or
  - 3. Denial of a permit renewal application.
- (B) It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [40 C.F.R. § 71.6(a)(6)(ii)]

#### **4.4. COMPLIANCE CERTIFICATIONS [40 C.F.R. § 71.6(c)(5)]**

The Permittee shall submit to EPA a certification of compliance with all permit terms and conditions, including emission limitations, standards, or work practices, each calendar year for the reporting period from January 1 to December 31, except the first reporting period shall begin on the effective date of this permit and end on December 31. All

reports shall be submitted to the EPA and shall be postmarked by the 30<sup>th</sup> day following the end of the reporting period. The compliance certification shall be certified as to truth, accuracy, and completeness by a responsible official in accordance with condition 4.8(A) of this permit. The certification shall include the following:

- (A) Identification of each permit term or condition that is the basis of the certification;
- (B) Identification of the method(s) or other means used for determining the compliance status of each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. If necessary, the Permittee also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the CAA, which prohibits knowingly making a false certification or omitting material information;
- (C) The compliance status of each term and condition of the permit, including whether monitoring data is continuous and whether that data or any other credible evidence shows the compliance is continuous. The certification shall identify each deviation and take it into account in the compliance certification; and
- (D) A statement indicating the compliance status of the source with any applicable monitoring and compliance certification requirements of the CAA.

**4.5. SCHEDULE OF COMPLIANCE [40 C.F.R. §§ 71.6(c)(3) and 71.5(c)(8)(iii)]**

- (A) The Permittee will comply with all requirements of the permit.
- (B) For applicable requirements that will become effective during the permit term, the Permittee shall timely comply with such requirements.

**4.6. DUTY TO PROVIDE AND SUPPLEMENT INFORMATION  
[40 C.F.R. §§ 71.6(a)(6)(v) and 71.5(b)]**

- (A) The Permittee shall furnish to the EPA, within a reasonable time, any information that the EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon request, the Permittee shall also furnish to EPA copies of records that are required to be kept pursuant to the terms of this permit, including information claimed to be confidential. Information claimed to be confidential should be accompanied by a claim of confidentiality according to the provisions of 40 C.F.R. Part 2, Subpart B.
- (B) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. The Permittee shall also provide

additional information as necessary to address any requirements that become applicable to the facility after this permit is issued.

**4.7. ENFORCEABILITY [40 C.F.R. § 71.6(b)]**

All terms and conditions in this permit, including any provisions designated to limit the source's potential to emit, are enforceable by the EPA and citizens in accordance with the CAA.

**4.8. SUBMISSIONS [40 C.F.R. §§ 71.5(d), 71.6 and 71.9]**

(A) A responsible official of the Permittee shall certify as to the truth, accuracy, and completeness of any document required to be submitted by this permit. Such certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Except as otherwise noted, the Permittee shall submit all documents required to be submitted by this permit to:

Air Enforcement and Compliance Assurance Branch (AE-17J)  
Air and Radiation Division  
EPA Region 5  
77 West Jackson Boulevard  
Chicago, Illinois 60604

(B) The Permittee shall submit permit applications, applications for permit amendments, and other applicable permit information, which includes but is not limited to installation of control equipment, replacement of an emissions unit, fee calculation worksheets, and applications for renewals and permit modifications, to:

Air Permits Section  
Air Programs Branch (AR-18J)  
EPA Region 5  
77 West Jackson Boulevard  
Chicago, Illinois 60604

**4.9. SEVERABILITY CLAUSE [40 C.F.R. § 71.6(a)(5)]**

The provisions of this permit are severable, and in the event of any challenge to any portion of this permit, or if any portion is held invalid, the remaining permit conditions shall remain valid and in force.

**4.10. PERMIT ACTIONS [40 C.F.R. § 71.6(a)(6)(iii)]**

The EPA may modify, revoke, reopen and reissue this permit, or terminate it for cause. The filing of a request by the Permittee for a permit modification, revocation and

reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

**4.11. ADMINISTRATIVE PERMIT AMENDMENTS [40 C.F.R. § 71.7(d)]**

The Permittee may request the use of administrative permit amendment procedures for a permit revision in accordance with 40 C.F.R. § 71.7(d).

**4.12. MINOR PERMIT MODIFICATIONS [40 C.F.R. § 71.7(e)(1)]**

The Permittee may request the use of minor permit modification procedures for those modifications that meet the requirements contained in 40 C.F.R. § 71.7(e)(1).

**4.13. SIGNIFICANT PERMIT MODIFICATIONS [40 C.F.R. § 71.7(e)(3)]**

The Permittee must request the use of significant permit modification procedures for those modifications that meet the requirements contained in 40 C.F.R. § 71.7(e)(3).

**4.14. REOPENING FOR CAUSE [40 C.F.R. § 71.7(f)]**

The EPA shall reopen and revise the permit prior to expiration under any of the following circumstances:

- (A) Additional applicable requirements under the CAA become applicable to this source if the remaining permit term is 3 or more years.
- (B) The EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- (C) The EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

**4.15. PROPERTY RIGHTS [40 C.F.R. § 71.6(a)(6)(iv)]**

This permit does not convey any property rights of any sort, or any exclusive privilege.

**4.16. INSPECTION AND ENTRY [40 C.F.R. § 71.6(c)(2)]**

Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow EPA or an authorized representative to perform the following as authorized by the CAA:

- (A) Enter upon the Permittee's premises where the Part 71 source is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
- (B) Have access to and copy, at reasonable times, any records that must be kept under the 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) Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

**4.17. [RESERVED]**

**4.18. OFF PERMIT CHANGES [40 C.F.R. § 71.6(a)(12)]**

The Permittee is allowed to make certain changes without a permit revision, provided that the following requirements are met:

- (A) Each change is not addressed or prohibited by this permit;
- (B) Each change must comply with all applicable requirements and may not violate any existing permit term or condition;
- (C) Changes under this provision may not include changes subject to any requirement of 40 C.F.R. Parts 72 through 78 or modifications under any provision of Title I of the CAA;
- (D) The Permittee must provide contemporaneous written notice to EPA of each change, except for changes that qualify as insignificant activities under 40 C.F.R. § 71.5(c)(11). The written notice must describe each change, the date of the change, any change in emissions, pollutants emitted, and any applicable requirements that would apply as a result of the change;
- (E) The permit shield does not apply to changes made under this provision; and
- (F) The Permittee must keep a record describing all changes that result in emissions of any regulated air pollutant subject to any applicable requirement not otherwise regulated under this permit, and the emissions resulting from those changes.

**4.19. PERMIT EXPIRATION AND RENEWAL [40 C.F.R. §§ 71.5(a)(1)(iii), 71.6(a)(11), 71.7(b), 71.7(c)(1)(i) and (ii), 71.8(d)]**

- (A) Except as provided in conditions 4.19(C) and (D), below, this permit shall expire 5 years from the effective date.
- (B) Expiration of this permit terminates the Permittee's right to operate unless the Permittee has submitted a timely and complete permit renewal application to the permitting authority at least 6 calendar months, but not more than 18 calendar months, prior to the date of expiration of this permit.
- (C) If the Permittee submits a timely and complete permit application for renewal, consistent with 40 C.F.R. § 71.5(a)(1) and (2) and condition 4.19(B), above, but the permitting authority fails to issue or deny the renewal permit, then this permit shall not expire until the permitting authority has issued or denied a renewal permit. Any permit shield granted under condition 4.21 of this permit may be extended during the period that the permitting authority fails to act on the renewal application.
- (D) If the Permittee has submitted a timely and complete application for renewal consistent with 40 C.F.R. § 71.5(a)(1) and (2) and condition 4.19(B), above, the Permittee's failure to have a Part 71 permit is not a violation of Part 71 or the CAA until the permitting authority takes final action on the permit renewal application. This protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit any additional information identified as being needed to process the application by the deadline specified in writing by the permitting authority.
- (E) Renewal of this permit is subject to the same procedural requirements that apply to initial permit issuance, including those for public participation and affected state and tribal review.
- (F) The application for renewal shall include the current permit number, description of permit revisions and off-permit changes that occurred during the permit term, any applicable requirements that were promulgated and not incorporated into the permit during the permit term, and other information required by the application form.

**4.20. OPERATIONAL FLEXIBILITY [40 C.F.R. § 71.6(a)(13)]**

The Permittee may make changes within the permitted facility without a permit revision, including the addition of a new generator or replacement of an existing generator, provided the following conditions are met:

- (A) The changes are not modifications under any provision of Title I of the CAA;

- (B) The changes do not exceed the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions); and
- (C) The Permittee notifies the EPA at least 7 days in advance of the proposed changes. The written notification shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

#### **4.21. PERMIT SHIELD [40 C.F.R. § 71.6(f)]**

- (A) Except as noted in condition 4.21(A)(1), below, compliance with the conditions of this permit shall be deemed compliance, as of the date of permit issuance, with any applicable requirements that are specifically identified and included in this permit or that are specifically identified in this permit as not applying to the facility.
  - 1. The permit shield shall not apply, and compliance with this permit shall not be deemed to be compliance with, Parts C and D of Title I of the CAA, or any requirements of the Illinois SIP, or federal or state regulations that govern the permitting of major modifications to sources of air emissions.
- (B) Nothing in this permit shall alter or affect the following:
  - 1. The liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance;
  - 2. The ability of EPA to obtain information under Section 114 of the CAA;
  - 3. The applicable requirements of the acid rain program, consistent with section 408(a) of the CAA; or
  - 4. The provisions of section 303 of the CAA (emergency orders), including the authority of the Administrator under that section.

#### **4.22. CREDIBLE EVIDENCE [62 Fed. Reg. 8314 (February 24, 1997); 42 U.S.C. § 7413]**

Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.