ADEQ OPERATING ARPERMIT

Pursuant to the Regulations of the Arkansas Operating Air Permit Program, Regulation 26:

Permit No.: 1355-AOP-R1

IS ISSUED TO:
Anthony Timberlands, Inc.
Highway 51 South
Beirne, AR 71721
Clark County
AFIN: 10-00070

THIS PERMIT AUTHORIZES THE ABOVE REFERENCED PERMITTEE TO INSTALL, OPERATE, AND MAINTAIN THE EQUIPMENT AND EMISSION UNITS DESCRIBED IN THE PERMIT APPLICATION AND ON THE FOLLOWING PAGES. THIS PERMIT IS VALID BETWEEN:

January 4, 2005

AND

January 3, 2010

THE PERMITTEE IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HERBIN.

Signed:

Mike Porta

Interim Chief, Air Division

February 9, 2006

Date Amended

Anthony Timberlands, In Permit #: 1355-AOP-R1 AFIN: 10-00070

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List of Acronyms and Abbreviations

A.C.A. Arkansas Code Annotated

AFIN ADEQ Facility Identification Number

CFR Code of Federal Regulations

CO Carbon Monoxide

HAP Hazardous Air Pollutant

lb/hr Pound Per Hour

MVAC Motor Vehicle Air Conditioner

No. Number

NO Nitrogen Oxide

PM Particulate Matter

PM_{in} Particulate Matter Smaller Than Ten Microns

SNAP Significant New Alternatives Program (SNAP)

__ SO₂ Sulfur Dioxide

SSM Startup, Shutdown, and Malfunction Plan

Tpy Tons Per Year

UTM Universal Transverse Mercator

__ VOC Volatile Organic Compound

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SECTION I: FACILITY INFORMATION

PERMITTEE: Anthony Timberlands, Inc.

AFIN: 10-00070

PERMIT NUMBER: 1355-AOP-R1

FACILITY ADDRESS: Highway 51 South

Beirne, AR 71721

MAILING ADDRESS P.O. Box 128

Beime, AR 71721

COUNTY: Clark

CONTACT POSITION: Steven M. Anthony, Esq.

TELEPHONE NUMBER: (870) 687-2246

REVIEWING ENGINEER: Ann Sudmeyer

UTM North South (Y): Zone 15: 3749.77

UTM East West (X): Zone 15: 480.94

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SECTION II: INTRODUCTION

Summary of Permit Activity

Anthony Timberlands, Inc. operates a hardwood sawmill in Clark County near Beirne, Arkansas, approximately five miles southwest of Gurdon on Highway 51 South. This permitting action is necessary to correct the heat input of the wood-fired boilers (SN-13A, SN-13B, and SN-13C) to 19.0 MMBtu/hr each.

The total permitted emission rate increases due to this modification include: 42.0 tons per year (tpy) PM, 39.3 tpy PM₁₀, 2.7 tpy SO₂, 2.7 tpy VOC, 68.4 tpy CO, 24.9 tpy NO₂, 0.03 tpy accenapthylene, 0.45 tpy acrolein, 0.45 tpy benzene, 0.003 tpy cadmium, 0.09 tpy chlorine, 0.51 tpy formaldehyde, 2.19 tpy hydrogen chloride, 0.18 tpy manganese, 0.03 tpy phenanthrene, 0.03 tpy phenol, and 0.21 tpy styrene.

In addition, a reference to General Provision #7 was added to Specific Condition #40 so that the CAM monitoring will be submitted to the Department every 6 months in accordance with 40 CFR §64.9(a) and 40 CFR §70.6(a)(3)(iii)(A).

Process Description

Logs are transported by truck from the forest to the Beirne hardwood sawmill facility. Rubbertired mobile equipment unload the logs which are transferred to one of the following areas: the infeed system for immediate processing, dry storage for near future processing, or the wet storage area for long term future demands.

The wet storage system is self contained consisting of a storage area, a water storage pond, and a water recirculation system. Pumps are used to spray water from the pond onto the logs in the storage area. The runoff from the spraying operations is gravity fed back into the storage pond for reuse.

Infeed systems convey the logs one at a time to the debarkers (SN-14) where bark is removed. The bark is collected in hoppers, mixed with sawdust, and conveyed by a chain conveyor to the bark/sawdust storage area (SN-15). The mixture of bark and sawdust is then sold or will be used as fuel. Two chippers are used in association with the log processing operations. One of the chippers discharges into the truck loading storage bin. Chips that are too large are routed to the rechipper for further processing. The chips exit the rechipper and are pneumatically conveyed through a cyclone (SN-06) to a chip bin (SN-11). The chips are loaded onto trucks from this bin.

Sawmill operations convert logs into rough boards which are edged, trimmed, and prepared for drying. Wood waste from the trimming operations is chipped for use in paper mills. The wood waste is collected by chutes and hoppers and conveyed to the chippers for size reduction. The chippers use a blower type discharge to the sawmill chipper cyclone (SN-01) and the quad

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chipper cyclone (SN-07). Chain conveyors transfer the remaining chips to a truck loading bin (SN-11).

Green lumber is submerged in a 7,900 gallon dip vat (SN-12) to prevent decaying and staining of the lumber and to remove any insects that may still be residing in the lumber. Only certain lumber is dipped in this tank. This existing unit is a source of volatile organic compounds and hazardous air pollutant emissions.

Lumber drying is accomplished using a predryer (SN-08) and fourteen steam-heated kilns (SN-09). The predryer has a capacity of 1.75 million board feet of hardwood with a typical drying cycle of 30 days. During each cycle, the moisture content of the lumber is reduced from 50% to near 25%. The kilns have a standard cycle of 10 days. During each cycle, air dried or pre-dried lumber is heated to reduce the moisture content from 25% to 6-8%. Seven of the kilns have an individual capacity of 102,000 board feet, four have an individual capacity of 100,000 board feet, and three have an individual capacity of 110,000 board feet. The steam from the kilns is supplied by three 300 HP wood-fired boilers (SN-13A, SN-13B, and SN-13C). The particulate matter emissions from the boilers are controlled by multicyclones.

The dried (cooled) lumber is routed to the finishing operation where it is trimmed and planed, graded, and sorted into packages for shipping. Wood shavings generated during the finishing operations are collected by vacuum hoods and routed by blowers to cyclones (SN-02 and SN-03) at a truck bin. The shavings are loaded onto trucks through a Peerless bin (SN-10). The collected materials are sold for use in particle board manufacturing.

Regulations

The following table contains the regulations applicable to this permit.

	Regulations
Arkansas A	ir Pollution Control Code, Regulation 18, effective February 15, 1999
1 10/0/ 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	s of the Arkansas Plan of Implementation for Air Pollution Control, 19, effective February 15, 1999
Regulations September	s of the Arkansas Operating Air Permit Program, Regulation 26, effective 26, 2002
40 CFR Par	rt 64 – Compliance Assurance Monitoring
	rt 60, Subpart Dc - Standards of Performance for Small Industrial- ul-Institutional Steam Generating Units
40 CFR Pa	t 63, Subpart DDDD – National Emission Standards for Hazardous Air Plywood and Composite Wood Products
	t 63, Subpart DDDDD – National Emission Standards for Hazardous Air for Industrial, Commercial, and Institutional Boilers and Process Heaters

The following table is a summary of emissions from the facility. This table, in itself, is not an enforceable condition of the permit.

Emission Summary

Source			Emissio	n Rates
Number	Description	Pollutant	b/hr	Фу
	en e	PM	41.6	133.6
		PM ₁₀	23,4	92.4
		SO,	1.5	6.6
Total	Allowable Emissions	voc	18.3	63.0
		co.	34.2	150.0
		NO NO	12.6	55.2
		Lead'	0.03	0.03
	HAPs	Acenapthylene¹ Acrolein¹ Arsenic¹ Benzene¹ Cadmium¹ Chlorine Chromium (hexavalent)¹ DEGMME¹²¹ Formaldehyde¹ Hydrogen Chloride Manganese¹ Methano¹ Phenanthrene¹ Pheno¹¹ Styrene¹	0.03 0.24 0.03 0.24 0.003 0.06 0.03 6.00 0.27 1.11 0.12 0.20 0.03 0.03 0.03	0.03 1.02 0.03 1.05 0.003 0.21 0.03 26.30 1.11 4.77 0.42 0.80 0.03 0.03 0.03
SN-01	Sawmill Chipper (controlled by a cyclone)	PM.	5.9 0.6	12.0 1.2
SN-02	Planer Shavings	PM PM ₀	1.5 # 0.2	3.0 0.3
SN-03	Planer Shavings	PV.	1.6	3.0
SN-04	Boiler #2 (10.05 MMBtu/hr)	PM _{in} Source Remov	0.2 ed Prom Servic	0.3

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		EMISSION SUMMARY		
Source	Description	Pollutant	Emissio	n Rates
Number			lb/hr	tpy
SN-05	Boiler #1 (2.95 MMBtu/hr)	Source Remov	ed From Service	*
SN-06	Log Processing Rechipper	PM PM _{in}	3.0 0,3	6.2 0.7
SN-07	Quad Chipper	PM PM _{in}	3,0 0.3	6.2 0.7
SN-08	Pre-Dryer	VOC	0,6	2.7
SN-09	Dry Kilns (14 – Steam Heated)	voc	9.6	24.9
SN-10	Peerless Bin	PM PM _{in}	1.5 0.8	3.0 1.5
SN-11	Chip Bin	PM PM ₁₀	2.1 0.3	4.9 0.5
SN-12	Chemical Dip Vat (7,900 Gallons)	VOC DEGMME ² Methanol	6.9 6.0 0.2	30.0 26.3 0.8
SN-13A	Wood Fired Boiler (300 HP)	PM PM ₁₀ SO ₂ VOC CO CO NO _X Lead Acenapthylene Acrolein Arsenic Benzene Cadmium Chlorine Chromium (hexavalent) Formaldehyde Hydrogen Chloride Manganese Phenanthrene Phenol Styrene	7.0 6.5 0.5 0.4 11.4 4.2 0.01 0.08 0.01 0.08 0.01 0.02 0.01 0.02 0.01 0.09 0.37 0.04 0.01 0.01	30.7 28.5 2.2 1.8 50.0 18.4 0.01 0.34 0.01 0.35 0.001 0.07 0.01 0.37 1.59 0.14 0.01 0.01
SN-13B	Wood Fired Boiler (300 HP)	PM PM ₁₆ SO.	7.0 6.5 0.5	30.7 28.5 2.2

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		EMISSION SUMMARY	Live .	227
Source	Description	Pollutant	Emissio	n Rates
Number			lb/hr	tpy
And these works a con-		VOC	0.4	1.8
		co	11.4	50.0
		NO _x	4.2	18.4
		Lead	0.01	0.01
	7 Particular P	Acenapthylene	0.01	0.01
- 1. gali	Vertical Control of the Control of t	Acrolein	0.08	0.34
		Arsenic	0.01	0.01
		Benzene	80.0	0.35
		Cadmium	0.001	0.001
		Chlorine	0.02	0.07
		Chromium (hexavalent)	0.01	0.01
		Formaldehyde	0.09	0.37
		Hydrogen Chloride	0.37	1.59
		Manganese	0.04	0.14
		Phénanthrene	0.01	0.01
		Phenol	0.01	0.01
		Styrene	0.04	0.16
		PM	7.0	30.7
		PM ₀	6.5	28.5
		SO	0.5	2.2
		voc	0.4	1.8
		CO	11.4	50.0
		NO _x	4.2	18.4
		Lead	0.01	0.01
		Acenapthylene	0.01	0.01
		Acrolein	0.08	0.34
SN-13C	Wood Fired Boiler	Arsenic	0.01	0.01
	(300 HP)	Benzene	0.08	0.35
		Cadmium	0.001	0.001
		Chlorine	0.02	0.07
		Chromium (hexavalent)	0.01	0.01
		Formaldehyde Hydrogen Chloride	0.09 0.37	0.37 1.59
		Manganese	0.57	0.14
		Phenanthrene	0.01	0.14
		Phenol	0.01	0.01
		Styrene	0.04	0.16
		Syvene	1.9	2.9
SN-14	Debarking Operations	PW,	1.7	1.6

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. Marine		The state of the second	Control of the Contro	-
) i			EMISSION SUMMARY	(a.5)
	Source	scription	Pollutant Emission Rates	
Ŀ	Number	The second secon	b/hr py	
	SN-15 Bark/Sa	wdust Storage Area	PM 0.2 0.3 PM ₁₀ 0.1 0.1	

- 1. HAPs included in the VOC or PM totals. Other HAPs are not included in any other totals unless specifically stated.

 2. DEGMME = Diethylene glycol monomethyl ether

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SECTION III: PERMIT HISTORY

Permit # 1355-A was issued on September 22, 1992. It was the initial permit for the existing facility. It allowed emissions of 9.2 tpy PM, 0.031 tpy SO₂, 6.81 tpy NO_x, 1.65 tpy CO, and 0.33 tpy VOC.

Permit # 1355-AR-1 was issued on January 30, 1996. This modification involved replacing a bottom discharge chipper with a top discharge unit and the accompanying cyclone. Emission limits in this permit were: 12.0 tpy PM/PM₁₀, 0.2 tpy SO₂, 10.2 tpy VOC, 1.8 tpy CO, and 7.5 tpy NO₃.

Permit #1355-AR-2 was issued on June 8, 1999. This modification involved adding four kilns with individual capacities of 100,000 board feet and the permitting of the chemical dip tank (SN-12). The addition of the four new kilns added 14.6 million board feet per year to the total processing capacity of the facility. Emission limits in this permit were: 25.5 tpy of PM, 6.1 tpy of PM₁₀, 0.3 tpy of SO₂, 39.6 tpy of VOC, 2.7 tpy of CO, 18.0 of NO₂, 0.2 tpy of methanol, and 9.6 tpy of diethylene glycol monomethyl ether (DEGMME).

Permit #1355-AR-3 was issued on February 18, 2004. This modification allowed for the replacement of 8 kilns with individual capacities of 70,000 board feet with 7 new track kilns with individual capacities of 102,000 board feet. This increased the total capacity of lumber to be dried at the facility to 40,000,000 board feet per year. This modification also allowed for the replacement of two Scotch Marine-type boilers (SN-04 and SN-05) with three 300 HP woodfired boilers (SN-13A, SN-13B, and SN-13C). These projects were completed in two phases. For Phase One, the total permitted emission rates increased by 59.7 tons per year (tpy) PM, 43.7 tpy PM₁₀, 3.9 tpy SO₂, 84.5 tpy CO, 21.6 tpy NO₂, 0.20 tpy methanol, 0.20 tpy DEGMME (Diethylene glycol monomethyl ether), 0.54 tpy acrolein, 0.57 tpy benzene, 0.12 tpy chlorine, 0.60 tpy formaldehyde, 2.58 tpy hydrogen chloride, 0.27 tpy styrene, 0.21 tpy manganese, and 0.03 tpy arsenic, 0.03 tpy chromium (hexavalent), and 0.03 tpy lead. For Phase Two, the total permitted emission rates increased from Permit #1355-AR-2 by 58.7 tpy PM, 42.7 tpy PM_{in} 3.6 tpy SO, 78.9 tpy CO, 12.3 tpy NO, 0.20 tpy methanol, 0.20 tpy DEGMME, 0.54 tpy acrolein, 0.57 tpy benzene, 0.12 tpy chlorine, 0.60 tpy formaldehyde, 2.58 tpy hydrogen chloride, 0.27 tpy styrene, 0.21 manganese, and 0.03 tpy arsenic, 0.03 tpy chromium (hexavalent), and 0.03 tpy lead.

Permit #1355-AOP-R0 was issued on January 4, 2005. This initial Title V air permit was necessary to install three new steam-heated kilns (SN-09); increase the permitted lumber capacity from 40 to 55 million board feet per year; increase the chemical dip usage limit from 3,625 gal/yr to 7,500 gal/yr; correct the hourly emission rate for the Hardwood Predryer (SN-08); correct the hourly emission rate for the Log Processing Rechipper (SN-06); increase the VOC and HAP content limits for Chemical A used at SN-12; and add condensable particulate matter to the permitted particulate emission rates at SN-13A, SN-13B, and SN-13C. The permitted hazardous air pollutant (HAP) emission rates exceeded the threshold of 10 tons per year of any single HAP and 25 tons per year of any combination of HAPs due to this modification; therefore, a Title V permit was required. The total permitted emission rate increases due to this

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modification as compared to Phase Two of the last modification included: 7.4 tons per year (tpy) PM, 4.3 tpy PM₁₀, 24.5 tpy VOC, 0.03 tpy acrolein, 0.03 tpy benzene, 16.5 tpy diethylene glycol monomethyl ether, 0.03 tpy manganese, and 0.40 tpy methanol.

SECTION IV: SPECIFIC CONDITIONS

SN-01 Sawmill Chipper (controlled by a cyclone)

Source Description

Sawmill operations transform logs into rough boards which are edged, trimmed, and prepared for drying. Woodwaste from the trimming operations is then chipped for use in paper mills. The woodwaste is gathered through the use of chutes and hoppers and conveyed to the chippers for size reduction. The chippers employ a blower-type discharge to the sawmill chipper discharge cyclone (SN-01) and the quad chipper cyclone (SN-07). These control devices are 99.99% efficient in capturing particulate matter.

Specific Conditions

1. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #20. [Regulation 19, §19.501 et seq., effective February 15, 1999 and 40 CFR Part 52, Subpart E]

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				Pl	VI				0.6	7.7.000			1.	2	
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100				PJ	M ₁₀				0.6	**************************************			1,	2.	

2. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #20. [Regulation 18, §18.801, effective February 15, 1999, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

 Pollu	ıtant.	lb/hr tpy
Pl	Togging 1 Shamming 1 S	5.9 12.0

3. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [Regulation 19, §19.503 and 40 CFR Part 52, Subpart E]

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- 1				100	114		15.6		200	. 5		-		-	4.33				1000			ł
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1		20	10%		81	9	50	13	ЯT	d	40	\boldsymbol{C}	FR	P	art	S	2	Su	hn	art T	7	l
1		20	1%		81	9	50	13	an	d	40	C	FR	P	art	5	2.	Su	bo	art I	1	١
1		20	1%		§]	9.	50	13	an	d	40	C	FR	P	art	5	2,	Su	bp	art I	3.	١
1		20)%		§ 1	9.	50	13	an	d	40	C	FR	P	art	5	2,	Su	bp	art I	3	l
I		20	1%		§1	9.	50	13	an	d	40	C	FR	P	art	5	2,	Su	bp	art I	3.	
1		20)%		§]	9.	50	13	an	d	40	C	FR	P	art	5	2,	Su	bp	art I	3.	
1		20)%		§]	9.	50	13	an	d	40	C	FR	P	art	5	2,	Su	bp	art I	3.	
1		20)%		§1	9.	50	13	an	ď	40	C	FR	P	art	5	2,	Su	bp	art I	3	

4. The permittee shall conduct weekly observations of the opacity from source SN-01 and keep a record of these observations. If the permittee detects visible emissions in excess of 20%, the permittee must immediately take action to identify and correct the cause of

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the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [Regulation 19, §19,705 and 40 CFR Part 52, Subpart E]

SN-02 and SN-03 Planer Shavings (controlled by two cyclones)

Source Description

Dried lumber from the kilns is routed to the finishing operation where it is trimmed and planed, graded and sorted into packages for shipping. Wood shavings generated during finishing operations are collected by vacuum hoods and routed by blowers to cyclones (SN-02 and SN-03) at a truck bin. These pollution control devices are 99.9% efficient in collecting particulate matter.

Specific Conditions

5. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #20. [Regulation 19, \$19.501 et seq. and 40 CFR Part 52, Subpart E]

9.7	The control of the co	The state of the s	Company of the Compan	The same of the sa
	Source	Pollutant	Ma	ip y
	SN-02	PM	0,2	0.3
	SN-03	PM _{io}	0.2	0.3

6. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #20. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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		And and a second	Sou	ırce			P	ollu	ıtan		i.	1.00	lb/t	I		t	ру	bracket
	7777		SN	-02				Pì	VI.				1,1	5	176		0.0]
			SN	-03				Pì	VI.				1,5	.		3	0.8	

7. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [Regulation 19, §19.503 and 40 CFR Part 52, Subpart E]

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- con		SN	-02		2	99	6		§	19) .	5C	3	8	n	j,	10	C	F	R	P	aı	t	52	•	Sı	ıt	p	ırt	E	
		SN	-03	3	2	09	6		8	15).:	50)3	a	nc	1	Ю	C	F	R	P	aı	t.	52	49	Sı	ıt	pı	ırt	E	

8. The permittee shall conduct weekly observations of the opacity from sources SN-02 and SN-03 and keep a record of these observations. If the permittee detects visible emissions

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in excess of 20%, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]

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SN-06 Log Processing Rechipper (controlled by a cyclone)

Source Description

Two chippers are used in association with the log processing operations. One of the chippers discharges to the truck loading storage bin with out-of-specification chips being routed to the rechipper for future processing. The green chips exit the rechipper and are pneumatically conveyed through a cyclone to a truck bin. The capture efficiency of this pollution control device is 99.99%.

Specific Conditions

The permittee shall not exceed the emission rates set forth in the following table. The
permittee shall demonstrate compliance with this condition by compliance with Specific
Condition #20. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

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10. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #20. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

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11. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [Regulation 19, §19,503 and 40 CFR Part 52, Subpart E]

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20%	§19.503 and 40 CFR Part 52, Subpart E	ú
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12. The permittee shall conduct weekly observations of the opacity from source SN-06 and keep a record of these observations. If the permittee detects visible emissions in excess of 20%, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to

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SN-07 Quad Chipper (controlled by a cyclone)

Source Description

Sawmill operations transform logs into rough boards which are edged, trimmed, and prepared for drying. Woodwaste from the trimming operations is then chipped for use in paper mills. The woodwaste is gathered through the use of chutes and hoppers and conveyed to the chippers for size reduction. The chippers employ a blower-type discharge to the sawmill chipper discharge cyclone (SN-01) and the quad chipper cyclone (SN-07). These control devices are 99.99% efficient in capturing particulate matter.

Specific Conditions

13. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #20. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

Re	llutant	Parameter and the second secon	l l	o/hr	tpy
	PM ₁₀		in Auto I	0.3	0.7

14. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #20. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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15. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [Regulation 19, §19.503 and 40 CFR Part 52, Subpart E]

Limit			Regula	atory Ci	ation	
20%	§1	9,503 a	ınd 40 (CFR Pa	n 52, Su	bpart E

16. The permittee shall conduct weekly observations of the opacity from source SN-07 and keep a record of these observations. If the permittee detects visible emissions in excess of 20%, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective

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action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]

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SN-08 Hardwood Pre-dryer

Source Description

The drying of hard lumber is accomplished through the use of a pre-dryer (SN-08) and kilns (SN-09). The pre-dryer has a capacity of 1.75 million board feet of hardwood with a typical drying cycle of 30 days. During each drying cycle, the moisture content of the lumber is reduced from 50% to near 25%. The pre-dryer is steam-heated.

Specific Conditions

17. The permittee shall not exceed the emission rates set forth in the following table. These emission rate limits are based on the maximum capacity of the equipment. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

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- 18. The permittee shall meet all applicable requirements of 40 CFR Part 63, Subpart DDDD

 National Emission Standards for Hazardous Air Pollutants: Plywood and Composite

 Wood Products. These requirements include, but are not limited to the following:

 [Regulation 19, §19.304 and 40 CFR Part 63, Subpart DDDD]
 - a. The permittee must always operate and maintain the affected source according to the provisions in 40 CFR §63.6(e)(1)(i). [40 CFR §63.2250(b)]
 - The permittee must submit an Initial Notification no later than 120 calendar days after September 28, 2004, or after initial startup, whichever is later, as specified in 40 CFR §63.9(b)(2). [40 CFR §63.2280(b)]

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SN-09 Dry Kilns (14)

Source Description

Lumber drying is accomplished through the use of a predryer (SN-08) and 14 steam-heated kilns (SN-09). Seven of the kilns have individual capacities of 102,000 board feet, four kilns have individual capacities of 100,000 board feet, and three kilns have individual capacities of 110,000 board feet. These kilns have a standard drying time of 10 days. During each cycle, air-dried or pre-dried lumber is heated to reduce the moisture content from 25% to 6-8%.

Specific Conditions

19. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #20. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

Pollu	tant	lb/hr	tpy	
Vo	e	9.6	24.9	

- 20. The permittee shall not process more than 55 million board feet of lumber through the fourteen drying kilns per consecutive 12-month period. [Regulation 19, §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]
- 21. The permittee will maintain monthly records which demonstrate compliance with Specific Condition #20. The permittee will update the records by the fifteenth day of the month following the month to which the records pertain. These records shall be kept on site and shall be made available to Department personnel upon request. The twelvementh rolling total and each individual month's data shall be submitted in accordance with General Provision #7. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]
- 22. The permittee shall meet all applicable requirements of 40 CFR Part 63, Subpart DDDD

 National Emission Standards for Hazardous Air Pollutants: Plywood and Composite

 Wood Products. These requirements include, but are not limited to the following:

 [Regulation 19, §19.304 and 40 CFR Part 63, Subpart DDDD]
 - a. The permittee must always operate and maintain the affected source according to the provisions in 40 CFR §63.6(e)(1)(i). [40 CFR §63.2250(b)]
 - b. The permittee must submit an Initial Notification no later than 120 calendar days after September 28, 2004, or after initial startup, whichever is later, as specified in 40 CFR §63.9(b)(2). [40 CFR §63.2280(b)]

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SN-10 Peerless Bin

Source Description

Dried (cooled) lumber is routed to the finishing operation where it is trimmed and planed, graded and sorted into packages for shipping. Wood shavings generated during finishing operations are collected by vacuum hoods and routed by blowers to cyclones (SN-02 and SN-03) at a truck bin. The shavings are loaded out onto trucks through a Peerless Bin (SN-10). The collected materials are sold for use in particle board manufacturing, or are burned in the wood-fired boilers (SN-13A, SN-13B, and SN-13C).

Specific Conditions

23. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #20. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

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24. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #20. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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25. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [Regulation 19, §19.503 and 40 CFR Part 52, Subpart E]

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26. The permittee shall conduct weekly observations of the opacity from source SN-10 and keep a record of these observations. If the permittee detects visible emissions in excess of 20%, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective

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action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]

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SN-11 Chip Bin

Source Description

Wood chips from the Sawmill Chipper Cyclone (SN-01), the Log Processing Rechipper (SN-06), and the Quad Chipper (SN-07) are collected in this bin and loaded out on trucks. Analyses conducted at similar sawmill facilities indicate that the loading out of wood chips generates 0.04 pounds of particulate matter per ton of material.

Specific Conditions

27. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #20. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

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28. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #20. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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29. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [Regulation 19, §19.503 and 40 CFR Part 52, Subpart E]

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30. The permittee shall conduct weekly observations of the opacity from source SN-11 and keep a record of these observations. If the permittee detects visible emissions in excess of 20%, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to

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# SN-12 Chemical Dip Vat

Source Description

Green lumber is submerged in either Busperse 293, Busan 1009, or a dip chemical equivalent to prevent the decaying and staining of the lumber and to remove any insects that may still be present on the lumber. The dipping chemicals are stored in a 7,900-gallon open top vat. Not all of the green lumber is dipped in this tank.

# Specific Conditions

31. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Conditions #33 and #34. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

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32. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Conditions #35 and #36. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Polli	nant	lb/hr	tpy
 Diethyle: monome	ne glycol thyl ether	6.0	26.3
 Meth	ianol	0.2	0.8

33. The permittee will not exceed the limits on the chemicals used in the chemical dip vat (SN-12) listed in the following table. [Regulation 19, §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

Acceptance of the control of the con			
Chemical	VOC Content (lb/gal)	HAP Content (lb/gal)	Allowable 12 Month Usage (Gallons)
Chemical A	8.0	DEGMME 7.0 Methanol 0.2	7,500
Chemical B	No VOCs Allowed	No HAPs Allowed	No Limit

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- 34. The permittee will maintain records to demonstrate compliance with the usage and VOC content limits in Specific Condition #33. These records will include the amount of chemical compounds for use in the dip tank received at this facility and the VOC content of these compounds as documented by the manufacturer's Material Safety Data Sheet or equivalent. These records will be kept on a monthly basis and updated by the 15th day of the month following the month to which the records pertain. These records will be kept on site, made available to Department personnel upon request, and submitted in accordance with General Provision #7. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]
- 35. The permittee will maintain records of the HAPs contained in the chemical compounds used at SN-12 to demonstrate compliance with the HAP content limits in Specific Condition #33. These records will include the name of the HAP, the HAP content of the chemical compound used as documented by the manufacturer's Material Safety Data sheet or equivalent, and the TLV (Threshold Limit Value, as listed in the most recent American Conference of Governmental Industrial Hygienists handbook) of the HAP. These records will be kept on a monthly basis and updated by the 15th day of the month following the month to which the records pertain. These records will be kept on site, made available to Department personnel upon request, and submitted in accordance with General Provision #7. [Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 36. The permittee may use chemical compounds containing HAPs other than those listed in Specific Condition #33 provided that the TLV of the substituted HAP is greater than or equal to the TLV of the HAP being substituted and the emission rates set forth in Specific Condition #32 are not exceeded. Substitutions shall be fully documented in the records required by Specific Condition #35. [Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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# SN-13A, SN-13B, and SN-13C Wood-Fired Boilers (controlled by multicyclone)

# Source Description

This source consists of three 300 HP wood-fired boilers (19,0 MMBtu/hr per boiler). These boilers supply steam for the facility's dry kilns (SN-09). The boilers are controlled by multicylcones with collection efficiency greater than 95%.

# **Specific Conditions**

37. The permittee shall not exceed the emission rates set forth in the following table. These emission rate limits are based on the maximum capacity of the equipment. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

Source	Pollutant	lb/hr .	lру
	PM.	65	28.5
	w SO ₁	0.5 0.4	2.2 1.8
SN-13A	CO	11.4	50.0
	NO _x	4.2	18.4
	Lead PM ₁₀	0.0 <u>1</u> 6.5	0.01 28.5
	SQ	0.5	2.2
SN-13B	Voc	0.4	1.8
	eo Go	1) 4 42	50.0 18.4
	NO _x Lead	0.01	0.01
	PM.	6.5	28.5
	SO ₂	0.5	2.2
SN-13C	VOC CO	0.4 11.4	1.8 50.0
	NO _x	4.2	18.4
	Lead	0.01	0.01

38. The permittee shall not exceed the emission rates set forth in the following table. These emission rate limits are based on the maximum capacity of the equipment. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Source	Pollutant	16/hr tpy	
SN-13A	PM Acenapthylene Acrolein Arsenic	7.0 30.7 0.01 0.01 0.08 0.34 0.01 0.01	

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Pollutant	lb/hr	tpy
Benzene	0.08	0.35
Cadmium	0.001	0.001
Chlorine	0.02	0.07
Chromium (hexavalent)	0.01	0.01
Formaldehyde	0.09	0.37
Hydrogen Chloride	0.37	1.59
Månganese	0.04	0.14
Phenanthrene	0.01	0.01
Phenol	0.01	0.01
Styrene	0.04	0.16
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^{39.} Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [Regulation 19, §19.503 and 40 CFR Part 52, Subpart E]

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Source	Limit	Regulatory Citation
SN-13A	20%	§19.503 and 40 CFR Part 52, Subpart E
SN-13B	20%	§19.503 and 40 CFR Part 52, Subpart E
SN-13C	20%	§19.503 and 40 CFR Part 52, Subpart E

- 40. The permittee shall conduct daily observations of the opacity from sources SN-13A, SN-13B, and SN-13C and keep a record of these observations. If the permittee detects visible emissions in excess of 20%, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. These records shall also be submitted in accordance with General Provision #7. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E, and 40 CFR Part 64]
- 41. The permittee will use only wood to fuel the boilers. [Regulation No. 19 §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 42. The permittee will perform an initial test on one of the boilers (SN-13A, SN-13B, or SN-13C) while the source is operating at or above 90% of rated capacity using EPA Reference Methods 201A and 202 for PM₁₀. This test will be performed in accordance with Plantwide Condition #3. Test results will be maintained on-site, made available to Department personnel upon request, and will be submitted to the Department in accordance with Plantwide Condition #3. The Department reserves the right to select the boiler to be tested. Testing was conducted on October 27, 2004. [Regulation No. 19 §19.702 and 40 CFR Part 52, Subpart E]
- 43. The permittee will perform a one time test on one of the boilers (SN-13A, SN-13B, or SN-13C) while the source is operating at or above 90% of rated capacity using EPA Reference Method 10 for CO. This test will be performed in accordance with Plantwide Condition #3. Test results will be maintained on-site, made available to Department personnel upon request, and will be submitted to the Department in accordance with Plantwide Condition #3. The Department reserves the right to select the boiler to be tested. Testing was conducted on October 27, 2004. [Regulation No. 19 §19.702 and 40 CFR Part 52, Subpart E]
- 44. SN-13A, SN-13B, and SN-13C are subject to 40 CFR 60, Subpart Dc Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. The permittee will comply with all applicable regulations under 40 CFR Part 60, Subpart Dc. Requirements of this subpart for this facility include, but are not limited to, the following: 40 CFR 60.48c (g): records of the amount of fuel combusted for source SN-13A, SN-13B, and SN-13C; and 40 CFR 60.48c (i): maintaining these records for two years.

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The permittee is required to keep records of the fuel combusted each day by each of the three wood-fired boilers and to maintain those records for at least two years. These records will be updated by noon of the day following the day to which the records pertain. These records will be kept on site and made available to Department personnel upon request. [§19.304 of Regulation 19 and 40 CFR 60, Subpart Dc]

45. The permittee shall submit an application to the Department before March 12, 2006 for the incorporation of the requirements of 40 CFR Part 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. [§26.1011 of Regulation 26]

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# SN-14 Debarking Operations

## Source Description

Infeed systems convey the logs one at a time to the debarkers where bark is removed. The bark is collected in hoppers, mixed with sawdust, and conveyed by a chain conveyor to the Chip Bin (SN-11). The mixture of bark and sawdust is then sold or will be used as fuel.

# **Specific Conditions**

46. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #20. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

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47. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #20. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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48. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [Regulation 19, §19.503 and 40 CFR Part 52, Subpart E]

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49. The permittee shall conduct weekly observations of the opacity from source SN-14 and keep a record of these observations. If the permittee detects visible emissions in excess of 20%, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]

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# SN-15 Bark/Sawdust Storage Area

## Source Description

Green bark from the Debarkers (SN-14) is collected in hoppers, mixed with sawdust, and conveyed by a chain conveyor to the Bark/Sawdust Storage Area (SN-15). The mixture of bark and sawdust is then sold or will be used as fuel.

## **Specific Conditions**

50. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #20. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

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51. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #20. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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52. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [Regulation 19, §19.503 and 40 CFR Part 52, Subpart E]

	Limit	Regulatory C	itation
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1	20%	§19.503 and 40 CFR Pa	irt 52, Subpart E
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53. The permittee shall conduct weekly observations of the opacity from source SN-15 and keep a record of these observations. If the permittee detects visible emissions in excess of 20%, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]

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# SECTION V: COMPLIANCE PLAN AND SCHEDULE

Anthony Timberlands, Inc. will continue to operate in compliance with those identified regulatory provisions. The facility will examine and analyze future regulations that may apply and determine their applicability with any necessary action taken on a timely basis.

#### **SECTION VI: PLANTWIDE CONDITIONS**

- The permittee shall notify the Director in writing within thirty (30) days after commencing construction, completing construction, first placing the equipment and/or facility in operation, and reaching the equipment and/or facility target production rate.
   [Regulation 19, §19.704, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 2. If the permittee fails to start construction within eighteen months or suspends construction for eighteen months or more, the Director may cancel all or part of this permit. [Regulation 19, §19.410(B) and 40 CFR Part 52, Subpart E]
- 3. The permittee must test any equipment scheduled for testing, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) new equipment or newly modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source or (2) operating equipment according to the time frames set forth by the Department or within 180 days of permit issuance if no date is specified. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. The permittee shall submit the compliance test results to the Department within thirty (30) days after completing the testing. [Regulation 19, §19.702 and/or Regulation 18 §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 4. The permittee must provide: [Regulation 19, §19.702 and/or Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
  - a. Sampling ports adequate for applicable test methods;
  - b. Safe sampling platforms;
  - c. Safe access to sampling platforms; and
  - d. Utilities for sampling and testing equipment.
- 5. The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee shall maintain the equipment in good condition at all times. [Regulation 19, §19.303 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 6. This permit subsumes and incorporates all previously issued air permits for this facility. [Regulation 26 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

#### Title VI Provisions

7. The permittee must comply with the standards for labeling of products using ozone-depleting substances. [40 CFR Part 82, Subpart E]

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- a. All containers containing a class I or class II substance stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced to interstate commerce pursuant to §82.106.
- b. The placement of the required warning statement must comply with the requirements pursuant to §82.108.
- c. The form of the label bearing the required warning must comply with the requirements pursuant to §82.110.
- d. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- 8. The permittee must comply with the standards for recycling and emissions reduction, except as provided for MVACs in Subpart B. [40 CFR Part 82, Subpart F]
  - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
  - c. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC like appliance" as defined at §82.152)
  - e. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to §82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 9. If the permittee manufactures, transforms, destroys, imports, or exports a class I or class II substance, the permittee is subject to all requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.
- 10. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC 22 refrigerant.

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11. The permittee can switch from any ozone depleting substance to any alternative listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G.

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# SECTION VII: INSIGNIFICANT ACTIVITIES

The following sources are insignificant activities. Any activity that has a state or federal applicable requirement shall be considered a significant activity even if this activity meets the criteria of §304 of Regulation 26 or listed in the table below. Insignificant activity determinations rely upon the information submitted by the permittee in an application received on January 24, 2006 and correspondence received on January 27, 2006.

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# SECTION VIII: GENERAL PROVISIONS

- 1. Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute. [40 CFR 70.6(b)(2)]
- 2. This permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later. [40 CFR 70.6(a)(2) and §26.701(B) of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26), effective August 10, 2000]
- 3. The permittee must submit a complete application for permit renewal at least six (6) months before permit expiration. Permit expiration terminates the permittee's right to operate unless the permittee submitted a complete renewal application at least six (6) months before permit expiration. If the permittee submits a complete application, the existing permit will remain in effect until the Department takes final action on the renewal application. The Department will not necessarily notify the permittee when the permit renewal application is due. [Regulation 26, §26.406]
- 4. Where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, et seq. (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, the permit incorporates both provisions into the permit, and the Director or the Administrator can enforce both provisions. [40 CFR 70.6(a)(1)(ii) and Regulation 26, §26.701(A)(2)]
- 5. The permittee must maintain the following records of monitoring information as required by this permit. [40 CFR 70.6(a)(3)(ii)(A) and Regulation 26, §26.701(C)(2)]
  - a. The date, place as defined in this permit, and time of sampling or measurements;
  - b. The date(s) analyses performed;
  - c. The company or entity performing the analyses;
  - d. The analytical techniques or methods used;
  - e. The results of such analyses; and
  - f. The operating conditions existing at the time of sampling or measurement.
- 6. The permittee must retain the records of all required monitoring data and support information for at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and

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maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [40 CFR 70.6(a)(3)(ii)(B) and Regulation 26, §26.701(C)(2)(b)]

7. The permittee must submit reports of all required monitoring every six (6) months. If permit establishes no other reporting period, the reporting period shall end on the last day of the anniversary month of the initial Title V permit. The report is due within thirty (30) days of the end of the reporting period. Although the reports are due every six months, each report shall contain a full year of data. The report must clearly identify all instances of deviations from permit requirements. A responsible official as defined in Regulation No. 26, §26.2 must certify all required reports. The permittee will send the reports to the address below: [40 C.F.R. 70.6(a)(3)(iii)(A) and Regulation 26, §26.701(C)(3)(a)]

Arkansas Department of Environmental Quality Air Division ATTN: Compliance Inspector Supervisor Post Office Box 8913 Little Rock, AR 72219

- 8. The permittee will report to the Department all deviations from permit requirements, including those attributable to upset conditions as defined in the permit.
  - a. For all upset conditions (as defined in Regulation 19.601), the permittee will make an initial report to the Department by the next business day after the discovery of the occurrence. The initial report may be made by telephone and shall include:
    - i. The facility name and location,
    - ii. The process unit or emission source deviating from the permit limit,
    - iii. The permit limit, including the identification of pollutants, from which deviation occurs.
    - iv. The date and time the deviation started.
    - v. The duration of the deviation,
    - vi. The average emissions during the deviation,
    - vii. The probable cause of such deviations,
    - viii. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future, and
      - ix. The name of the person submitting the report.

The permittee will make a full report in writing to the Department within five (5) business days of discovery of the occurrence. The report must include, in addition to the information required by the initial report, a schedule of actions taken or planned to eliminate future occurrences and/or to minimize the amount the permit's limits were exceeded and to reduce the length of time the limits were exceeded. The permittee may

submit a full report in writing (by facsimile, overnight courier, or other means) by the next business day after discovery of the occurrence, and the report will serve as both the initial report and full report.

- b. For all deviations, the permittee will report such events in semi-annual reporting and annual certifications required in this permit. This includes all upset conditions reported in 8a. above. The semi-annual report must include all the information as required in the initial and full report required in 8a.
  - [40 CFR 70.6(a)(3)(iii)(B), Regulation No. 26 §26.701(C)(3)(b), Regulation No. 19 §19.601 and §19.602]
- 9. If any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity will not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable. [40 CFR 70.6(a)(5), Regulation 26, §26.701(E), and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 10. The permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation 26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. §7401, et seq. and is grounds for enforcement action; for permit termination, revocation and reissuance, for permit modification; or for denial of a permit renewal application. [40 CFR 70.6(a)(6)(i) and Regulation 26, §26.701(F)(1)]
- 11. 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 to maintain compliance with the conditions of this permit. [40 CFR 70.6(a)(6)(ii) and Regulation 26, §26.701(F)(2)]
- 12. The Department may modify, revoke, reopen and reissue the permit or terminate the permit for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [40 CFR 70.6(a)(6)(iii) and Regulation 26, §26.701(F)(3)]
- 13. This permit does not convey any property rights of any sort, or any exclusive privilege. [40 CFR 70.6(a)(6)(iv) and Regulation 26, §26.701(F)(4)]
- 14. The permittee must furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee must also furnish to the Director copies of records required by the permit. For information the permittee claims confidentiality, the Department may require the permittee to furnish such records directly to the Director

- along with a claim of confidentiality. [40 CFR 70.6(a)(6)(v) and Regulation 26, §26.701(F)(5)]
- 15. The permittee must pay all permit fees in accordance with the procedures established in Regulation 9: [40 CFR 70.6(a)(7) and Regulation 26, §26.701(G)]
- 16. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes provided for elsewhere in this permit. [40 CFR 70.6(a)(8) and Regulation 26, \$26.701(H)]
- 17. If the permit allows different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the operational scenario. [40 CFR 70.6(a)(9)(i) and Regulation 26; §26.701(I)(1)]
- 18. The Administrator and citizens may enforce under the Act all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, unless the Department specifically designates terms and conditions of the permit as being federally unenforceable under the Act or under any of its applicable requirements. [40 CFR 70.6(b) and Regulation 26, §26.702(A) and (B)]
- 19. Any document (including reports) required by this permit must contain a certification by a responsible official as defined in Regulation 26, §26.2. [40 CFR 70.6(c)(1) and Regulation 26, §26,703(A)]
- The permittee must allow an authorized representative of the Department, upon presentation of credentials, to perform the following: [40 CFR 70.6(c)(2) and Regulation 26, §26.703(B)]
  - a. Enter upon the permittee's premises where the permitted source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit:
  - Have access to and copy, at reasonable times, any records required under the conditions of this permit;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
  - d. As authorized by the Act, sample or monitor at reasonable times substances or parameters for assuring compliance with this permit or applicable requirements.
  - 21. The permittee shall submit a compliance certification with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The permittee must submit the compliance certification annually within 30 days following the last day of the anniversary month of the initial Title V permit. The permittee must also submit the compliance certification to the Administrator as well as to the Department.



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APPENDIX A

# 40 CFR Part 60, Subpart De—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

Source: 55 FR 37683, Sept. 12, 1990, unless otherwise noted.

§ 60.40c Applicability and delegation of authority.

- (a) Except as provided in paragraph (d) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million Btu per hour (Btu/hr)) or less, but greater than or equal to 2.9 MW (10 million Btu/hr).
- (b) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, §60.48c(a)(4) shall be retained by the Administrator and not transferred to a State.
- (c) Steam generating units which meet the applicability requirements in paragraph (a) of this section are not subject to the sulfur dioxide (SO₂) or particulate matter (PM) emission limits, performance testing requirements, or monitoring requirements under this subpart (§§60.42c, 60.43c, 60.44c, 60.45c, 60.46c, or 60.47c) during periods of combustion research, as defined in §60.41c.
- (d) Any temporary change to an existing steam generating unit for the purpose of conducting combustion research is not considered a modification under §60.14.

[55 FR 37683, Sept. 12, 1990, as amended at 61 FR 20736, May 8, 1996]

§ 60.41c Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from an individual fuel or combination of fuels during a period of 12 consecutive calendar months and the potential heat input to the steam generating unit from all fuels had the steam ch a separate source (such as a stationary gas turbine, internal combustion engine, or kiln) provides exhaust gas to a steam generating unit.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society for Testing and Materials in ASTM D388-77, "Standard Specification for Classification of Coals by Rank" (incorporated by reference—see §60.17); coal refuse; and petroleum coke. Synthetic fuels derived from coal for the purpose of creating useful heat, including but not limited to solvent-refined coal, gasified coal, coal-oil mixtures, and coal-water mixtures, are included in this definition for the purposes of this subpart.

Coal refuse means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (kJ/kg) (6,000 Btu per pound (Btu/lb) on a dry basis.

Cogeneration steam generating unit means a steam generating unit that simultaneously produces both electrical (or mechanical) and thermal energy from the same primary energy source.

Combined cycle system means a system in which a separate source (such as a stationary gas turbine, internal combustion engine, or kiln) provides exhaust gas to a steam generating unit.

Combustion research means the experimental firing of any fuel or combination of fuels in a steam generating unit for the purpose of conducting research and development of more efficient combustion or more effective prevention or control of air pollutant emissions from combustion, provided that, during these periods of research and development, the heat generated is not used for any purpose other than preheating combustion air for use by that steam generating unit (i.e., the heat generated is released to the atmosphere without being used for space heating, process heating, driving pumps, preheating combustion air for other units, generating electricity, or any other purpose).

Conventional technology means wet flue gas desulfurization technology, dry flue gas desulfurization technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-78, 89, 90, 92, 96, or 98, "Standard Specification for Fuel Oils" (incorporated by reference—see §60.17)

Dry flue gas desulfurization technology means a sulfur dioxide (SO₂) control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline reagents used in dry flue gas desulfurization systems include, but are not limited to, lime and sodium compounds.

Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source (such as a stationary gas turbine, internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

Emerging technology means any SO₂ control system that is not defined as a conventional technology under this section, and for which the owner or operator of the affected facility has received approval from the Administrator to operate as an emerging technology under §60.48c(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR Parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 40 CFR 51.24.

Fluidized bed combustion technology means a device wherein fuel is distributed onto a bed (or series of beds) of limestone aggregate (or other sorbent materials) for combustion; and these materials are forced upward in the device by the flow of combustion air and the gaseous products of combustion. Fluidized bed combustion technology includes, but is not limited to, bubbling bed units and circulating bed units.

Fuel pretreatment means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources (such as stationary gas turbines, internal combustion engines, and kilns).

Heat transfer medium means any material that is used to transfer heat from one point to another point.

Maximum design heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel (or combination of fuels) on a steady state basis as determined by the physical design and characteristics of the steam generating unit.

Natural gas means (1) a naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is

methane, or (2) liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835-86, 87, 91, or 97, "Standard Specification for Liquefied Petroleum Gases" (incorporated by reference—see §60.17).

Noncontinental area means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Oil means crude oil or petroleum, or a liquid fuel derived from crude oil or petroleum, including distillate oil and residual oil.

Potential sulfur dioxide emission rate means the theoretical SO₂ emissions (nanograms per joule [ng/J], or pounds per million Btu [lb/million Btu] heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.

Process heater means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

Residual oil means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American

Society for Testing and Materials in ASTM D396-78, 89, 90, 92, 96, or 98, "Standard Specification for Fuel Oils" (incorporated by reference—see §60.17).

Steam generating unit means a device that combusts any fuel and produces steam or heats water or any other heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Wet flue gas desulfurization technology means an SO₂ control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a liquid material. This definition includes devices where the liquid material is subsequently converted to another form. Alkaline reagents used in wet flue gas desulfurization systems include, but are not limited to, lime, limestone, and sodium compounds.

Wet scrubber system means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of particulate matter (PM) or SO₂.

Wood means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

[55 FR 37683, Sept. 12, 1990, as amended at 61 FR 20736, May 8, 1996; 65 FR 61752, Oct. 17, 2000]

#### § 60.42c Standard for sulfur dioxide.

(a) Except as provided in paragraphs (b), (c), and (e) of this section, on and after the date on which the initial performance test is completed or required to be completed under §60.8 of this part, whichever date comes first, the owner or operator of an affected facility that combusts only coal shall neither: (1) cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 10 percent (0.10) of the potential SO₂ emission rate (90 percent reduction); nor (2) cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 520 ng/J (1.2 lb/million Btu) heat input. If coal is combusted with other fuels, the affected facility is subject to the 90 percent SO₂ reduction requirement specified in this paragraph and the emission limit is determined pursuant to paragraph (e)(2) of this section.

- (b) Except as provided in paragraphs (c) and (e) of this section, on and after the date on which the initial performance test is completed or required to be completed under §60.8 of this part, whichever date comes first, the owner or operator of an affected facility that:
- (1) Combusts coal refuse alone in a fluidized bed combustion steam generating unit shall neither:
- (i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 20 percent (0.20) of the potential SO₂ emission rate (80 percent reduction); nor
- (ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 520 ng/J (1.2 lb/million Btu) heat input. If coal is fired with coal refuse, the affected facility is subject to paragraph (a) of this section. If oil or any other fuel (except coal) is fired with coal refuse, the affected facility is subject to the 90 percent SO₂ reduction requirement specified in paragraph (a) of this section and the emission limit determined pursuant to paragraph (e)(2) of this section.
- (2) Combusts only coal and that uses an emerging technology for the control of SO₂ emissions shall neither:
- (i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 50 percent (0.50) of the potential SO₂ emission rate (50 percent reduction); nor
- (ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 260 ng/J (0.60 lb/million Btu) heat input. If coal is combusted with other fuels, the affected facility is subject to the 50 percent SO₂ reduction requirement specified in this paragraph and the emission limit determined pursuant to paragraph (e)(2) of this section.
- (c) On and after the date on which the initial performance test is completed or required to be completed under §60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts coal, alone or in combination with any other fuel, and is listed in paragraphs (c)(1), (2), (3), or (4) of this section shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of the emission limit determined pursuant to paragraph (e)(2) of this section. Percent reduction requirements are not applicable to affected facilities under paragraphs (c)(1), (2), (3), or (4).
- (1) Affected facilities that have a heat input capacity of 22 MW (75 million Btu/hr) or less.
- (2) Affected facilities that have an annual capacity for coal of 55 percent (0.55) or less and are subject to a Federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for coal of 55 percent (0.55) or less.
- (3) Affected facilities located in a noncontinental area.
- (4) Affected facilities that combust coal in a duct burner as part of a combined cycle system where 30 percent (0.30) or less of the heat entering the steam generating unit is from combustion

of coal in the duct burner and 70 percent (0.70) or more of the heat entering the steam generating unit is from exhaust gases entering the duct burner.

- (d) On and after the date on which the initial performance test is completed or required to be completed under §60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 215 ng/J (0.50 lb/million Btu) heat input; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.
- (e) On and after the date on which the initial performance test is completed or required to be completed under §60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, or coal and oil with any other fuel shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of the following:
- (1) The percent of potential SO₂ emission rate required under paragraph (a) or (b)(2) of this section, as applicable, for any affected facility that
- (i) Combusts coal in combination with any other fuel,
- (ii) Has a heat input capacity greater than 22 MW (75 million Btu/hr), and
- (iii) Has an annual capacity factor for coal greater than 55 percent (0.55); and
- (2) The emission limit determined according to the following formula for any affected facility that combusts coal, oil, or coal and oil with any other fuel:

$$E_s = (K_a H_a + K_b H_b + K_c H_c)/H_a + H_b + H_c)$$

where:

E_s is the SO₂ emission limit, expressed in ng/J or lb/million Btu heat input,

Ka is 520 ng/J (1.2 lb/million Btu),

K_b is 260 ng/J (0.60 lb/million Btu),

 $K_c$  is 215 ng/J (0.50 lb/million Btu),

H_a is the heat input from the combustion of coal, except coal combusted in an affected facility subject to paragraph (b)(2) of this section, in Joules (J) [million Btu]

H_b is the heat input from the combustion of coal in an affected facility subject to paragraph (b)(2) of this section, in J (million Btu)

- He is the heat input from the combustion of oil, in J (million Btu).
- (f) Reduction in the potential SO₂ emission rate through fuel pretreatment is not credited toward the percent reduction requirement under paragraph (b)(2) of this section unless:
- (1) Fuel prétreatment results in a 50 percent (0.50) or greater reduction in the potential SO₂ emission rate; and
- (2) Emissions from the pretreated fuel (without either combustion or post-combustion SO₂ control) are equal to or less than the emission limits specified under paragraph (b)(2) of this section.
- (g) Except as provided in paragraph (h) of this section, compliance with the percent reduction requirements, fuel oil sulfur limits, and emission limits of this section shall be determined on a 30-day rolling average basis.
- (h) For affected facilities listed under paragraphs (h)(1), (2), or (3) of this section, compliance with the emission limits or fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier, as described under §60.48c(f)(1), (2), or (3), as applicable.
- (1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 million Btu/hr).
- (2) Residual oil-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 million Btu/hr).
- (3) Coal-fired facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 million Btu/hr).
- (i) The SO₂ emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.
- (j) Only the heat input supplied to the affected facility from the combustion of coal and oil is counted under this section. No credit is provided for the heat input to the affected facility from wood or other fuels or for heat derived from exhaust gases from other sources, such as stationary gas turbines, internal combustion engines, and kilns.

[55 FR 37683, Sept. 12, 1990, as amended at 65 FR 61753, Oct. 17, 2000]

### § 60.43c Standard for particulate matter.

(a) On and after the date on which the initial performance test is completed or required to be completed under §60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts coal or combusts mixtures of coal with other fuels and has a heat input capacity of 8.7 MW (30 million Btu/hr) or greater, shall cause to be discharged into the

atmosphere from that affected facility any gases that contain PM in excess of the following emission limits:

- (1) 22 ng/J (0.051 lb/million Btu) heat input if the affected facility combusts only coal, or combusts coal with other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less.
- (2) 43 ng/J (0.10 lb/million Btu) heat imput if the affected facility combusts coal with other fuels, has an annual capacity factor for the other fuels greater than 10 percent (0.10), and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor greater than 10 percent (0.10) for fuels other than coal.
- (b) On and after the date on which the initial performance test is completed or required to be completed under §60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts wood or combusts mixtures of wood with other fuels (except coal) and has a heat input capacity of 8.7 MW (30 million Btu/hr) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emissions limits:
- (1) 43 ng/J (0.10 lb/million Btu) heat input if the affected facility has an annual capacity factor for wood greater than 30 percent (0.30); or
- (2) 130 ng/J (0.30 lb/million Btu) heat input if the affected facility has an annual capacity factor for wood of 30 percent (0.30) or less and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for wood of 30 percent (0.30) or less.
- (c) On and after the date on which the initial performance test is completed or required to be completed under §60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts coal, wood, or oil and has a heat input capacity of 8.7 MW (30 million Btu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.
- (d) The PM and opacity standards under this section apply at all times, except during periods of startup, shutdown, or malfunction.

[55 FR 37683, Sept. 12, 1990, as amended at 65 FR 61753, Oct. 17, 2000]

§ 60.44c Compliance and performance test methods and procedures for sulfur dioxide.

(a) Except as provided in paragraphs (g) and (h) of this section and in §60.8(b), performance tests required under §60.8 shall be conducted following the procedures specified in paragraphs (b), (c), (d), (e), and (f) of this section, as applicable. Section 60.8(f) does not apply to this section. The 30-day notice required in §60.8(d) applies only to the initial performance test unless otherwise specified by the Administrator.

- (b) The initial performance test required under §60.8 shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the percent reduction requirements and SO₂ emission limits under §60.42c shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affect facility will be operated, but not later than 180 days after the initial startup of the facility. The steam generating unit load during the 30-day period does not have to be the maximum design heat input capacity, but must be representative of future operating conditions.
- (c) After the initial performance test required under paragraph (b) and §60.8, compliance with the percent reduction requirements and SO₂ emission limits under §60.42c is based on the average percent reduction and the average SO₂ emission rates for 30 consecutive steam generating unit operating days. A separate performance test is completed at the end of each steam generating unit operating day, and a new 30-day average percent reduction and SO₂ emission rate are calculated to show compliance with the standard.
- (d) If only coal, only oil, or a mixture of coal and oil is combusted in an affected facility, the procedures in Method 19 are used to determine the hourly  $SO_2$  emission rate ( $E_{ho}$ ) and the 30-day average  $SO_2$  emission rate ( $E_{ao}$ ). The hourly averages used to compute the 30-day averages are obtained from the continuous emission monitoring system (CEMS). Method 19 shall be used to calculate  $E_{ao}$  when using daily fuel sampling or Method 6B.
- (e) If coal, oil, or coal and oil are combusted with other fuels:
- (1) An adjusted  $E_{ho}$  ( $E_{ho}$ 0) is used in Equation 19–19 of Method 19 to compute the adjusted  $E_{ao}$  ( $E_{ao}$ 0). The  $E_{ho}$ 0 is computed using the following formula:

 $E_{ho}o=[E_{ho}-E_w(1-X_k)]/X_k$ 

where:

Ehoo is the adjusted Eho, ng/J (lb/million Btu)

E_{bo} is the hourly SO₂ emission rate, ng/J (lb/million Btu)

 $E_w$  is the SO₂ concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 9, ng/J (lb/million Btu). The value  $E_w$  for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure  $E_w$  if the owner or operator elects to assume  $E_w$ =0.

X_k is the fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19.

(2) The owner or operator of an affected facility that qualifies under the provisions of §60.42c(c) or (d) [where percent reduction is not required] does not have to measure the parameters E_w or

 $X_k$  if the owner or operator of the affected facility elects to measure emission rates of the coal or oil using the fuel sampling and analysis procedures under Method 19.

- (f) Affected facilities subject to the percent reduction requirements under \$60.42c(a) or (b) shall determine compliance with the SO₂ emission limits under \$60.42c pursuant to paragraphs (d) or (e) of this section, and shall determine compliance with the percent reduction requirements using the following procedures:
- (1) If only coal is combusted, the percent of potential SO₂ emission rate is computed using the following formula;

$$%P_s=100(1-%R_g/100)(1-%R_f/100)$$

where

%Ps is the percent of potential SO₂ emission rate, in percent

%R_g is the SO₂ removal efficiency of the control device as determined by Method 19, in percent

%R_f is the SO₂ removal efficiency of fuel pretreatment as determined by Method 19, in percent

- (2) If coal, oil, or coal and oil are combusted with other fuels, the same procedures required in paragraph (f)(1) of this section are used, except as provided for in the following:
- (i) To compute the  $%P_s$ , an adjusted  $%R_g$  ( $%R_g$ 0) is computed from  $E_{a0}$ 0 from paragraph (e)(1) of this section and an adjusted average  $SO_2$  inlet rate ( $E_{ai}$ 0) using the following formula:

$$%R_{go}=100 [1.0-E_{ao}o/E_{ai}o)]$$

where:

%Rgo is the adjusted %Rg, in percent

E_{ao}o is the adjusted E_{ao}, ng/J (lb/million Btu)

Eaio is the adjusted average SO2 inlet rate, ng/J (lb/million Btu)

(ii) To compute  $E_{aio}$ , an adjusted hourly  $SO_2$  inlet rate ( $E_{hio}$ ) is used. The  $E_{hio}$  is computed using the following formula:

$$E_{hi}o=[E_{hi}-E_{w}(1-X_{k})]/X_{k}$$

where:

Ehio is the adjusted Ehi, ng/J (lb/million Btu)

E_{hi} is the hourly SO₂ inlet rate, ng/J (lb/million Btu)

 $E_w$  is the  $SO_2$  concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 19, ng/J (lb/million Btu). The value  $E_w$  for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure  $E_w$  if the owner or operator elects to assume  $E_w = O$ .

 $X_k$  is the fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19.

- (g) For oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under §60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under §60.46c(d)(2).
- (h) For affected facilities subject to  $\S60.42c(h)(1)$ , (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO₂ standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under  $\S60.48c(f)(1)$ , (2), or (3), as applicable.
- (i) The owner or operator of an affected facility seeking to demonstrate compliance with the SO₂ standards under §60.42c(c)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.
- (j) The owner or operator of an affected facility shall use all valid  $SO_2$  emissions data in calculating %P_s and E_{ho} under paragraphs (d), (e), or (f) of this section, as applicable, whether or not the minimum emissions data requirements under  $\S60.46c(f)$  are achieved. All valid emissions data, including valid data collected during periods of startup, shutdown, and malfunction, shall be used in calculating %P_s or E_{ho} pursuant to paragraphs (d), (e), or (f) of this section, as applicable.

[55 FR 37683, Sept. 12, 1990, as amended at 65 FR 61753, Oct. 17, 2000]

§ 60.45c Compliance and performance test methods and procedures for particulate matter.

(a) The owner or operator of an affected facility subject to the PM and/or opacity standards under §60.43c shall conduct an initial performance test as required under §60.8, and shall conduct

subsequent performance tests as requested by the Administrator, to determine compliance with the standards using the following procedures and reference methods.

- (1) Method 1 shall be used to select the sampling site and the number of traverse sampling points.
- (2) Method 3 shall be used for gas analysis when applying Method 5, Method 5B, or Method 17.
- (3) Method 5, Method 5B, or Method 17 shall be used to measure the concentration of PM as follows:
- (i) Method 5 may be used only at affected facilities without wet scrubber systems.
- (ii) Method 17 may be used at affected facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of Sections 8.1 and 11.1 of Method 5B may be used in Method 17 only if Method 17 is used in conjunction with a wet scrubber system. Method 17 shall not be used in conjunction with a wet scrubber system if the effluent is saturated or laden with water droplets.
- (iii) Method 5B may be used in conjunction with a wet scrubber system.
- (4) The sampling time for each run shall be at least 120 minutes and the minimum sampling volume shall be 1.7 dry standard cubic meters (dscm) [60 dry standard cubic feet (dscf)] except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.
- (5) For Method 5 or Method 5B, the temperature of the sample gas in the probe and filter holder shall be monitored and maintained at 160±14 °C (320±25 °F).
- (6) For determination of PM emissions, an oxygen or carbon dioxide measurement shall be obtained simultaneously with each run of Method 5, Method 5B, or Method 17 by traversing the duct at the same sampling location.
- (7) For each run using Method 5, Method 5B, or Method 17, the emission rates expressed in ng/J (lb/million Btu) heat input shall be determined using:
- (i) The oxygen or carbon dioxide measurements and PM measurements obtained under this section,
- (ii) The dry basis F-factor, and
- (iii) The dry basis emission rate calculation procedure contained in Method 19 (appendix A).
- (8) Method 9 (6-minute average of 24 observations) shall be used for determining the opacity of stack emissions.

(b) The owner or operator of an affected facility seeking to demonstrate compliance with the PM standards under §60.43c(b)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

[55 FR 37683, Sept. 12, 1990, as amended at 65 FR 61753, Oct. 17, 2000]

# § 60.46c Emission monitoring for sulfur dioxide

- (a) Except as provided in paragraphs (d) and (e) of this section, the owner or operator of an affected facility subject to the SO₂ emission limits under §60,42c shall install, calibrate, maintain, and operate a CEMS for measuring SO₂ concentrations and either oxygen or carbon dioxide concentrations at the outlet of the SO₂ control device (or the outlet of the steam generating unit if no SO₂ control device is used), and shall record the output of the system. The owner or operator of an affected facility subject to the percent reduction requirements under §60.42c shall measure SO₂ concentrations and either oxygen or carbon dioxide concentrations at both the inlet and outlet of the SO₂ control device.
- (b) The 1-hour average SO₂ emission rates measured by a CEMS shall be expressed in ng/J or 1b/million Btu heat input and shall be used to calculate the average emission rates under §60.42c. Each 1-hour average SO₂ emission rate must be based on at least 30 minutes of operation and include at least 2 data points representing two 15-minute periods. Hourly SO₂ emission rates are not calculated if the affected facility is operated less than 30 minutes in a 1-hour period and are not counted toward determination of a steam generating unit operating day.
  - (c) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the CEMS.
  - (1) All CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 (appendix B).
  - (2) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 (appendix F).
  - (3) For affected facilities subject to the percent reduction requirements under §60.42c, the span value of the SO₂ CEMS at the inlet to the SO₂ control device shall be 125 percent of the maximum estimated hourly potential SO₂ emission rate of the fuel combusted, and the span value of the SO₂ CEMS at the outlet from the SO₂ control device shall be 50 percent of the maximum estimated hourly potential SO₂ emission rate of the fuel combusted.

- (4) For affected facilities that are not subject to the percent reduction requirements of §60.42c, the span value of the SO₂ CEMS at the outlet from the SO₂ control device (or outlet of the steam generating unit if no SO₂ control device is used) shall be 125 percent of the maximum estimated hourly potential SO₂ emission rate of the fuel combusted.
- (d) As an alternative to operating a CEMS at the inlet to the SO₂ control device (or outlet of the steam generating unit if no SO₂ control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO₂ emission rate by sampling the fuel prior to combustion. As an alternative to operating a CEMS at the outlet from the SO₂ control device (or outlet of the steam generating unit if no SO₂ control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO₂ emission rate by using Method 6B. Fuel sampling shall be conducted pursuant to either paragraph (d)(1) or (d)(2) of this section. Method 6B shall be conducted pursuant to paragraph (d)(3) of this section.
- (1) For affected facilities combusting coal or oil, coal or oil samples shall be collected daily in an as-fired condition at the inlet to the steam generating unit and analyzed for sulfur content and heat content according the Method 19. Method 19 provides procedures for converting these measurements into the format to be used in calculating the average SO₂ input rate.
- (2) As an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fule tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.
- (3) Method 6B may be used in lieu of CEMS to measure SO₂ at the inlet or outlet of the SO₂ control system. An initial stratification test is required to verify the adequacy of the Method 6B sampling location. The stratification test shall consist of three paired runs of a suitable SO₂ and carbon dioxide measurement train operated at the candidate location and a second similar train operated according to the procedures in §3.2 and the applicable procedures in section 7 of Performance Specification 2 (appendix B). Method 6B, Method 6A, or a combination of Methods 6 and 3 or Methods 6C and 3A are suitable measurement techniques. If Method 6B is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both sampling trains are to be operated similarly. For the location to be adequate for Method 6B 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent (0.10).
- (e) The monitoring requirements of paragraphs (a) and (d) of this section shall not apply to affected facilities subject to \$60.42c(h) (1), (2), or (3) where the owner or operator of the

affected facility seeks to demonstrate compliance with the SO₂ standards based on fuel supplier certification, as described under §60.48c(f) (1), (2), or (3), as applicable:

(f) The owner or operator of an affected facility operating a CEMS pursuant to paragraph (a) of this section, or conducting as-fired fuel sampling pursuant to paragraph (d)(1) of this section, shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive steam generating unit operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the Administrator.

[55 FR 37683, Sept. 12, 1990, as amended at 65 FR 61753, Oct. 17, 2000]

# § 60.47c Emission monitoring for particulate matter.

- (a) The owner or operator of an affected facility combusting coal, residual oil, or wood that is subject to the opacity standards under §60.43c shall install, calibrate, maintain, and operate a COMS for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system.
- (b) All COMS for measuring opacity shall be operated in accordance with the applicable procedures under Performance Specification 1 (appendix B). The span value of the opacity COMS shall be between 60 and 80 percent.
- _ [55 FR 37683, Sept. 12, 1990, as amended at 65 FR 61753, Oct. 17, 2000]
  - § 60.48c Reporting and recordkeeping requirements.
    - (a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by \$60.7 of this part. This notification shall include:
    - (1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.
    - (2) If applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under §60.42c, or §60.43c.
    - (3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.
  - (4) Notification if an emerging technology will be used for controlling SO₂ emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of §60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.

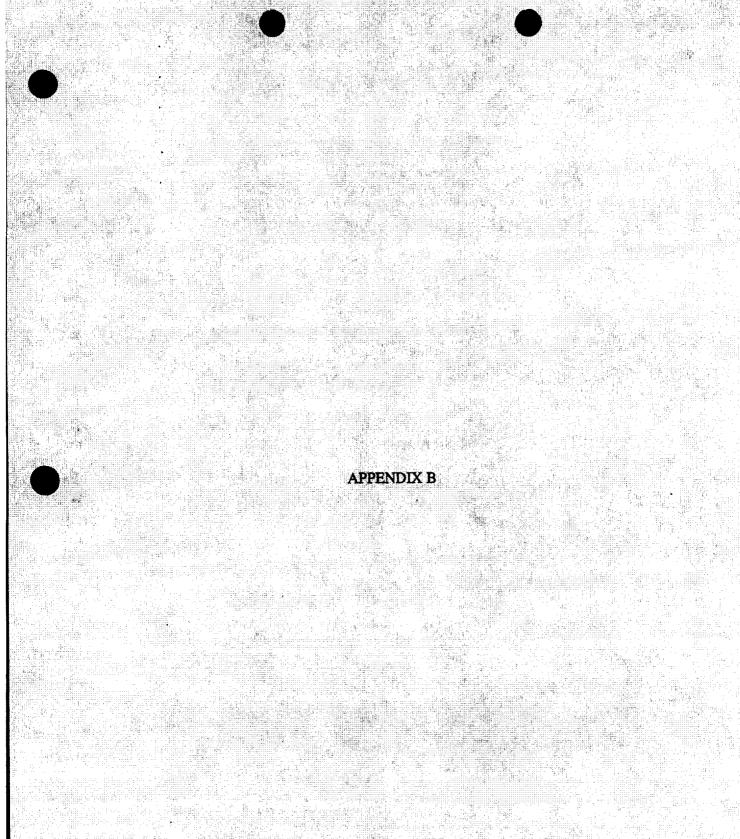
- (b) The owner or operator of each affected facility subject to the SO₂ emission limits of §60.42c, or the PM or opacity limits of §60.43c, shall submit to the Administrator the performance test data from the initial and any subsequent performance tests and, if applicable, the performance evaluation of the CEMS and/or COMS using the applicable performance specifications in appendix B.
- (c) The owner or operator of each coal-fired, residual oil-fired, or wood-fired affected facility subject to the opacity limits under §60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility which occur during the reporting period.
- (d) The owner or operator of each affected facility subject to the SO₂ emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.42c shall submit reports to the Administrator.
- (e) The owner or operator of each affected facility subject to the SO₂ emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.43c shall keep records and submit reports as required under paragraph (d) of this section, including the following information, as applicable.
- (1) Calendar dates covered in the reporting period.
- (2) Each 30-day average SO₂ emission rate (nj/J or lb/million Btu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.
- (3) Each 30-day average percent of potential SO₂ emission rate calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of the corrective actions taken.
- (4) Identification of any steam generating unit operating days for which SO₂ or diluent (oxygen or carbon dioxide) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.
- (5) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.
- (6) Identification of the F factor used in calculations, method of determination, and type of fuel combusted.
- (7) Identification of whether averages have been obtained based on CEMS rather than manual sampling methods.

- (8) If a CEMS is used, identification of any times when the pollutant concentration exceeded the full span of the CEMS.
- (9) If a CEMS is used, description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specifications 2 or 3 (appendix B).
- (10) If a CEMS is used, results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1.
- (11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1), (2), or (3) of this section, as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.
- (f) Fuel supplier certification shall include the following information:
- (I) For distillate oil:
- (i) The name of the oil supplier, and
- (ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c.
  - (2) For residual oil:
- (i) The name of the oil supplier;
  - (ii) The location of the oil when the sample was drawn for analysis to determine the sulfur content of the oil, specifically including whether the oil was sampled as delivered to the affected facility, or whether the sample was drawn from oil in storage at the oil supplier's or oil refiner's facility, or other location;
  - (iii) The sulfur content of the oil from which the shipment came (or of the shipment itself); and
  - (iv) The method used to determine the sulfur content of the oil.
  - (3) For coal:
  - (i) The name of the coal supplier;
  - (ii) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether the sample was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall

include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected);

- (iii) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and
- (iv) The methods used to determine the properties of the coal.
- (g) The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.
- (h) The owner or operator of each affected facility subject to a Federally enforceable requirement limiting the annual capacity factor for any fuel or mixture of fuels under §60.42c or §60.43c shall calculate the annual capacity factor individually for each fuel combusted. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of the calendar month.
- (i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.
- (j) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

[55 FR 37683, Sept. 12, 1990, as amended at 64 FR 7465, Feb. 12, 1999; 65 FR 61753, Oct. 17, 2000]



# 40 CFR Part 63, Subpart DDDD - National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products

Source: 69 FR 46011, July 30, 2004, unless otherwise noted.

# § 63.2230 What is the purpose of this subpart?

This subpart establishes national compliance options, operating requirements, and work practice requirements for hazardous air pollutants (HAP) emitted from plywood and composite wood products (PCWP) manufacturing facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the compliance options, operating requirements, and work practice requirements.

# § 63.2231 Does this subpart apply to me?

This subpart applies to you if you meet the criteria in paragraphs (a) and (b) of this section, except for facilities that the Environmental Protection Agency (EPA) determines are part of the low-risk subcategory of PCWP manufacturing facilities as specified in appendix B to this subpart.

- (a) You own or operate a PCWP manufacturing facility. A PCWP manufacturing facility is a facility that manufactures plywood and/or composite wood products by bonding wood material (fibers, particles, strands, veneers, etc.) or agricultural fiber, generally with resin under heat and pressure, to form a structural panel or engineered wood product. Plywood and composite wood products manufacturing facilities also include facilities that manufacture dry veneer and lumber kilns located at any facility. Plywood and composite wood products include, but are not limited to, plywood, veneer, particleboard, oriented strandboard, hardboard, fiberboard, medium density fiberboard, laminated strand lumber, laminated veneer lumber, wood I-joists, kiln-dried lumber, and glue-laminated beams.
- (b) The PCWP manufacturing facility is located at a major source of HAP emissions. A major source of HAP emissions is any stationary source or group of stationary sources within a contiguous area and under common control that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (10 tons) or more per year or any combination of HAP at a rate of 22.68 megagrams (25 tons) or more per year.

### § 63.2232 What parts of my plant does this subpart cover?

- (a) This subpart applies to each new, reconstructed, or existing affected source at a PCWP manufacturing facility.
- (b) The affected source is the collection of dryers, refiners, blenders, formers, presses, board coolers, and other process units associated with the manufacturing of plywood and composite wood products. The affected source includes, but is not limited to, green end operations, refining, drying operations, resin preparation, blending and forming operations, pressing and board

cooling operations, and miscellaneous finishing operations (such as sanding, sawing, patching, edge sealing, and other finishing operations not subject to other National Emission Standards for Hazardous Air Pollutants (NESHAP)). The affected source also includes onsite storage and preparation of raw materials used in the manufacture of plywood and/or composite wood products, such as resins; onsite wastewater treatment operations specifically associated with plywood and composite wood products manufacturing; and miscellaneous coating operations (§63.2292). The affected source includes lumber kilns at PCWP manufacturing facilities and at any other kind of facility.

- (c) An affected source is a new affected source if you commenced construction of the affected source after January 9, 2003, and you meet the applicability criteria at the time you commenced construction.
- (d) An affected source is reconstructed if you meet the criteria as defined in §63.2.
- (e) An affected source is existing if it is not new or reconstructed.

### § 63.2233 When do I have to comply with this subpart?

- (a) If you have a new or reconstructed affected source, you must comply with this subpart according to paragraph (a)(1) or (2) of this section, whichever is applicable.
- (1) If the initial startup of your affected source is before September 28, 2004, then you must comply with the compliance options, operating requirements, and work practice requirements for new and reconstructed sources in this subpart no later than September 28, 2004.
- (2) If the initial startup of your affected source is after September 28, 2004, then you must comply with the compliance options, operating requirements, and work practice requirements for new and reconstructed sources in this subpart upon initial startup of your affected source.
- (b) If you have an existing affected source, you must comply with the compliance options, operating requirements, and work practice requirements for existing sources no later than October 1, 2007.
- (c) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, you must be in compliance with this subpart by October 1, 2007 or upon initial startup of your affected source as a major source, whichever is later.
- (d) You must meet the notification requirements according to the schedule in §63.2280 and according to 40 CFR part 63, subpart A. Some of the notifications must be submitted before you are required to comply with the compliance options, operating requirements, and work practice requirements in this subpart.

Compliance Options, Operating Requirements, and Work Practice Requirements

§ 63.2240 What are the compliance options and operating requirements and how must I meet them?

You must meet the compliance options and operating requirements described in Tables 1A, 1B, and 2 to this subpart and in paragraph (c) of this section by using one or more of the compliance options listed in paragraphs (a), (b), and (c) of this section. The process units subject to the compliance options are listed in Tables 1A and 1B to this subpart and are defined in §63.2292. You need only to meet one of the compliance options outlined in paragraphs (a) through (c) of this section for each process unit. You cannot combine compliance options in paragraph (a), (b), or (c) for a single process unit. (For example, you cannot use a production-based compliance option in paragraph (a) for one vent of a veneer dryer and an add-on control system compliance option in paragraph (b) for another vent on the same veneer dryer. You must use either the production-based compliance option or an add-on control system compliance option for the entire dryer.)

- (a) Production-based compliance options. You must meet the production-based total HAP compliance options in Table 1A to this subpart and the applicable operating requirements in Table 2 to this subpart. You may not use an add-on control system or wet control device to meet the production-based compliance options.
- (b) Compliance options for add-on control systems. You must use an emissions control system and demonstrate that the resulting emissions meet the compliance options and operating requirements in Tables 1B and 2 to this subpart. If you own or operate a reconstituted wood product press at a new or existing affected source or a reconstituted wood product board cooler at a new affected source, and you choose to comply with one of the concentration-based compliance options for a control system outlet (presented as option numbers 2, 4, and 6 in Table 1B to this subpart), you must have a capture device that either meets the definition of wood products enclosure in §63.2292 or achieves a capture efficiency of greater than or equal to 95 percent.
- (c) Emissions averaging compliance option (for existing sources only). Using the procedures in paragraphs (c)(1) through (3) of this section, you must demonstrate that emissions included in the emissions average meet the compliance options and operating requirements. New sources may not use emissions averaging to comply with this subpart.
- (1) Calculation of required and actual mass removal. Limit emissions of total HAP, as defined in §63.2292, to include acetaldehyde, acrolein, formaldehyde, methanol, phenol, and propionaldehyde from your affected source to the standard specified by Equations 1, 2, and 3 of this section.

RMR = 
$$0.90 \times \left(\sum_{i=1}^{n} UCER \times OH_{i}\right)$$
 (Eq. 1) AMR =  $\left(\sum_{i=1}^{n} CD_{i} \times OCER \times OH_{i}\right)$  (Eq. 2)  
AMR \(\frac{1}{2}\) RMR \(\left(\text{Eq. 3}\))

Where:

RMR = required mass removal of total HAP from all process units generating debits (i.e., all process units that are subject to the compliance options in Tables 1A and 1B to this subpart and that are either uncontrolled or under-controlled), pounds per semiannual period;

AMR = actual mass removal of total HAP from all process units generating credits (i.e., all process units that are controlled as part of the Emissions Averaging Plan including credits from debit-generating process units that are under-controlled), pounds per semiannual period;

UCEP_i = mass of total HAP from an uncontrolled or under-controlled process unit (i) that generates debits, pounds per hour;

OH_i = number of hours a process unit (i) is operated during the semiannual period, hours per 6-month period;

 $CD_i$  = control system efficiency for the emission point (i) for total HAP, expressed as a fraction, and not to exceed 90 percent, unitless (Note: To calculate the control system efficiency of biological treatment units that do not meet the definition of biofilter in §63.2292, you must use 40 CFR part 63, appendix C, Determination of the Fraction Biodegraded ( $F_{bio}$ ) in a Biological Treatment Unit.);

OCEP_i = mass of total HAP from a process unit (i) that generates credits (including credits from debit-generating process units that are under-controlled), pounds per hour;

- 0.90 = required control system efficiency of 90 percent multiplied, unitless.
- (2) Requirements for debits and credits. You must calculate debits and credits as specified in paragraphs (c)(2)(i) through (vi) of this section.
- (i) You must limit process units in the emissions average to those process units located at the existing affected source as defined in §63.2292.
- (ii) You cannot use nonoperating process units to generate emissions averaging credits. You cannot use process units that are shut down to generate emissions averaging debits or credits.
- (iii) You may not include in your emissions average process units controlled to comply with a State, Tribal, or Federal rule other than this subpart.
- (iv) You must use actual measurements of total HAP emissions from process units to calculate your required mass removal (RMR) and actual mass removal (AMR). The total HAP measurements must be obtained according to §63.2262(b) through (d), (g), and (h), using the methods specified in Table 4 to this subpart.
- (v) Your initial demonstration that the credit-generating process units will be capable of generating enough credits to offset the debits from the debit-generating process units must be made under representative operating conditions. After the compliance date, you must use actual operating data for all debit and credit calculations.
- (vi) Do not include emissions from the following time periods in your emissions averaging calculations:

- (A) Emissions during periods of startup, shutdown, and malfunction as described in the startup, shutdown, and malfunction plan (SSMP).
- (B) Emissions during periods of monitoring malfunctions, associated repairs, and required quality assurance or control activities or during periods of control device maintenance covered in your routine control device maintenance exemption. No credits may be assigned to credit-generating process units, and maximum debits must be assigned to debit-generating process units during these periods.
- (3) Operating requirements. You must meet the operating requirements in Table 2 to this subpart for each process unit or control device used in calculation of emissions averaging credits.

# § 63.2241 What are the work practice requirements and how must I meet them?

- (a) You must meet each work practice requirement in Table 3 to this subpart that applies to you.
- (b) As provided in §63.6(g), we, the EPA, may choose to grant you permission to use an alternative to the work practice requirements in this section.
- (c) If you have a dry rotary dryer, you may choose to designate your dry rotary dryer as a green rotary dryer and meet the more stringent compliance options and operating requirements in \$63.2240 for green rotary dryers instead of the work practices for dry rotary dryers. If you have a hardwood veneer dryer or veneer redryer, you may choose to designate your hardwood veneer dryer or veneer redryer as a softwood veneer dryer and meet the more stringent compliance options and operating requirements in \$63.2240 for softwood veneer dryer heated zones instead of the work practices for hardwood veneer dryers or veneer redryers.

# General Compliance Requirements

# § 63.2250 What are the general requirements?

- (a) You must be in compliance with the compliance options, operating requirements, and the work practice requirements in this subpart at all times, except during periods of process unit or control device startup, shutdown, and malfunction; prior to process unit initial startup; and during the routine control device maintenance exemption specified in §63.2251. The compliance options, operating requirements, and work practice requirements do not apply during times when the process unit(s) subject to the compliance options, operating requirements, and work practice requirements are not operating, or during scheduled startup and shutdown periods, and during malfunctions. These startup and shutdown periods must not exceed the minimum amount of time necessary for these events.
- (b) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in §63.6(e)(1)(i).
- (c) You must develop and implement a written SSMP according to the provisions in §63.6(e)(3).

(d) Shutoff of direct-fired burners resulting from partial and full production stoppages of direct-fired softwood veneer dryers or over-temperature events shall be deemed shutdowns and not malfunctions. Lighting or re-lighting any one or all gas burners in direct-fired softwood veneer dryers shall be deemed startups and not malfunctions.

# § 63.2251 What are the requirements for the routine control device maintenance exemption?

- (a) You may request a routine control device maintenance exemption from the EPA Administrator for routine maintenance events such as control device bakeouts, washouts, media replacement, and replacement of corroded parts. Your request must justify the need for the routine maintenance on the control device and the time required to accomplish the maintenance activities, describe the maintenance activities and the frequency of the maintenance activities, explain why the maintenance cannot be accomplished during process shutdowns, describe how you plan to make reasonable efforts to minimize emissions during the maintenance, and provide any other documentation required by the EPA Administrator.
- (b) The routine control device maintenance exemption must not exceed the percentages of process unit operating uptime in paragraphs (b)(1) and (2) of this section.
- (1) If the control device is used to control a green rotary dryer, tube dryer, rotary strand dryer, or pressurized refiner, then the routine control device maintenance exemption must not exceed 3 percent of annual operating uptime for each process unit controlled.
- (2) If the control device is used to control a softwood veneer dryer, reconstituted wood product press, reconstituted wood product board cooler, hardboard oven, press predryer, conveyor strand dryer, or fiberboard mat dryer, then the routine control device maintenance exemption must not exceed 0.5 percent of annual operating uptime for each process unit controlled.
- (3) If the control device is used to control a combination of equipment listed in both paragraphs (b)(1) and (2) of this section, such as a tube dryer and a reconstituted wood product press, then the routine control device maintenance exemption must not exceed 3 percent of annual operating uptime for each process unit controlled.
- (c) The request for the routine control device maintenance exemption, if approved by the EPA Administrator, must be IBR in and attached to the affected source's title V permit.
- (d) The compliance options and operating requirements do not apply during times when control device maintenance covered under your approved routine control device maintenance exemption is performed. You must minimize emissions to the greatest extent possible during these routine control device maintenance periods.
- (e) To the extent practical, startup and shutdown of emission control systems must be scheduled during times when process equipment is also shut down.

**Initial Compliance Requirements** 

§ 63.2260 How do I demonstrate initial compliance with the compliance options, operating requirements, and work practice requirements?

- (a) To demonstrate initial compliance with the compliance options and operating requirements, you must conduct performance tests and establish each site-specific operating requirement in Table 2 to this subpart according to the requirements in §63.2262 and Table 4 to this subpart. Combustion units that accept process exhausts into the flame zone are exempt from the initial performance testing and operating requirements for thermal oxidizers.
- (b) You must demonstrate initial compliance with each compliance option, operating requirement, and work practice requirement that applies to you according to Tables 5 and 6 to this subpart and according to §§63.2260 through 63.2269 of this subpart.
- (c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63:2280(d).

§ 63.2261 By what date must I conduct performance tests or other initial compliance demonstrations?

- (a) You must conduct performance tests upon initial startup or no later than 180 calendar days after the compliance date that is specified for your source in §63.2233 and according to §63.7(a)(2), whichever is later.
  - (b) You must conduct initial compliance demonstrations that do not require performance tests upon initial startup or no later than 30 calendar days after the compliance date that is specified for your source in §63.2233, whichever is later.

§ 63.2262 How do I conduct performance tests and establish operating requirements?

- (a) You must conduct each performance test according to the requirements in §63.7(e)(1), the requirements in paragraphs (b) through (o) of this section, and according to the methods specified in Table 4 to this subpart.
- (b) Periods when performance tests must be conducted. (1) You must not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1).
- (2) You must test under representative operating conditions as defined in §63.2292. You must describe representative operating conditions in your performance test report for the process and control systems and explain why they are representative.
- (c) Number of test runs. You must conduct three separate test runs for each performance test required in this section as specified in §63.7(e)(3). Each test run must last at least 1 hour except for: testing of a temporary total enclosure (TTE) conducted using Methods 204A through 204F of 40 CFR part 51, appendix M, which require three separate test runs of at least 3 hours each; and testing of an enclosure conducted using the alternative tracer gas method in appendix A to this subpart, which requires a minimum of three separate runs of at least 20 minutes each.

- (d) Location of sampling sites. (1) Sampling sites must be located at the inlet (if emission reduction testing or documentation of inlet methanol or formaldehyde concentration is required) and outlet of the control device and prior to any releases to the atmosphere. For HAP-altering controls in sequence, such as a wet control device followed by a thermal oxidizer, sampling sites must be located at the functional inlet of the control sequence (e.g., prior to the wet control device) and at the outlet of the control sequence (e.g., thermal oxidizer outlet) and prior to any releases to the atmosphere.
- (2) Sampling sites for process units meeting compliance options without a control device must be located prior to any releases to the atmosphere. Facilities demonstrating compliance with a production-based compliance option for a process unit equipped with a wet control device must locate sampling sites prior to the wet control device.
- (e) Collection of monitoring data. You must collect operating parameter monitoring system or continuous emissions monitoring system (CEMS) data at least every 15 minutes during the entire performance test and determine the parameter or concentration value for the operating requirement during the performance test using the methods specified in paragraphs (k) through (o) of this section.
- (f) Collection of production data. To comply with any of the production-based compliance options, you must measure and record the process unit throughput during each performance test.
- (g) Nondetect data. (1) Except as specified in paragraph (g)(2) of this section, all nondetect data (§63.2292) must be treated as one-half of the method detection limit when determining total HAP, formaldehyde, methanol, or total hydrocarbon (THC) emission rates.
- (2) When showing compliance with the production-based compliance options in Table 1A to this subpart, you may treat emissions of an individual HAP as zero if all three of the performance test runs result in a nondetect measurement, and the method detection limit is less than or equal to 1 parts per million by volume, dry basis (ppmvd). Otherwise, nondetect data for individual HAP must be treated as one-half of the method detection limit.
- (h) Calculation of percent reduction across a control system. When determining the control system efficiency for any control system included in your emissions averaging plan (not to exceed 90 percent) and when complying with any of the compliance options based on percent reduction across a control system in Table 1B to this subpart, as part of the performance test, you must calculate the percent reduction using Equation 1 of this section:

$$PR = CE \times \frac{ER_{in} - ER_{out}}{ER_{in}} (100) \qquad (Eq. 1)$$

Where:

PR = percent reduction, percent;

CE = capture efficiency, percent (determined for reconstituted wood product presses and board coolers as required in Table 4 to this subpart);

ER_{in} = emission rate of total HAP (calculated as the sum of the emission rates of acetaldehyde, acrolein, formaldehyde, methanol, phenol, and propionaldehyde), THC, formaldehyde, or methanol in the inlet vent stream of the control device, pounds per hour;

ER_{out} = emission rate of total HAP (calculated as the sum of the emission rates of acetaldehyde, acrolein, formaldehyde, methanol, phenol, and propionaldehyde), THC, formaldehyde, or methanol in the outlet vent stream of the control device, pounds per hour.

(i) Calculation of mass per unit production. To comply with any of the production-based compliance options in Table 1A to this subpart, you must calculate your mass per unit production emissions for each performance test run using Equation 2 of this section:

$$MP = \frac{RR_{BD}}{P \times CE} \qquad (Eq. 2)$$

Where:

MP = mass per unit production, pounds per oven dried ton OR pounds per thousand square feet on a specified thickness basis (see paragraph (j) of this section if you need to convert from one thickness basis to another);

ER_{HAP} = emission rate of total HAP (calculated as the sum of the emission rates of acetaldehyde, acrolein, formaldehyde, methanol, phenol, and propionaldehyde) in the stack, pounds per hour;

P = process unit production rate (throughput), oven dried tons per hour OR thousand square feet per hour on a specified thickness basis;

CE = capture efficiency, percent (determined for reconstituted wood product presses and board coolers as required in Table 4 to this subpart).

(j) Thickness basis conversion. Use Equation 3 of this section to convert from one thickness basis to another:

$$MSF_B = MSF_A \times \frac{A}{B}$$
 (Eq. 3)

Where:

MSF_A = thousand square feet on an A-inch basis;

MSF_B = thousand square feet on a B-inch basis;

A = old thickness you are converting from, inches;

B = new thickness you are converting to, inches.

- (k) Establishing thermal oxidizer operating requirements. If you operate a thermal oxidizer, you must establish your thermal oxidizer operating parameters according to paragraphs (k)(1) through (3) of this section.
- (1) During the performance test, you must continuously monitor the firebox temperature during each of the required 1-hour test runs. For regenerative thermal oxidizers, you may measure the temperature in multiple locations (e.g., one location per burner) in the combustion chamber and calculate the average of the temperature measurements prior to reducing the temperature data to 15-minute averages for purposes of establishing your minimum firebox temperature. The minimum firebox temperature must then be established as the average of the three minimum 15-minute firebox temperatures monitored during the three test runs. Multiple three-run performance tests may be conducted to establish a range of parameter values under different operating conditions.
- (2) You may establish a different minimum firebox temperature for your thermal oxidizer by submitting the notification specified in §63.2280(g) and conducting a repeat performance test as specified in paragraph (k)(1) of this section that demonstrates compliance with the applicable compliance options of this subpart.
- (3) If your thermal oxidizer is a combustion unit that accepts process exhaust into the flame zone, then you are exempt from the performance testing and monitoring requirements specified in paragraphs (k)(1) and (2) of this section. To demonstrate initial compliance, you must submit documentation with your Notification of Compliance Status showing that process exhausts controlled by the combustion unit enter into the flame zone.
- (1) Establishing catalytic oxidizer operating requirements. If you operate a catalytic oxidizer, you must establish your catalytic oxidizer operating parameters according to paragraphs (1)(1) and (2) of this section.
- (1) During the performance test, you must continuously monitor during the required 1-hour test runs either the temperature at the inlet to each catalyst bed or the temperature in the combustion chamber. For regenerative catalytic oxidizers, you must calculate the average of the temperature measurements from each catalyst bed inlet or within the combustion chamber prior to reducing the temperature data to 15-minute averages for purposes of establishing your minimum catalytic oxidizer temperature. The minimum catalytic oxidizer temperature must then be established as the average of the three minimum 15-minute temperatures monitored during the three test runs. Multiple three-run performance tests may be conducted to establish a range of parameter values under different operating conditions.
- (2) You may establish a different minimum catalytic oxidizer temperature by submitting the notification specified in §63.2280(g) and conducting a repeat performance test as specified in paragraphs (l)(1) and (2) of this section that demonstrates compliance with the applicable compliance options of this subpart.

- (m) Establishing biofilter operating requirements. If you operate a biofilter, you must establish your biofilter operating requirements according to paragraphs (m)(1) through (3) of this section.
- (1) During the performance test, you must continuously monitor the biofilter bed temperature during each of the required 1-hour test runs. To monitor biofilter bed temperature, you may use multiple thermocouples in representative locations throughout the biofilter bed and calculate the average biofilter bed temperature across these thermocouples prior to reducing the temperature data to 15-minute averages for purposes of establishing biofilter bed temperature limits. The biofilter bed temperature range must be established as the minimum and maximum 15-minute biofilter bed temperatures monitored during the three test runs. You may base your biofilter bed temperature range on values recorded during previous performance tests provided that the data used to establish the temperature ranges have been obtained using the test methods required in this subpart. If you use data from previous performance tests, you must certify that the biofilter and associated process unit(s) have not been modified subsequent to the date of the performance tests. Replacement of the biofilter media with the same type of material is not considered a modification of the biofilter for purposes of this section.
- (2) For a new biofilter installation, you will be allowed up to 180 days following the compliance date or 180 days following initial startup of the biofilter to complete the requirements in paragraph (m)(1) of this section.
- (3) You may expand your biofilter bed temperature operating range by submitting the notification specified in §63.2280(g) and conducting a repeat performance test as specified in paragraph (m)(1) of this section that demonstrates compliance with the applicable compliance options of this subpart.
- (n) Establishing operating requirements for process units meeting compliance options without a control device. If you operate a process unit that meets a compliance option in Table 1A to this subpart, or is a process unit that generates debits in an emissions average without the use of a control device, you must establish your process unit operating parameters according to paragraphs (n)(1) through (2) of this section.
- (1) During the performance test, you must identify and document the process unit controlling parameter(s) that affect total HAP emissions during the three-run performance test. The controlling parameters you identify must coincide with the representative operating conditions you describe according to §63.2262(b)(2). For each parameter, you must specify appropriate monitoring methods, monitoring frequencies, and for continuously monitored parameters, averaging times not to exceed 24 hours. The operating limit for each controlling parameter must then be established as the minimum, maximum, range, or average (as appropriate depending on the parameter) recorded during the performance test. Multiple three-run performance tests may be conducted to establish a range of parameter values under different operating conditions.
- (2) You may establish different controlling parameter limits for your process unit by submitting the notification specified in §63.2280(g) and conducting a repeat performance test as specified in paragraph (n)(1) of this section that demonstrates compliance with the compliance options in

Table 1A to this subpart or is used to establish emission averaging debits for an uncontrolled process unit.

- (o) Establishing operating requirements using THC CEMS. If you choose to meet the operating requirements by monitoring THC concentration instead of monitoring control device or process operating parameters, you must establish your THC concentration operating requirement according to paragraphs (o)(1) through (2) of this section.
- (1) During the performance test, you must continuously monitor THC concentration using your CEMS during each of the required 1-hour test runs. The maximum THC concentration must then be established as the average of the three maximum 15-minute THC concentrations monitored during the three test runs. Multiple three-run performance tests may be conducted to establish a range of THC concentration values under different operating conditions.
- (2) You may establish a different maximum THC concentration by submitting the notification specified in §63.2280(g) and conducting a repeat performance test as specified in paragraph (o)(1) of this section that demonstrates compliance with the compliance options in Tables 1A and 1B to this subpart.

# § 63.2263 Initial compliance demonstration for a dry rotary dryer.

If you operate a dry rotary dryer, you must demonstrate that your dryer processes furnish with an inlet moisture content of less than or equal to 30 percent (by weight, dry basis) and operates with a dryer inlet temperature of less than or equal to 600 °F. You must designate and clearly identify each dry rotary dryer. You must record the inlet furnish moisture content (dry basis) and inlet dryer operating temperature according to §63.2269(a), (b), and (c) and §63.2270 for a minimum of 30 calendar days. You must submit the highest recorded 24-hour average inlet furnish moisture content and the highest recorded 24-hour average dryer inlet temperature with your Notification of Compliance Status. In addition, you must submit with the Notification of Compliance Status a signed statement by a responsible official that certifies with truth, accuracy, and completeness that the dry rotary dryer will dry furnish with a maximum inlet moisture content less than or equal to 30 percent (by weight, dry basis) and will operate with a maximum inlet temperature of less than or equal to 600 °F in the future.

#### § 63.2264 Initial compliance demonstration for a hardwood veneer dryer.

If you operate a hardwood veneer dryer, you must record the annual volume percentage of softwood veneer species processed in the dryer as follows:

(a) Use Equation 1 of this section to calculate the annual volume percentage of softwood species dried:

$$SW_{2} = \frac{SW}{T} (100) \quad (Eq. 1)$$

Where:

SW% = annual volume percent softwood species dried;

SW = softwood veneer dried during the previous 12 months, thousand square feet (3/8-inch basis);

T = total softwood and hardwood veneer dried during the previous 12 months, thousand square feet (3/8-inch basis).

(b) You must designate and clearly identify each hardwood veneer dryer. Submit with the Notification of Compliance Status the annual volume percentage of softwood species dried in the dryer based on your dryer production for the 12 months prior to the compliance date specified for your source in §63.2233. If you did not dry any softwood species in the dryer during the 12 months prior to the compliance date, then you need only to submit a statement indicating that no softwood species were dried. In addition, submit with the Notification of Compliance Status a signed statement by a responsible official that certifies with truth, accuracy, and completeness that the veneer dryer will be used to process less than 30 volume percent softwood species in the future.

# § 63.2265 Initial compliance demonstration for a softwood veneer dryer.

If you operate a softwood veneer dryer, you must develop a plan for review and approval for minimizing fugitive emissions from the veneer dryer heated zones, and you must submit the plan with your Notification of Compliance Status.

# § 63.2266 Initial compliance demonstration for a veneer redryer.

If you operate a veneer redryer, you must record the inlet moisture content of the veneer processed in the redryer according to §63.2269(a) and (c) and §63.2270 for a minimum of 30 calendar days. You must designate and clearly identify each veneer redryer. You must submit the highest recorded 24-hour average inlet veneer moisture content with your Notification of Compliance Status to show that your veneer redryer processes veneer with an inlet moisture content of less than or equal to 25 percent (by weight, dry basis). In addition, submit with the Notification of Compliance Status a signed statement by a responsible official that certifies with truth, accuracy, and completeness that the veneer redryer will dry veneer with a moisture content less than 25 percent (by weight, dry basis) in the future.

#### § 63.2267 Initial compliance demonstration for a reconstituted wood product press or board cooler.

If you operate a reconstituted wood product press at a new or existing affected source or a reconstituted wood product board cooler at a new affected source, then you must either use a wood products enclosure as defined in §63.2292 or measure the capture efficiency of the capture device for the press or board cooler using Methods 204 and 204A through 204F of 40 CFR part 51, appendix M (as appropriate), or using the alternative tracer gas method contained in appendix A to this subpart. You must submit documentation that the wood products enclosure meets the press enclosure design criteria in §63.2292 or the results of the capture efficiency verification with your Notification of Compliance Status.

# § 63.2268 Initial compliance demonstration for a wet control device.

If you use a wet control device as the sole means of reducing HAP emissions, you must develop and implement a plan for review and approval to address how organic HAP captured in the wastewater from the wet control device is contained or destroyed to minimize re-release to the atmosphere such that the desired emissions reductions are obtained. You must submit the plan with your Notification of Compliance Status.

# § 63.2269 What are my monitoring installation, operation, and maintenance requirements?

- (a) General continuous parameter monitoring requirements. You must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to paragraphs (a)(1) through (3) of this section.
- (1) The CPMS must be capable of completing a minimum of one cycle of operation (sampling, analyzing, and recording) for each successive 15-minute period.
- (2) At all times, you must maintain the monitoring equipment including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
- (3) Record the results of each inspection, calibration, and validation check.
- (b) Temperature monitoring. For each temperature monitoring device, you must meet the requirements in paragraphs (a) and (b)(1) through (6) of this section.
- (1) Locate the temperature sensor in a position that provides a representative temperature.
- (2) Use a temperature sensor with a minimum accuracy of 4 °F or 0.75 percent of the temperature value, whichever is larger.
- (3) If a chart recorder is used, it must have a sensitivity with minor divisions not more than 20 °F.
- (4) Perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owners manual. Following the electronic calibration, you must conduct a temperature sensor validation check in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 30 °F of the process temperature sensor's reading.
- (5) Conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.
- (6) At least quarterly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion.

- (c) Wood moisture monitoring. For each furnish or veneer moisture meter, you must meet the requirements in paragraphs (a)(1), (2), (4) and (5) and paragraphs (c)(1) through (4) of this section.
- (1) For dry rotary dryers, use a continuous moisture monitor with a minimum accuracy of 1 percent (dry basis) moisture or better in the 25 to 35 percent (dry basis) moisture content range. For veneer redryers, use a continuous moisture monitor with a minimum accuracy of 3 percent (dry basis) moisture or better in the 15 to 25 percent (dry basis) moisture content range. Alternatively, you may use a continuous moisture monitor with a minimum accuracy of 5 percent (dry basis) moisture or better for dry rotary dryers used to dry furnish with less than 25 percent (dry basis) moisture or for veneer redryers used to redry veneer with less than 20 percent (dry basis) moisture.
- (2) Locate the moisture monitor in a position that provides a representative measure of furnish or veneer moisture.
- (3) Calibrate the moisture monitor based on the procedures specified by the moisture monitor manufacturer at least once per semiannual compliance period (or more frequently if recommended by the moisture monitor manufacturer).
- (4) At least quarterly, inspect all components of the moisture monitor for integrity and all electrical connections for continuity.
- (5) Use Equation 1 of this section to convert percent moisture measurements wet basis to a dry basis;

$$- MC_{sq} = \frac{MC_{sq}/100}{1 - (MC_{sq}/100)} (100) \qquad (Eq. 1)$$

Where:

MC_{dry} = percent moisture content of wood material (weight percent, dry basis);

MC_{wet} = percent moisture content of wood material (weight percent, wet basis).

- (d) Continuous emission monitoring system(s). Each CEMS must be installed, operated, and maintained according to paragraphs (d)(1) through (4) of this section.
- (1) Each CEMS for monitoring THC concentration must be installed, operated, and maintained according to Performance Specification 8 of 40 CFR part 60, appendix B. You must also comply with Procedure 1 of 40 CFR part 60, appendix F.
- (2) You must conduct a performance evaluation of each CEMS according to the requirements in §63.8 and according to Performance Specification 8 of 40 CFR part 60, appendix B.

- (3) As specified in §63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.
- (4) The CEMS data must be reduced as specified in §63.8(g)(2) and §63.2270(d) and (e).

# **Continuous Compliance Requirements**

# § 63.2270 How do I monitor and collect data to demonstrate continuous compliance?

- (a) You must monitor and collect data according to this section.
- (b) Except for, as appropriate, monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must conduct all monitoring in continuous operation at all times that the process unit is operating. For purposes of calculating data averages, you must not use data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities. You must use all the data collected during all other periods in assessing compliance. 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. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.
- (c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities; data recorded during periods of startup, shutdown, and malfunction; or data recorded during periods of control device downtime covered in any approved routine control device maintenance exemption in data averages and calculations used to report emission or operating levels, nor may such data be used in fulfilling a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing the operation of the control system.
- (d) Except as provided in paragraph (e) of this section, determine the 3-hour block average of all recorded readings, calculated after every 3 hours of operation as the average of the evenly spaced recorded readings in the previous 3 operating hours (excluding periods described in paragraphs (b) and (c) of this section).
- (e) For dry rotary dryer and veneer redryer wood moisture monitoring, dry rotary dryer temperature monitoring, biofilter bed temperature monitoring, and biofilter outlet THC monitoring, determine the 24-hour block average of all recorded readings, calculated after every 24 hours of operation as the average of the evenly spaced recorded readings in the previous 24 operating hours (excluding periods described in paragraphs (b) and (c) of this section).
- (f) To calculate the data averages for each 3-hour or 24-hour averaging period, you must have at least 75 percent of the required recorded readings for that period using only recorded readings that are based on valid data (i.e., not from periods described in paragraphs (b) and (c) of this section).

# § 63.2271 How do I demonstrate continuous compliance with the compliance options, operating requirements, and work practice requirements?

- (a) You must demonstrate continuous compliance with the compliance options, operating requirements, and work practice requirements in §§63.2240 and 63.2241 that apply to you according to the methods specified in Tables 7 and 8 to this subpart.
- (b) You must report each instance in which you did not meet each compliance option, operating requirement, and work practice requirement in Tables 7 and 8 to this subpart that applies to you. This includes periods of startup, shutdown, and malfunction and periods of control device maintenance specified in paragraphs (b)(1) through (3) of this section. These instances are deviations from the compliance options, operating requirements, and work practice requirements in this subpart. These deviations must be reported according to the requirements in §63.2281.
- (1) During periods of startup, shutdown, and malfunction, you must operate in accordance with the SSMP.
- (2) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the EPA Administrator's
- satisfaction that you were operating in accordance with the SSMP. The EPA Administrator will
   determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).
- (3) Deviations that occur during periods of control device maintenance covered by any approved routine control device maintenance exemption are not violations if you demonstrate to the EPA
- Administrator's satisfaction that you were operating in accordance with the approved routine
   control device maintenance exemption.

# Notifications, Reports, and Records

# § 63.2280 What notifications must I submit and when?

- (a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9 (b) through (e), and (g) and (h) by the dates specified.
- (b) You must submit an Initial Notification no later than 120 calendar days after September 28, 2004, or after initial startup, whichever is later, as specified in §63.9(b)(2).
- (c) If you are required to conduct a performance test, you must submit a written notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as specified in §63.7(b)(1).
- (d) If you are required to conduct a performance test, design evaluation, or other initial compliance demonstration as specified in Tables 4, 5, and 6 to this subpart, you must submit a Notification of Compliance Status as specified in §63.9(h)(2)(ii).

- (1) For each initial compliance demonstration required in Table 5 or 6 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration.
- (2) For each initial compliance demonstration required in Tables 5 and 6 to this subpart that includes a performance test conducted according to the requirements in Table 4 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to §63.10(d)(2).
- (e) If you request a routine control device maintenance exemption according to §63.2251, you must submit your request for the exemption no later than 30 days before the compliance date.
- (f) If you use the emissions averaging compliance option in §63.2240(c), you must submit an Emissions Averaging Plan to the EPA Administrator for approval no later than 1 year before the compliance date or no later than 1 year before the date you would begin using an emissions average, whichever is later. The Emissions Averaging Plan must include the information in paragraphs (f)(1) through (6) of this section.
- (1) Identification of all the process units to be included in the emissions average indicating which process units will be used to generate credits, and which process units that are subject to compliance options in Tables 1A and 1B to this subpart will be uncontrolled (used to generate debits) or under-controlled (used to generate debits and credits).
- (2) Description of the control system used to generate emission credits for each process unit used to generate credits.
- (3) Determination of the total HAP control efficiency for the control system used to generate emission credits for each credit-generating process unit.
- (4) Calculation of the RMR and AMR, as calculated using Equations 1 through 3 of §63.2240(c)(1).
- (5) Documentation of total HAP measurements made according to §63.2240(c)(2)(iv) and other relevant documentation to support calculation of the RMR and AMR.
- (6) A summary of the operating parameters you will monitor and monitoring methods for each debit-generating and credit-generating process unit.
- (g) You must notify the EPA Administrator within 30 days before you take any of the actions specified in paragraphs (g)(1) through (3) of this section.
- (1) You modify or replace the control system for any process unit subject to the compliance options and operating requirements in this subpart.

- (2) You shut down any process unit included in your Emissions Averaging Plan.
- (3) You change a continuous monitoring parameter or the value or range of values of a continuous monitoring parameter for any process unit or control device.

# § 63.2281 What reports must I submit and when?

- (a) You must submit each report in Table 9 to this subpart that applies to you.
- (b) Unless the EPA Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 9 to this subpart and as specified in paragraphs (b)(1) through (5) of this section.
- (1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.2233 ending on June 30 or December 31, and lasting at least 6 months, but less than 12 months. For example, if your compliance date is March 1, then the first semiannual reporting period would begin on March 1 and end on December 31.
- (2) The first compliance report must be postmarked or delivered no later than July 31 or January 31 for compliance periods ending on June 30 and December 31, respectively.
- (3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
- (4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31 for the semiannual reporting period ending on June 30 and December 31, respectively.
- (5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to §70.6(a)(3)(iii)(A) or §71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.
- (c) The compliance report must contain the information in paragraphs (c)(1) through (8) of this section.
- (1) Company name and address.
- (2) 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.
- (3) Date of report and beginning and ending dates of the reporting period.

- (4) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information specified in §63.10(d)(5)(i).
- (5) A description of control device maintenance performed while the control device was offline and one or more of the process units controlled by the control device was operating, including the information specified in paragraphs (c)(5)(i) through (iii) of this section.
- (i) The date and time when the control device was shut down and restarted.
- (ii) Identification of the process units that were operating and the number of hours that each process unit operated while the control device was offline.
- (iii) A statement of whether or not the control device maintenance was included in your approved routine control device maintenance exemption developed pursuant to §63,2251. If the control device maintenance was included in your approved routine control device maintenance exemption, then you must report the information in paragraphs (c)(5)(iii)(A) through (C) of this section.
- (A) The total amount of time that each process unit controlled by the control device operated during the semiannual compliance period and during the previous semiannual compliance period.
- (B) The amount of time that each process unit controlled by the control device operated while the control device was down for maintenance covered under the routine control device maintenance exemption during the semiannual compliance period and during the previous semiannual compliance period.
- (C) Based on the information recorded under paragraphs (c)(5)(iii)(A) and (B) of this section for each process unit, compute the annual percent of process unit operating uptime during which the control device was offline for routine maintenance using Equation 1 of this section.

$$RM = \frac{DT_s + DT_c}{PU_s + PU_c} \qquad (Eq. 1)$$

Where:

RM = Annual percentage of process unit uptime during which control device is down for routine control device maintenance;

PU_p = Process unit uptime for the previous semiannual compliance period;

PU_c = Process unit uptime for the current semiannual compliance period;

 $DT_p$  = Control device downtime claimed under the routine control device maintenance exemption for the previous semiannual compliance period;

DT_e = Control device downtime claimed under the routine control device maintenance exemption for the current semiannual compliance period.

- (6) The results of any performance tests conducted during the semiannual reporting period.
- (7) If there are no deviations from any applicable compliance option or operating requirement, and there are no deviations from the requirements for work practice requirements in Table 8 to this subpart, a statement that there were no deviations from the compliance options, operating requirements, or work practice requirements during the reporting period.
- (8) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.
- (d) For each deviation from a compliance option or operating requirement and for each deviation from the work practice requirements in Table 8 to this subpart that occurs at an affected source where you are not using a CMS to comply with the compliance options, operating requirements, or work practice requirements in this subpart, the compliance report must contain the information in paragraphs (c)(1) through (6) of this section and in paragraphs (d)(1) and (2) of this section. This includes periods of startup, shutdown, and malfunction and routine control device maintenance.
- (1) The total operating time of each affected source during the reporting period.
- (2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
- (e) For each deviation from a compliance option or operating requirement occurring at an affected source where you are using a CMS to comply with the compliance options and operating requirements in this subpart, you must include the information in paragraphs (c)(1) through (6) and paragraphs (e)(1) through (11) of this section. This includes periods of startup, shutdown, and malfunction and routine control device maintenance.
- (1) The date and time that each malfunction started and stopped.
- (2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.
- (3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).
- (4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction; during a period of control device maintenance covered in your approved routine control device maintenance exemption; or during another period.

- (5) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.
- (6) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control system problems, control device maintenance, process problems, other known causes, and other unknown causes.
- (7) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.
- (8) A brief description of the process units.
- (9) A brief description of the CMS.
- (10) The date of the latest CMS certification or audit.
- (11) A description of any changes in CMS, processes, or controls since the last reporting period.
- (f) If you comply with the emissions averaging compliance option in §63.2240(c), you must include in your semiannual compliance report calculations based on operating data from the semiannual reporting period that demonstrate that actual mass removal equals or exceeds the required mass removal.
- (g) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by §70.6(a)(3)(iii)(A) or §71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 9 to this subpart along with, or as part of, the semiannual monitoring report required by §70.6(a)(3)(iii)(A) or §71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any compliance option, operating requirement, or work practice requirement in this subpart, submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permitting authority.

# § 63.2282 What records must I keep?

- (a) You must keep the records listed in paragraphs (a)(1) through (4) of this section.
- (1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirements in §63.10(b)(2)(xiv).
- (2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

- (3) Documentation of your approved routine control device maintenance exemption, if you request such an exemption under §63.2251.
- (4) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).
- (b) You must keep the records required in Tables 7 and 8 to this subpart to show continuous compliance with each compliance option, operating requirement, and work practice requirement that applies to you.
- (c) For each CEMS, you must keep the following records.
- (1) Records described in §63,10(b)(2)(vi) through (xi),
- (2) Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3).
- (3) Request for alternatives to relative accuracy testing for CEMS as required in §63.8(f)(6)(i).
- (4) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.
- (d) If you comply with the emissions averaging compliance option in §63.2240(c), you must keep records of all information required to calculate emission debits and credits.
- (e) If you operate a catalytic oxidizer, you must keep records of annual catalyst activity checks and subsequent corrective actions.

# § 63.2283 In what form and how long must I keep my records?

- (a) Your records must be in a form suitable and readily available for expeditious review as specified in §63.10(b)(1).
- (b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to §63.10(b)(1). You can keep the records offsite for the remaining 3 years.

#### Other Requirements and Information

#### § 63.2290 What parts of the General Provisions apply to me?

Table 10 to this subpart shows which parts of the General Provisions in §§63.1 through 63.13 apply to you.

§ 63.2291 Who implements and enforces this subpart?

- (a) This subpart can be implemented and enforced by the U.S. EPA or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.
- (b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency.
- (c) The authorities that will not be delegated to State, local, or tribal agencies are listed in paragraphs (c)(1) through (5) of this section.
- (1) Approval of alternatives to the compliance options, operating requirements, and work practice requirements in §§63.2240 and 63.2241 as specified in §63.6(g). For the purposes of delegation authority under 40 CFR part 63, subpart E, "compliance options" represent "emission limits"; "operating requirements" represent "operating limits"; and "work practice requirements" represent "work practice standards."
- (2) Approval of major alternatives to test methods as specified in §63.7(e)(2)(ii) and (f) and as defined in §63.90.
- (3) Approval of major alternatives to monitoring as specified in §63.8(f) and as defined in §63.90.
- (4) Approval of major alternatives to recordkeeping and reporting as specified in §63.10(f) and as defined in §63.90.
- (5) Approval of PCWP sources demonstrations of eligibility for the low-risk subcategory developed according to appendix B of this subpart.

# § 63.2292 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act (CAA), in 40 CFR 63.2, the General Provisions, and in this section as follows:

Affected source means the collection of dryers, refiners, blenders, formers, presses, board coolers, and other process units associated with the manufacturing of plywood and composite wood products. The affected source includes, but is not limited to, green end operations, refining, drying operations, resin preparation, blending and forming operations, pressing and board cooling operations, and miscellaneous finishing operations (such as sanding, sawing, patching, edge sealing, and other finishing operations not subject to other NESHAP). The affected source also includes onsite storage of raw materials used in the manufacture of plywood and/or composite wood products, such as resins; onsite wastewater treatment operations specifically associated with plywood and composite wood products manufacturing; and miscellaneous

coating operations (defined elsewhere in this section). The affected source includes lumber kilns at PCWP manufacturing facilities and at any other kind of facility.

Agricultural fiber means the fiber of an annual agricultural crop. Examples of agricultural fibers include, but are not limited to, wheat straw, rice straw, and bagasse.

Biofilter means an enclosed control system such as a tank or series of tanks with a fixed roof that contact emissions with a solid media (such as bark) and use microbiological activity to transform organic pollutants in a process exhaust stream to innocuous compounds such as carbon dioxide, water, and inorganic salts. Wastewater treatment systems such as aeration lagoons or activated sludge systems are not considered to be biofilters.

Capture device means a hood, enclosure, or other means of collecting emissions into a duct so that the emissions can be measured.

Capture efficiency means the fraction (expressed as a percentage) of the pollutants from an emission source that are collected by a capture device.

Catalytic oxidizer means a control system that combusts or oxidizes, in the presence of a catalyst, exhaust gas from a process unit. Catalytic oxidizers include regenerative catalytic oxidizers and thermal catalytic oxidizers.

Combustion unit means a dryer burner, process heater, or boiler used for combustion of organic HAP emissions.

Control device means any equipment that reduces the quantity of HAP emitted to the air. The device may destroy the HAP or secure the HAP for subsequent recovery. Control devices include, but are not limited to, thermal or catalytic oxidizers, combustion units that incinerate process exhausts, biofilters, and condensers.

Control system or add-on control system means the combination of capture and control devices used to reduce HAP emissions to the atmosphere.

Conveyor strand dryer means a conveyor dryer used to reduce the moisture of wood strands used in the manufacture of oriented strandboard, laminated strand lumber, or other wood strand-based products. A conveyor strand dryer is a process unit.

Conveyor strand dryer zone means each portion of a conveyor strand dryer with a separate heat exchange system and exhaust vent(s). Conveyor strand dryers contain multiple zones (e.g., three zones), which may be divided into multiple sections.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any compliance option, operating requirement, or work practice requirement;

- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart, and that is included in the operating permit for any affected source required to obtain such a permit; or
- (3) Fails to meet any compliance option, operating requirement, or work practice requirement in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart. A deviation is not always a violation. The determination of whether a deviation constitutes a violation of the standard is up to the discretion of the entity responsible for enforcement of the standards.

Dryer heated zones means the zones of a softwood veneer dryer or fiberboard mat dryer that are equipped with heating and hot air circulation units. The cooling zone(s) of the dryer through which ambient air is blown are not part of the dryer heated zones.

Dry forming means the process of making a mat of resinated fiber to be compressed into a reconstituted wood product such as particleboard, oriented strandboard, medium density fiberboard, or hardboard.

Dry rotary dryer means a rotary dryer that dries wood particles or fibers with a maximum inlet moisture content of less than or equal to 30 percent (by weight, dry basis) and operates with a maximum inlet temperature of less than or equal to 600 °F. A dry rotary dryer is a process unit.

Fiber means the discrete elements of wood or similar cellulosic material, which are separated by mechanical means, as in refining, that can be formed into boards.

Fiberboard means a composite panel composed of cellulosic fibers (usually wood or agricultural material) made by wet forming and compacting a mat of fibers. Fiberboard density generally is less than 0.50 grams per cubic centimeter (31.5 pounds per cubic foot).

Fiberboard mat dryer means a dryer used to reduce the moisture of wet-formed wood fiber mats by operation at elevated temperature. A fiberboard mat dryer is a process unit.

Flame zone means the portion of the combustion chamber in a combustion unit that is occupied by the flame envelope.

Furnish means the fibers, particles, or strands used for making boards.

Glue-laminated beam means a structural wood beam made by bonding lumber together along its faces with resin.

Green rotary dryer means a rotary dryer that dries wood particles or fibers with an inlet moisture content of greater than 30 percent (by weight, dry basis) at any dryer inlet temperature or operates with an inlet temperature of greater than 600 °F with any inlet moisture content. A green rotary dryer is a process unit.

Group 1 miscellaneous coating operations means application of edge seals, nail lines, logo (or other information) paint, shelving edge fillers, trademark/gradestamp inks, and wood putty patches to plywood and composite wood products (except kiln-dried lumber) on the same site where the plywood and composite wood products are manufactured. Group 1 miscellaneous coating operations also include application of synthetic patches to plywood at new affected sources.

Hardboard means a composite panel composed of inter-felted cellulosic fibers made by dry or wet forming and pressing of a resinated fiber mat. Hardboard generally has a density of 0.50 grams per cubic centimeter (31,5 pounds per cubic foot) or greater.

Hardboard oven means an oven used to heat treat of temper hardboard after hot pressing. Humidification chambers are not considered as part of hardboard ovens. A hardboard oven is a process unit.

Hardwood means the wood of a broad-leafed tree, either deciduous or evergreen. Examples of hardwoods include, but are not limited to, aspen, birch, poplar, and oak.

Hardwood veneer dryer means a dryer that removes excess moisture from veneer by conveying the veneer through a heated medium on rollers, belts, cables, or wire mesh. Hardwood veneer dryers are used to dry veneer with less than 30 percent softwood species on an annual volume basis. Veneer kilns that operate as batch units, veneer dryers heated by radio frequency or microwaves that are used to redry veneer, and veneer redryers (defined elsewhere in this section) that are heated by conventional means are not considered to be hardwood veneer dryers. A hardwood veneer dryer is a process unit.

Kiln-dried lumber means solid wood lumber that has been dried in a lumber kiln.

Laminated strand lumber (LSL) means a composite product formed into a billet made of thin wood strands cut from whole logs, resinated, and pressed together with the grain of each strand oriented parallel to the length of the finished product.

Laminated veneer lumber (LVL) means a composite product formed into a billet made from layers of resinated wood veneer sheets or pieces pressed together with the grain of each veneer aligned primarily along the length of the finished product. Laminated veneer lumber includes parallel strand lumber (PSL).

Lumber kiln means an enclosed dryer operated at elevated temperature to reduce the moisture content of lumber.

Medium density fiberboard (MDF) means a composite panel composed of cellulosic fibers (usually wood or agricultural fiber) made by dry forming and pressing of a resinated fiber mat.

Method detection limit means the minimum concentration of an analyte that can be determined with 99 percent confidence that the true value is greater than zero.

Miscellaneous coating operations means application of any of the following to plywood or composite wood products: edge seals, moisture sealants, anti-skid coatings, company logos, trademark or grade stamps, nail lines, synthetic patches, wood patches, wood putty, concrete forming oils, glues for veneer composing, and shelving edge fillers. Miscellaneous coating operations also include the application of primer to oriented strandboard siding that occurs at the same site as oriented strandboard manufacture and application of asphalt, clay slurry, or titanium dioxide coatings to fiberboard at the same site of fiberboard manufacture.

MSF means thousand square feet (92.9 square meters). Square footage of panels is usually measured on a thickness basis, such as 3/8-inch, to define the total volume of panels. Equation 6 of §63.2262(j) shows how to convert from one thickness basis to another.

Nondetect data means, for the purposes of this subpart, any value that is below the method detection limit.

Non-HAP coating means a coating with HAP contents below 0.1 percent by mass for Occupational Safety and Health Administration-defined carcinogens as specified in 29 CFR 1910.1200(d)(4), and below 1.0 percent by mass for other HAP compounds.

1-hour period means a 60-minute period.

Oriented strandboard (OSB) means a composite panel produced from thin wood strands cut from whole logs, formed into resinated layers (with the grain of strands in one layer oriented perpendicular to the strands in adjacent layers), and pressed.

Oven-dried ton(s) (ODT) means tons of wood dried until all of the moisture in the wood is removed. One oven-dried ton equals 907 oven-dried kilograms.

Partial wood products enclosure means an enclosure that does not meet the design criteria for a wood products enclosure as defined in this subpart.

Particle means a discrete, small piece of cellulosic material (usually wood or agricultural fiber) produced mechanically and used as the aggregate for a particleboard.

Particleboard means a composite panel composed primarily of cellulosic materials (usually wood or agricultural fiber) generally in the form of discrete pieces or particles, as distinguished from fibers, which are pressed together with resin.

Plywood means a panel product consisting of layers of wood veneers hot pressed together with resin. Plywood includes panel products made by hot pressing (with resin) veneers to a substrate such as particleboard, medium density fiberboard, or lumber.

Plywood and composite wood products (PCWP) manufacturing facility means a facility that manufactures plywood and/or composite wood products by bonding wood material (fibers, particles, strands, veneers, etc.) or agricultural fiber, generally with resin under heat and pressure, to form a structural panel or engineered wood product. Plywood and composite wood

products manufacturing facilities also include facilities that manufacture dry veneer and lumber kilns located at any facility. Plywood and composite wood products include, but are not limited to, plywood, veneer, particleboard, oriented strandboard, hardboard, fiberboard, medium density fiberboard, laminated strand lumber, laminated veneer lumber, wood I-joists, kiln-dried lumber, and glue-laminated beams.

Press predryer means a dryer used to reduce the moisture and elevate the temperature of a wetformed fiber mat before the mat enters a hot press, A press predryer is a process unit.

Pressurized refiner means a piece of equipment operated under pressure for preheating (usually by steaming) wood material and refining (rubbing or grinding) the wood material into fibers. Pressurized refiners are operated with continuous infeed and outfeed of wood material and maintain elevated internal pressures (i.e., there is no pressure release) throughout the preheating and refining process. A pressurized refiner is a process unit.

Primary tube dryer means a single-stage tube dryer or the first stage of a multi-stage tube dryer. Tube dryer stages are separated by vents for removal of moist gases between stages (e.g., a product cyclone at the end of a single-stage dryer or between the first and second stages of a multi-stage tube dryer). The first stage of a multi-stage tube dryer is used to remove the majority of the moisture from the wood furnish (compared to the moisture reduction in subsequent stages of the tube dryer). Blow-lines used to apply resin are considered part of the primary tube dryer. A primary tube dryer is a process unit.

Process unit means equipment classified according to its function such as a blender, dryer, press, former, or board cooler.

Reconstituted wood product board cooler means a piece of equipment designed to reduce the temperature of a board by means of forced air or convection within a controlled time period after the board exits the reconstituted wood product press unloader. Board coolers include wicket and star type coolers commonly found at medium density fiberboard and particleboard plants. Board coolers do not include cooling sections of dryers (e.g., veneer dryers or fiberboard mat dryers) or coolers integrated into or following hardboard bake ovens or humidifiers. A reconstituted wood product board cooler is a process unit.

Reconstituted wood product press means a press, including (if applicable) the press unloader, that presses a resinated mat of wood fibers, particles, or strands between hot platens or hot rollers to compact and set the mat into a panel by simultaneous application of heat and pressure. Reconstituted wood product presses are used in the manufacture of hardboard, medium density fiberboard, particleboard, and oriented strandboard. Extruders are not considered to be reconstituted wood product presses. A reconstituted wood product press is a process unit.

Representative operating conditions means operation of a process unit during performance testing under the conditions that the process unit will typically be operating in the future, including use of a representative range of materials (e.g., wood material of a typical species mix and moisture content or typical resin formulation) and representative operating temperature range.

Resin means the synthetic adhesive (including glue) or natural binder, including additives, used to bond wood or other cellulosic materials together to produce plywood and composite wood products.

Responsible official means responsible official as defined in 40 CFR 70.2 and 40 CFR 71.2.

Rotary strand dryer means a rotary dryer operated at elevated temperature and used to reduce the moisture of wood strands used in the manufacture of oriented strandboard, laminated strand lumber, or other wood strand-based products. A rotary strand dryer is a process unit.

Secondary tube dryer means the second stage and subsequent stages following the primary stage of a multi-stage tube dryer. Secondary tube dryers, also referred to as relay dryers, operate at lower temperatures than the primary tube dryer they follow. Secondary tube dryers are used to remove only a small amount of the furnish moisture compared to the furnish moisture reduction across the primary tube dryer. A secondary tube dryer is a process unit.

Softwood means the wood of a coniferous tree. Examples of softwoods include, but are not limited to, Southern yellow pine, Douglas fir, and White spruce.

Softwood veneer dryer means a dryer that removes excess moisture from veneer by conveying the veneer through a heated medium, generally on rollers, belts, cables, or wire mesh. Softwood veneer dryers are used to dry veneer with greater than or equal to 30 percent softwood species on an annual volume basis. Veneer kilns that operate as batch units, veneer dryers heated by radio frequency or microwaves that are used to redry veneer, and veneer redryers (defined elsewhere in this section) that are heated by conventional means are not considered to be softwood veneer dryer is a process unit.

Startup means bringing equipment online and starting the production process.

Startup, initial means the first time equipment is put into operation. Initial startup does not include operation solely for testing equipment. Initial startup does not include subsequent startups (as defined in this section) following malfunction or shutdowns or following changes in product or between batch operations. Initial startup does not include startup of equipment that occurred when the source was an area source.

Startup, shutdown, and malfunction plan (SSMP) means a plan developed according to the provisions of §63.6(e)(3).

Strand means a long (with respect to thickness and width), flat wood piece specially cut from a log for use in oriented strandboard, laminated strand lumber, or other wood strand-based product.

Temporary total enclosure (TTE) means an enclosure constructed for the purpose of measuring the capture efficiency of pollutants emitted from a given source, as defined in Method 204 of 40 CFR part 51, appendix M.

Thermal oxidizer means a control system that combusts or oxidizes exhaust gas from a process unit. Thermal oxidizers include regenerative thermal oxidizers and combustion units.

Total hazardous air pollutant emissions means, for purposes of this subpart, the sum of the emissions of the following six compounds: acetaldehyde, acrolein, formaldehyde, methanol, phenol, and propionaldehyde.

Tube dryer means a single-stage or multi-stage dryer operated at elevated temperature and used to reduce the moisture of wood fibers or particles as they are conveyed (usually pneumatically) through the dryer. Resin may or may not be applied to the wood material before it enters the tube dryer. A tube dryer is a process unit.

Veneer means thin sheets of wood peeled or sliced from logs for use in the manufacture of wood products such as plywood, laminated veneer lumber, or other products.

Veneer redryer means a dryer heated by conventional means, such as direct wood-fired, direct-gas-fired, or steam heated, that is used to redry veneer that has been previously dried. Because the veneer dried in a veneer redryer has been previously dried, the inlet moisture content of the veneer entering the redryer is less than 25 percent (by weight, dry basis). Batch units used to redry veneer (such as redry cookers) are not considered to be veneer redryers. A veneer redryer is a process unit.

Wet control device means any equipment that uses water as a means of collecting an air pollutant. Wet control devices include scrubbers, wet electrostatic precipitators, and electrified filter beds. Wet control devices do not include biofilters or other equipment that destroys or degrades HAP.

Wet forming means the process of making a slurry of water, fiber, and additives into a mat of fibers to be compressed into a fiberboard or hardboard product.

Wood 1-joists means a structural wood beam with an I-shaped cross section formed by bonding (with resin) wood or laminated veneer lumber flanges onto a web cut from a panel such as plywood or oriented strandboard.

Wood products enclosure means a permanently installed containment that was designed to meet the following physical design criteria:

- (1) Any natural draft opening shall be at least four equivalent opening diameters from each HAPemitting point, except for where board enters and exits the enclosure, unless otherwise specified by the EPA Administrator.
- (2) The total area of all natural draft openings shall not exceed 5 percent of the surface area of the enclosure's four walls, floor, and ceiling.

- (3) The average facial velocity of air through all natural draft openings shall be at least 3,600 meters per hour (200 feet per minute). The direction of airflow through all natural draft openings shall be into the enclosure.
- (4) All access doors and windows whose areas are not included in item 2 of this definition and are not included in the calculation of facial velocity in item 3 of this definition shall be closed during routine operation of the process.
- (5) The enclosure is designed and maintained to capture all emissions for discharge through a control device.

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

# Table 1A to Subpart DDDD of Part 63.—Production-Based Compliance Options

For the following process units	You must meet the following production-based compliance option (total HAP \a\ basis)
(1) Fiberboard mat dryer heated zones	0.022 lb/MSF \1/2\[sec].
(at new affected sources only).	0.058 lb/ODT.
2) Green rotary dryers	그리고 그는 중 중요한 경요하다 이 바꾸게 하셨다면서 그는 그리고 하는 사람들이 모르는 그리다.
3) Hardboard ovens	0.022 lb/MSF \1/8\[sec].
<ol> <li>Press predryers (at new affected sources only).</li> </ol>	0.037 lb/MSF \1/2\[sec].
5) Pressurized refiners	0.039 lb/ODT.
6) Primary tube dryers	
7) Reconstituted wood product board coolers (at new affected sources only).	0.014 lb/MSF \3/4\[sec].
8) Reconstituted wood product presses.	0.30 lb/MSF \3/4\[sec].
9) Softwood veneer dryer heated zones.	0.022 lb/MSF \3/8\[sec].
10) Rotary strand dryers	0.18 lb/ODT.
11) Secondary tube dryers	0.010 lb/ODT,

\a\ Total HAP, as defined in § 63.2292, includes acetaldehyde, acrolein, formaldehyde, methanol, phenol, and propionaldehyde. lb/ODT = pounds per oven-dried ton; lb/MSF = pounds per thousand square feet with a specified thickness basis (inches). Section 63.2262(j) shows how to convert from one thickness basis to another.

Note: There is no production-based compliance option for conveyor strand dryers.

# Table 1B to Subpart DDDD of Part 63.—Add-on Control Systems Compliance Options

You must comply with one of the For each of the following process units following six compliance options by using an emissions

# control system .

riberboard mat dryer heated zones (at new affected sources only); green rotary dryers; hardboard ovens; press predryers (at new affected sources only); pressurized refiners; primary tube dryers; secondary tube dryers; reconstituted wood product board coolers (at new affected sources only); reconstituted wood product presses; softwood veneer dryer heated zones; rotary strand dryers; conveyor strand dryer zone one (at existing affected sources); and conveyor strand dryer zones one and two (at new affected sources).

(1) Reduce emissions of total HAP, measured as THC (as carbon) \a\, by 90 percent; or (2) Limit emissions of total HAP, measured as THC (as carbon) \a\, to 20 ppmvd; or (3) Reduce methanol emissions by 90 percent; or (4) Limit methanol emissions to less than or equal to 1 ppmvd if uncontrolled methanol emissions entering the control device are greater than or equal to 10 ppmvd; or (5) Reduce formaldehyde emissions by 90 percent; or (6) Limit formaldehyde emissions to less than or equal to 1 ppmvd if uncontrolled formaldehyde emissions entering the control device are greater than or equal to 10 ppmvd.

\a\ You may choose to subtract methane from THC as carbon measurements.

# Table 2 to Subpart DDDD of Part 63.—Operating Requirements

If you operate a(n)	You must	Or you must
(1) Thermal oxidizer	Maintain the 3- hour block average firebox temperature above the minimum temperature established during the performance test.	Maintain the 3- hour block average THC concentration \a\ in the thermal oxidizer exhaust below the maximum concentration established during the performance test.
(2) Catalytic oxidizer	Maintain the 3- hour block average catalytic oxidizer temperature above the minimum temperature established during the performance test; AND check the	Maintain the 3- hour block average THC concentration \a\

activity level of a representative sample of the catalyst at least every 12 months. (3) Biofilter.... Maintain the 24-Maintain the 24hour block hour block biofilter bed average THC temperature concentration \a\ within the range in the biofilter established according to exhaust below the maximum § 63,2262(m). concentration established during the performance test. (4) Control device other than a Petition the EPA Maintain the 3thermal oxidizer, catalytic Administrator for hour block oxidizer, or biofilter. site-specific average THC operating concentration \a\ parameter(s) to in the control be established device exhaust during the below the maximum performance test concentration and maintain the established average operating during the parameter(s) performance test. within the range(s) established during the performance test. (5) Process unit that meets a Maintain on a Maintain the 3compliance option in Table 1A daily basis the hour block of this subpart, or a process process unit average THC controlling unit that generates debits in concentration \a\ an emissions average without in the process operating parameter(s) the use of a control device. unit exhaust within the ranges below the maximum established concentration · during the established performance test during the according to performance test. § 63.2262(n). \a\ You may choose to subtract methane from THC measurements. Table 3 to Subpart DDDD of Part 63.—Work Practice Requirements For the following process units at You must . . . existing or new affected sources . (1) Dry rotary dryers..... Process furnish with a 24-hour block

(by weight, dry basis); AND operate with a 24-hour block average inlet dryer temperature of less than or equal to 600 °F. (2) Hardwood veneer dryers.. Process less than 30 volume percent softwood species on an annual basis. (3) Softwood veneer dryers... Minimize fugitive emissions from the dryer doors through (proper maintenance procedures) and the green end of the dryers (through proper balancing of the heated zone exhausts). (4) Veneer redryers......... Process veneer that has been previously dried, such that the 24hour block average inlet moisture content of the veneer is less than or equal to 25 percent (by weight, dry basis). (5) Group 1 miscellaneous coating Use non-HAP coatings as defined in

§ 63.2292.

average inlet moisture content of less than or equal to 30 percent

# Table 4 to Subpart DDDD of Part 63.—Requirements for Performance Tests

operations.

For .	You must	Using
(1) Each process unit subject to a compliance option in Table 1A- or 1B to this subpart or used in calculation of an emissions average under § 63.2240(c);	Select sampling port's location and the number of traverse ports.	Method 1 or 1A of 40 CFR part 60, appendix A (as appropriate).
(2) Each process unit subject to a compliance option in Table 1A or 1B to this subpart or used in calculation of an emissions average under § 63.2240(c).	Determine velocity and volumetric flow rate. app	Method 2 in addition to Method 2A, 2C, 2D, 2F, or 2G in Dendix A to 40 CFR part 60 (as appropriate).
(3) Each process unit subject to a compliance option in Table 1A or 1B to this subpart or used in calculation of an emissions average under § 63.2240(c).	Conduct gas molecular weight analysis.	Method 3, 3A, or 3B in appendix A to 40 CFR part 60 (as appropriate).
(4) Each process unit subject to a compliance option in Table 1A or 1B to this subpart or used in calculation of an emissions average under § 63.2240(c).	Measure moisture content of the stack gas. app	Method 4 in appendix A to 40 CFR part 60; OR Method 320 in pendix A to 40 CFR part 63; OR ASTM D6348-03

(5) Each process unit subject to a compliance option in Table 1B to this subpart for which you choose to demonstrate compliance using a total HAP as THC compliance option.

Measure emissions of total HAP as THC.

63.14(b)). Method 25A in appendix A to 40 CFR part 60. You may measure emissions of methane using EPA Method 18 in appendix A to 40 CFR part 60 and subtract the methane emissions from the emissions of total HAP as THC. Method 320 in appendix A to 40

(6) Each process unit subject to a compliance option in Table 1A to this subpart; or for each process unit used in calculation of an emissions average under § 63.2240(c).

Measure emissions of total HAP (as defined in § 63.2292).

CFR part 63; OR the NCASI Method IM/CAN/WP-99.02

(IBR, see § 63.14(f)); OR ASTM D6348-03 (IBR, see § 63.14(b)) provided that percent R as determined in Annex A5 of ASTM D6348-03 is equal or greater than 70 percent and less than or equal to 130 percent. Method 308 in

(7) Each process unit subject to Measure emissions a compliance option in Table 1B to this subpart for which you choose to demonstrate compliance using a methanol compliance option.

of methanol.

appendix A to 40 CFR part 63; OR Method 320 in appendix A to 40 CFR part 63; OR the NCASI Method CI/WP-98.01 (IBR, see § 63.14(f)); OR the NCASI Method IM/ CAN/WP-99.02 (IBR. see § 63.14(f)). Method 316 in appendix A to 40

CFR part 63; OR

appendix A to 40

CFR part 63; OR Method 0011 in 'Test Methods

Method 320 in

(8) Each process unit subject to Measure emissions a compliance option in Table 1B to this subpart for which you choose to demonstrate compliance using a formaldehyde compliance option.

of formaldehyde.

(9) Each reconstituted wood product press at a new or existing affected source or reconstituted wood product board cooler at a new affected source subject to a compliance option in Table IB to this subpart or used in calculation of an emissions average under § 63.2240(c).

Meet the design specifications included in the definition of wood products enclosure in § 63.2292 OR.............. Determine the percent capture efficiency of the enclosure directing emissions to an add-on control device.

Physical/Chemical Methods'' (EPA Publication No. SW-846) for formaldehyde; OR the NCASI Method CI/WP-98.01 (IBR, see § 63.14(f)); OR the NCASI Method IM/ CAN/WP-99.02 (IBR, see § 63.14(f)). Methods 204 and 204A through 204F of 40 CFR part 51, appendix M, to determine capture efficiency (except for wood products enclosures as defined in § 63.2292). Enclosures that meet the definition of wood products enclosure or that meet Method 204 requirements for a permanent total enclosure (PTE) are assumed to have a capture efficiency of 100 percent. Enclosures that do not meet either the PTE requirements or design criteria for a wood products enclosure must determine the capture efficiency by constructing a TTE according to the requirements of Method 204 and applying Methods 204A through 204F

for Evaluating Solid Waste. (10) Each reconstituted wood product press at a new or existing affected source or reconstituted wood product board cooler at a new affected source subject to a compliance option in Table 1A to this subpart.

Determine the percent capture efficiency.

(as appropriate). As an alternative to Methods 204 and 204A through 204F, you may use tracer gas method contained in appendix A to this subpart.

A TTE and Methods 204 and 204A through 204F (as appropriate) of 40 CFR part 51, appendix M. As an alternative to installing a TTE and using methods 204 and 204A through 204F, you may use the tracer gas method contained in appendix A to this subpart.

(11) Each process unit subject to a compliance option in Table specific parameter 1A and 1B to this subpart or used in calculation of an emissions average under § 63.2240(c).

Establish the site- Data from the operating requirements (including the the applicable parameter limits performance test or THC concentration limits) in Table 2 to this subpart.

monitoring system or THC CEMS and method(s).

# Table 5 to Subpart DDDD of Part 63.—Performance Testing and Initial Compliance Demonstrations for the Compliance Options and Operating Requirements

For the following compliance options For each . . . and operating initial compliance requirements . . .

You have demonstrated 

(1) Process unit listed in Table Meet the 1A to this subpart.

production-based HAP emissions compliance options listed in the methods in Table 1A to this subpart.

The average total measured using Table 4 to this subpart over the 3-hour performance test are no greater

Process unit listed in Table Reduce emissions lB to this subpart.

of total HAP. measured as THC, by 90 percent.

(3) Process unit listed in Table Limit emissions of 1B to this subpart.

total HAP, measured as THC, to 20 ppmvd.

compliance option in Table 1A to this subpart; AND you have a record of the operating requirement(s) listed in Table 2 to this subpart for the process unit over the performance test during which emissions did not exceed the compliance option value. Total HAP emissions, measured using the methods in Table 4 to this subpart over the 3-hour performance test, are reduced by at least 90 percent, as calculated using the procedures in § 63.2262; AND you have a record of the operating requirement(s) listed in Table 2 to this subpart for the process unit over the performance test during which emissions were reduced by at least 90 percent. The average total HAP emissions, measured using the methods in Table 4 to this subpart over the 3-hour performance test, do not exceed 20 ppmvd; AND you have a record of the operating

requirement(s)

than the

(4) Process unit listed in Table Reduce methanol or 1B to this subpart.

formaldehyde emissions by 90 percent.

(5) Process unit listed in Table 1B to this subpart.

Limit methanol or formaldehyde emissions to less than or equal to 1 ppmvd (if uncontrolled emissions are greater than or equal to 10 ppmvd).

listed in Table 2 to this subpart for the process unit over the performance test during which emissions did not exceed 20 ppmvd. The methanol or formaldehyde emissions measured using the methods in Table 4 to this subpart over the 3-hour performance test. are reduced by at least 90 percent, as calculated using the procedures in § 63.2262; AND you have a record of the operating requirement(s) listed in Table 2 to this subpart for the process unit over the performance test during which emissions were reduced by at least 90 percent. The average methanol or formaldehyde emissions, measured using the methods in Table 4 to this subpart over the 3-hour performance test. do not exceed 1 ppmvd; AND you have a record of the operating requirement(s) listed in Table 2 to this subpart for the process unit over the performance test

during which

(6) Reconstituted wood product
press at a new or existing
affected source; or
reconstituted wood product
board cooler at a new affected
source.

(7) Process unit listed in Table 1B to this subpart controlled by routing exhaust to a combustion unit.

(8) Process unit listed in Table
1B to this subpart using a wet
control device as the sole
means of reducing HAP emissions.

Compliance options in Tables 1A and 1B to this subpart or the emissions averaging compliance option in \$ thi 63.2240(c).

Compliance options
in Table 1B to
this subpart or
the emissions
averaging
compliance option
in § pro
63.2240(c).

Compliance options
in Table 1B to
this subpart or
the emissions
averaging
compliance option
in § cap
53.2240(c):

emissions did not exceed 1 ppmvd. If the process unit is a reconstituted wood product press or a reconstituted wood product board cooler, your capture device either meets the EPA Method 204 criteria for a PTE or achieves a capture efficiency of greater than or equal to 95 percent.

ns You submit the
d results of
capture
efficiency
verification
using the methods
on in Table 4 to
this subpart with
your Notification
of Compliance
Status.

your submit with
your Notification
of Compliance
Status
documentation
on showing that the
process exhausts
controlled enter
into the flame
zone of your
combustion unit.
ons You submit with
your Notification
of Compliance
Status your plan

on organic HAP
captured in the
wastewater from
the wet control
device is
contained or
destroyed to
minimize rerelease to the

to address how

# Table 6 to Subpart DDDD of Part 63.—Initial Compliance Demonstrations for Work Practice Requirements

For each	For the following work practice requirements	You have demonstrated initial compliance if
(1) Dry rotary dryer	with an inlet moisture content less than or equal to 30 percent (by weight, dry basis) AND operate with an inlet dryer temperature of less than or equal to 600	You meet the work practice requirement AND you submit a signed statement with the Notification of Compliance Status that the dryer meets the criteria of a ''dry rotary dryer' AND you are a record of the inlet moisture content and inlet dryer temperature (as required in
(2) Hardwood veneer dryer	Process less than	§ 63.2263). You meet the work
	30 volume percent softwood species.	practice requirement AND you submit a signed statement with the
		Notification of Compliance Status that the dryer meets the
		criteria of a 'hardwood veneer dryer'! AND you have a record of the percentage of
		softwoods processed in the dryer (as required in § 63.2264).
(3) Softwood veneer dryer	Minimize fugitive	You meet the work
	emissions from	practice
그리고요 현대로 하면 아버스 아일, 다	the dryer doors	requirement AND

and the green end.

you submit with the Notification of Compliance Status a copy of your plan for minimizing fugitive emissions from the veneer dryer heated zones (as required in § 63.2265). You meet the work

(4) Veneer redryers.....

Process veneer You meet the with an inlet practice moisture content requirement? of less than or you submit a equal to 25 signed states percent (by with the weight, dry Notification basis). Compliance States

You meet the work practice requirement AND signed statement with the Notification of Compliance Status that the dryer operates only as a redryer AND you have a record of the veneer inlet moisture content of the veneer processed in the redryer (as required in § 63.2266).

(5) Group 1 miscellaneous coating operations.

Use non-HAP coatings as defined in § 63.2292. \$ 63.2266).

You meet the work practice requirement AND you submit a signed statement with the Notification of Compliance Status that you are using non-HAP coatings AND you have a record showing that you are using non-HAP coatings.

Table 7 to Subpart DDDD of Part 63.—Continuous Compliance With the Compliance Options and Operating Requirements

For the following compliance options

You must demonstrate continuous

Dar

(1) Each process unit listed in Table 1B to this subpart or used in calculation of an emisaions average under § 63.2240(c).

Compliance options Collecting and in Table 1B to this subpart or the emissions averaging compliance option in § 63.2240(c) and the operating requirements in Table 2 to this subpart based on monitoring of operating parameters.

recording the operating parameter monitoring system data listed in Table 2 to this subpart for the process unit according to § 63.2269(a) through (b) and \$ 63.2270; AND reducing the operating parameter monitoring system data to the specified averages in units of the applicable requirement according to calculations in \$ 63.2270; AND maintaining the average operating parameter at or above the minimum, at or below the maximum, or within the range (whichever applies) established according to \$ 63.2262.

(2) Each process unit listed in Tables 1A and 1B to this subpart or used in calculation of an emissions average under § 63.2240(c).

Compliance options Collecting and in Tables 1A and 1B to this subpart or the emissions

averaging compliance option in 5 63.2240(c) and the operating requirements in Table 2 of this subpart based on THC CEMS data.

recording the THC monitoring data listed in Table 2 to this subpart

for the process unit according to

63.2269(d); AND reducing the CEMS data to 3-hour block averages according to calculations in

(3) Each process unit using a blofilter.

Compliance options in Tables 1B to this subpart or

> the emissions averaging compliance option in S

63.2240(c).

63.2269 (d); AND maintaining the 3hour block average THC concentration in the exhaust gases less than or equal to the THC concentration established according to § 63.2262.

Conducting a repeat performance test using the applicable method(s) specified in

Table 4 to this subpart within 2 years following the previous performance test and within 180 days after each replacement of any portion of the biofilter bed media with a different type of media or each replacement of more than 50 percent (by volume) of the biofilter bed media with the same type of media.

Compliance options in Table 1B to this subpart or the emissions averaging compliance option in § 63.2240(c).

Checking the activity level of a representative sample of the catalyst at least every 12 months and taking any necessary

corrective action to ensure that the catalyst is performing within its design range. Collecting and recording on a

daily basis

process unit

Compliance options in Table 1A to this subpart or the emissions

(5) Each process unit listed in Table 1A to this subpart, or each process unit without a control device used in

(4) Each process unit using a

catalytic oxidizer.

calculation of an emissions averaging debit under § 63.2240(c).

(6) Each Process unit listed in

Table 1B to this subpart using

a wet control device as the

sole means of reducing HAP

emissions.

averaging compliance option

in S 63.2240(c) and the operating requirements in

Table 2 to this subpart based on monitoring of process unit controlling

operating parameters.

controlling

operating parameter data;

AND maintaining the operating parameter at or above the minimum, at or below the maximum, or within the range (whichever applies) established

according to § 63.2262.

Compliance options in Table 1B to this subpart or the emissions averaging

in § 63.2240(c).

Implementing your plan to address how organic HAP captured in the wastewater from compliance option the wet control device is

> contained or destroyed to minimize rerelease to the armosphere.

# Table 8 to Subpart DDDD of Part 63,—Continuous Compliance With the Work Practice Requirements

You must For the following demonstrate work practice compliance by . . For . . . requirements . . .

with an inlet moisture content average inlet less than or equal to 30 percent (by weight, dry basis) AND operate with an

inlet dryer temperature of less than or equal to 600

°F.

(1) Dry rotary dryer..... Process furnish Maintaining the 24hour block furnish moisture content at less than or equal to 30 percent (by weight, dry basis) AND maintaining the 24-hour block average inlet dryer temperature

at less than or equal to 600

keeping records of the inlet temperature of furnish moisture content and inlet dryer temperature. Maintaining the (2) Hardwood veneer dryer..... Process less than 30 volume percent volume percent softwood species. softwood species processed below 30 percent AND keeping records of the volume percent softwood species processed. (3) Softwood veneer dryer..... Minimize fugitive Following (and emissions from documenting that the dryer doors you are and the green end. following) your plan for minimizing fugitive emissions. Maintaining the 24-(4) Veneer redryers........ Process veneer hour block with an inlet moisture content average inlet of less than or moisture content equal to 25 of the veneer processed at or percent (by below of less weight, dry than or 25 basis). percent AND keeping records of the inlet moisture content of the veneer processed. (5) Group 1 miscellaneous Use non-HAP Continuing to use coating operations, coatings as non-HAP coatings defined in § AND keeping 63.2292. records showing that you are using non-HAP

OF; AND

coatings.

### Table 9 to Subpart DDDD of Part 63.—Requirements for Reports

The report must You must submit You must submit You must submit a(n) . . . contain . . . the report . . .

Form Approved. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR) PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different) OMB No. 2040-0004 BURDETTE, TOWN OF MINOR ARO044237 ADDRESS WATER SYSTEM 001 B PERMIT NUMBER DISCHARGE NUMBER P.O. BOX 208 F - FINAL BURDETTE AR 72321 001-MONTHLY-TRTD MUNICIPAL WW MONITORING PERIOD FACILITY MARKED BURDETTE, TOWN OF-WHIF YEAR MO DAY YEAR MO DAY LOCATION BURDETTE AR 72321 FROM *** NO DISCHARGE !X! 06 01 01 TO 06 NOTE: Read Instructions before completing this form. ATTN: JAMES T. SULLIVAN, MAYOR FREQUENCY NO. SAMPLE PARAMETER QUANTITY OR LOADING QUALITY OR CONCENTRATION TYPE ANALYSIS AVERAGE MAXIMUM MINIMUM **AVERAGE** MAXIMUM UNITS UNITS BOD, 5-DAY SAMPLE **** (26) **** (19)MEASUREMENT (20 DEG. C) 30 .45 INCE! GRAD 25 ***** ***** 00310 1 1 0 PERMIT EFFLUENT GROSS VALUE REQUIREMENT 7 DA AVG MONTH MO AVG BS/DY MO AVG MG/L **** **** ***** (12)SAMPLE MEASUREMENT DNCE/ GRAB 9.0 00400 1 1 0 PERMIT **** **** 6.0 ***** REQUIREMENT MAXIMUM MONTH EFFLUENT GROSS VALUE *** MINIMUM SU (19) SOLIDS, TOTAL SAMPLE **** (26) ***** MEASUREMENT SUSPENDED GRAE PERMIT 75 **** ***** - T 1 90 135 DNCE 00530 1 1 0 REQUIREMENT MO AVE MO AVG 7 DA AVO MG/L MONTH EFFLUENT GROSS VALUE LBS/DY **** FLOW, IN COMPUIT OR SAMPLE ( 03) ***** **** THRU TREATMENT PLANTIMEASUREMENT ***** TWO ENDS 50050 1 1 0 PERMIT REPORT REPORT **** **** *** EFFLUENT GROSS VALUE REQUIREMENT WEEK MO AVG DATLY MX MGD *** COLIFORM, FECAL **** ***** ***** ( 13) SAMPLE GENERAL MEASUREMENT ***** ***** *** **** 1000 2000 CHOEF GRAS 74055 1 1 0 PERMIT EFFLUENT GROSS VALUE REQUIREMENT **30DA GED** 7 DA CED 100ML HONTE *** SAMPLE MEASUREMENT PERMIT REQUIREMENT SAMPLE MEASUREMENT **FEOLIE UPOT** NAME/TITLE PRINCIPAL EXECUTIVE OFFICER TELEPHONE DATE JAMES T SULLIVAN el properly guiber and evaluate the informati submitted. Sucid on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of any knowledge and build, time, accurate, and complete. MAYER 10 1633920 06 BI BI IGNATURE OF PHINCIPAL EXECUTIVE I am aware that there are significant penalties for submitting take informationing the prophility of fine and imprisonment for knowing violations OFFICIER OR AUTHORIZED AGENT MUMBER NUMBER YEAR TYPED OR PRINTED COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here) NO DISCHARGE IS ALLOWED BETWEEN APRIL 1 THROUGH NOVEMBER 30. REPORT FLOW AS MONTHLY AVG. & DAILY MAX. IN MGD (MILLION GALLONS/DAY).

compliance

date;		compliance
circumvention,		
fragmentation; \$ 63.5	Construction/	Applicability,
Yes. § 63.6(a)	Reconstruction. Applicability	applications; approvals. GP apply unless
Yes,		compliance
extension;		GP apply to
area		sources that
become		major
\$ 63.6(b)(1)-(4) Yes.	Compliance Dates for	Standards apply at
date; 3	New and Reconstruct	ed effective
effective	Sources.	years after
startup;		date; upon
arka:		10 years
or in		construction
reconstruction		
section		commences for
\$ 63.6(b) (5)	Notification	112(f). Must notify if
or		commenced construction
reconstruction after		
\$ 63.6(b)(6)		proposal.
\$ 63.6(b)(7),,		Area sources that
	New and Reconstruc	ted become major
must	Area Sources that	comply with
major	Become Major.	source
standards		immediately
upon h		becoming
major,		### #### 이번 : ### 보고 ### 보고 ### 보고 ################

whether		regardless of
		required to
comply		when they
were an		area source.
§ 63.6(c)(1)-(2) Yes.	Compliance Dates for Com	ply according to
subpart,	Existing Sources.	date in
no		which must be
		later than 3
years		after
effective date;		for section
112(f)		standards,
comply		within 90
days of		effective
date unless		compliance
extension. § 63.6(c)(3)-(4)	[Reserved]	
§ 63.6(c)(5), Yes.		a sources that
must	Existing Area Sources	become major
	that Become Major.	comply with
major		source
standards by		date
indicated in		subpart or by equivalent
time		period (e.g.,
		years).
S 63.6(d) S 63.6(e)(1)-(2)	[Reserved]	
Yes	Maintenance.	emissions at
		times;
correct		malfunctions
as soon		
practicable;		as operation and

maintenance

		independently enforceable; information Administrator
		use to
determine 11		operation and maintenance requirements
were met. § 63.6(e)(3)	Startup, Shutdown, and	Requirement for SSM
Yes.	Malfunction Plan	and SSMP;
content of	(SSMP).	SSMP.
\$ 63.6(f)(1)	Compliance Except	You must comply
standards at	During SSM.	emission
		all times
except § 63.6(f)(2)-(3)	Methods for Determining	during SSM. Compliance based on
<b>Yes</b> .	Compliance.	performance
test,		operation and maintenance
plans,		records,
inspection. § 63.6(g)(1)-(3) getting Yes.	Alternative Standard	Procedures for
alternative		<b>an</b>
§ 63.6(h)(1)-(9),	Opacity/Visible	standard. Requirements for
visible	Emission (VE)	opacity and
	Standards.	emission
standards. § 63,6(1)(1)-(14) Yes.	Compliance Extension	Procedures and
		criteria for Administrator
(CO)		grant
compliance		extension.
5 63.6(i)(15) § 63.6(i)(16)	[Reserved]	Compliance
extension Yes.		and

requirements

•

S 63.6(j)	, Presidential Compliance F	, authority. resident may
category from	Exemption	source
		requirement
	Performance Test Dates. I	with rule. Dates for
conducting Yes.		initial
performance		testing and
other		compliance
demonstrations; must		conduct 180
days		after first
subject		to rule.
\$ 63.7(a)(3) Yes.	Section 114 Authority A	
performance		require a
CAA		test under
at any		section 114
§ 63.7(b)(1) Yes.	Notification of	time. Nust notify
60 days	Performance Test.	Administrat
test.		before the
보다보면 많은 그는 사람들이 하는데 그를 하는데 함께 되어요?	Notification of	f have to
	Rescheduling.	performance
test		must notify Administrat
as soon		as
practicable. § 63.7(c)submit Yes.	Quality Assurance/Test R	equirement to
test	Plan.	site-specif
before		plan 60 day
		the test or
on date		Administrat

		with; test
plan		approval
procedures;		performance
audit		requirements;
external.		internal and
		QA procedures
for		testing.
§ 63.7(d) Yes.	Testing Facilities Req	ulrements for
facilitles.		testing
§ 63.7(e)(1),	Conditions for Per	formance tests
must Yes.	Conducting Performance	be conducted
under	Tests	
representative		conditions;
cannot		
performance		conduct
SSM; not	通、 (1975) (1976) (1975) (1976) (1976) (1976) (1976) (1976) (1976) (1976) (1976) (1976) (1976) (1976) (1976) (1 1976) (1976) (1976) (1976) (1976) (1976) (1976) (1976) (1976) (1976) (1976) (1976) (1976) (1976) (1976) (1976)	tests during
to exceed.		a violation
		standard
during SSM. § 63.7(e)(2)	Conditions for Mus	it conduct
according Yes.	Conducting Performance	to rule and
EPA test	Tests	methods
unless		Administrator
		approves
alternative. § 63.7(e)(3)	Test Run Duration Mu	st have three
test Yes.		runs for at
least the		time
specified in the		
standard;		relevant
based		compliance is
		on arithmetic
mean of		three runs;
specifies		conditions

when data

が禁っている。 ひちょう ・ 一里 ・ 一強い の対策 大型 がり 無禁止は発発 ひいい ・ ・ マモン 中間 ストラギャー にはして			from an
additional		ia pina k Lepinak	
be used.			test run can
s 63.7(f)	ternative Test Method	Proce	dures by which
T.Yes.			Administrator
can		proministra. Internation	Administrator
			grant
approval to use			an
alternative test		t ts	
§ 63.7(g)pe		No. amila	method. include raw
data Yes.	rroxmance rest baca	Musc	Include law
	Analysis.		in
performance test			report; must
submit			
test data			performance
			60 days after
end of			
			test with the notification
			HOCITICACION
			compliance
status:			keep data for
5 years.	선생님들은 불안되었다.		
§ 63.7(h) Wa Yes.	iver of Tests	Proce	dures for
			Administrator
			を Maria Albana Maria Albana
performance			waive
^실 통통 (불리 ) 경기 (조리 전 ) 기통의 (조통이다.			test.
\$ 63.8(a)(1)Ap	plicability of	Subje	ct to all
	Monitoring		monitoring
	Requirements.		requirements
로 <del>14 년</del> 기계 전도 기계 시간 기계			standard.
Direction of the control of the cont	rformance	Perfo	rmance
	Specifications.		
specifications in			
			appendix B of
part 60			apply.
	eserved]		
§ 63.8(a)(4)	nitoring with Flares.	Requi	rements for
			flares in §
		en de la companya de La companya de la co	63.11 apply.
§ 63.8(b)(1)	nitoring	Must	conduct
이 바로 바람이 생각하는 사람들이 되었다. 그는 사람들이 살아보고 있다면 되었다.	그는 그 사이 나이는 그렇게 꾸는 때문에 하는 것		

according to standard unless Administrator approves alternative. § 63.8(b)(2)-(3).... ...... Multiple Effluents and Specific requirements Yes. for Multiple Monitoring installing Systems. monitoring systems; must install on each effluent before it is combined and before it is released to the atmosphere unless Administrator approves otherwise; if more than one monitoring system on an emission point, must report a11" monitoring system results, unless one monitoring system is a backup. ..... Monitoring System § 63.8(c)(1).. Maintain monitoring Yes. Operation and system in a manner consistent Maintenance. with and good air pollution control practices. § 63.8(c)(1)(i)..... Operation and Must maintain and Yes. Maintenance of CMS. operate CMS in

monitoring

accordance

with

§ 63.8(c)(1)(ii) Yes.	Spare Parts for CMS	§ 63.6(e)(1). Must maintain spare
routine CMS		parts for
S 63.8(c)(1)(iii)	SSMP for CMS	repairs. Must develop and
SSMP for		implement
§ 63.8(c)(2)-(3)		CMS. Must install to get
Yes		
representative	Installation.	
parameter		emission of
Must the company of t		measurements;
operational		verify
or at		status before
		performance
test. § 63.8(c)(4)	Continuous Monitoring	CMS must be
operating Yes.	System (CMS)	except during
out-of-	Requirements.	breakdown,
		control,
repair,		maintenance,
and high-		level
calibration		drifts; COMS
must .		have a
minimum of one		
sampling and		cycle of
<b>ach</b>		analysis for
10-second		successive
one cycle		period and
	요보다 보다 보다 기계를 받는다. 그리는 기계를 가는 것이 되었다.	of data
recording for		each
successive 6-		minute
period; CEMS	Magazia Beag Mila - Cear Joseph San Garage	the control of the co

minimum

M of		of one cycle
each		operation for
15-miaute		successive
		period.
S 63.8(c)(5)	Continuous Opacity	COMS minimum
	Monitoring System (COMS) Minimum Procedures.	procedures.
」	CMS Requirements	Zero and high-level
check		calibration
out-of-		requirements;
periods.		control
§ 63.8(d) , V:	CMS Quality Control	Requirements for
control,		quality
		including calibration,
etc.;		must keep
T qualicy		control plan
, on		record for 5
Years.		Keep old
versions for		5 years after revisions.
为1.44的,这种的数据中心,可以这个可能的是基础保险的是一种的数据数据数据数据数据数据数据数据数据数据数据数据数据数据数据数据数据数据数据	CMS Performance	Notification,
Yes.	Evaluation.	performance evaluation
test plan,		reports.
§ 63.8(f)(1)-(5) Yes	Alternative Monitoring	Procedures for
	Method,	Administrator
alternative		approve
\$ 63.8(£)(6)	Alternative to Relative	monitoring. Procedures for
Yes.	Accuracy Test.	Administrator
to		
alternative		approve

		relative
accuracy		tests for
CEMS. § 63.8(g) averages Yes.	Data Reduction	COMS 6-minute
		calculated
over at		least 36
evenly		spaced data
points,		CEMS 1 hour
averages		computed over
equally		least 4
points;		spaced data
can't be		data that
average;		used in
data		rounding of
§ 63.9(a)	Notification	Applicability and
Yes	Requirements.	State
delegation. § 63.9(b)(1)-(2)	Initial Notification	s Submit notification
Yes .	를 받았다. 그리는 현실이 통해 사람들이다. 191일 - 기업 기업 기업 기업 1912년	120 days
After		effective
date;		
		contents of notification.
	[Reserved] Initial Notifications	
Yes.		120 days
After		effective
late:		notification
construct/		intent to
		reconstruct; notification
		commencement
a <b>f</b>		commencement construct/

		notification
contents of		startup;
§ 63,9(c)	Request for Compliance Car	each. request if
Cannot Yes.	Extension,	comply by
date or if		installed
		available
control .		
technology/lowest		achievable
emission		
	Notification of Special For	rate. sources that
Yes:	Compliance	commence
construction	Requirements for New	between
proposal and	Source	promulgation
and want		to comply 3
years		after
effective date.		
(es.	Notification of Not	
50 daya	Performance Test.	Administrator
\$ 63.9(f),	Notification of Visible Not	prior. lify EPA
	Emissions/Opacity Test	. Administrator
30 days § 63.9(g)	Additional Not	prior. dication of
	Notifications When Using CMS.	performance evaluation; notification
using		COMS data;
that		exceeded
criterion		for relative
accuracy		
§ 63.9(h)(l)-(6) days Yes.		ntents; due 60
	Compliance Status.	after end of

test or		performance
		other
compliance		
demonstration, except		for
opacity/VE, which		are due 30
daya		
to aubmit		after; when
vs. State		to Federal
§ 63.9(1) Yes	Adjustment of Submittal Pro	authority. cedures for
to	Deadlines.	Administrator
		approve
change in		when
notifications		must be
submitted. § 63.9(j)	인됐음요 하이 얼룩 명일생을 인탁하고 어느일이	t submit within
15 Yes	Information	days after
the change.	- 영화를 하는 수입 등 보험에 가지 됩니다. 소리가 가는 모든 수 - 1. 이렇게 하는 이 그는 이 안나라는 이 작물을 만들었다.	
§ 63.10(a) unless Yes.	Recordkeeping/Reporting App	
extension;		compliance
submit to		when to
State		Federal vs.
		authority;
procedures		for owners of
More		than one
source. § 63.10(b)(1)	Recordkeeping/Reporting Gen	eral
Requirements; Yes.		keep all
records		readily
available;		
years.		keep for 5
§ 63.10(b)(2)(i)-(iv) of Yes.	Records Related to Occ	urrence of each
(process	Startup, Shutdown, and	operation
	Malfunction.	equipment);

	occurrence of
each	malfunction
of att	pollution
equipment;	maintenance
	pollution
control	equipment;
actions	during
startup, \$ 63.10(b)(2)(vi) and (x)-(xi). CMS Recor	shutdown, and malfunction. ds Malfunctions,
Yes,	inoperative,
out-of-	control. Measurements to
\$ 63.10(b)(2)(vii)-(ix) Records Yes.	demonstrate compliance
with	compliance
options	and operating requirements; performance
test,	performance evaluation,
and	visible
emission	observation
results;	measurements
CO	determine
conditions	<b>of</b>
performance tests	and
performance	evaluations.
§ 63.10(b)(2)(xii) Records. Yes.	walver.
§ 63,10(b)(2)(xiii) Records. Yes.	[마마바톡   라마는 말보다고 하고 있습니다. [ [ - [ - [ - [ - [ - [ - [ - [ - [ -
<b>Eo</b>	alternative
	relative
accuracy	

§ 63.10(b) (2) (xiv)	Perced	test.
Yes.		supporting
initial		notification
and		
of		notification
status,		compliance
§ 63,10(b)(3) Yes	. Records	Applicability
determinations.		
§ 63.10(c)(1)-(6), (9)-(15) for Yes.	. Records	
§ 63.10(c)(7)-(8)	Records	CMS. Records of excess
No.		emissions and parameter
monitoring		exceedances
for CMS. § 63.10(d)(1) report, Yes.	. General Reporting	Requirement to
\$ 63.10(d)(2)	Requirements.	
Yes		
State	Test Results.	Federal or
§ 63.10(d)(3)NA.	. Reporting Opacity or VE	authority. What to report and
§ 63.10(d)(4)	Observations. Progress Reports	when,
progress Yes.	. Progress Reports	
schedule		reports on
compliance		if under
	Startup, Shutdown, and	extension.
§ 63.10 (d) (5)Yes.		
§ 63.10(e)(1)-(2) Yes.	Malfunction Report Additional CMS Reports.	
		for each CEM
on a		unit; written
copy of		performance evaluation; 3
copies		of coms

performance

§ 63.10(e)(3)	Reports	evaluation. Excess emission
§ 63.10(e)(4)	Reporting COMS data	reports. Must submit COMS
performance test		with.
S 63.10(f)	Waiver for	data. Procedures for EPA,
	Recordkeeping/	Administrator
to § 63.11	Reporting. Plares	waive. Requirements for
\$ 63.12	Delegation	flares. State authority to
standards. S 63.13	Addresses	enforce Addresses where
		reports,
notifications, and		
send.		requests are
S 63.14	Incorporation by	Test methods
	Reference.	incorporated
by § 63.15	Availability of	reference. Public and
Yes	Information.	confidential information.

Appendix A to Subpart DDDD of Part 63—Alternative Procedure to Determine Capture Efficiency From Enclosures Around Hot Presses in the Plywood and Composite Wood Products Industry Using Sulfur Hexafluoride Tracer Gas

# 1.0 Scope and Application

This procedure has been developed specifically for the rule for the plywood and composite wood products (PCWP) industry and is used to determine the capture efficiency of a partial hot press enclosure in that industry. This procedure is applicable for the determination of capture efficiency for enclosures around hot presses and is an alternative to the construction of temporary total enclosures (TTE). Sulfur hexafluoride (SF₆) is used as a tracer gas (other tracer gases may be used if approved by the EPA

Administrator). This gas is not indigenous to the ambient atmosphere and is nonreactive.

This procedure uses infrared spectrometry (IR) as the analytical technique. When the infrared spectrometer used is a Fourier-Transform Infrared spectrometer (FTIR), an alternate instrument calibration procedure may be used; the alternate calibration procedure is the calibration transfer standard (CTS) procedure of EPA Method 320 (appendix A to 40 CFR part 63). Other analytical techniques which are capable of equivalent Method Performance (Section 13.0) also may be used. Specifically, gas chromatography with electron capture detection (GC/ECD) is an applicable technique for analysis of SF₆.

## 2.0 Summary of Method

A constant mass flow rate of  $SF_6$  tracer gas is released through manifolds at multiple locations within the enclosure to mimic the release of hazardous air pollutants during the press process. This test method requires a minimum of three  $SF_6$  injection points (two at the press unloader and one at the press) and provides details about considerations for locating the injection points. A GC/ECD is used to measure the concentration of  $SF_6$  at the inlet duct to the control device (outlet duct from enclosure). Simultaneously, EPA Method 2 (appendix A to 40 CFR part 60) is used to measure the flow rate at the inlet duct to the control device. The concentration and flow rate measurements are used to calculate the mass emission rate of  $SF_6$  at the control device inlet. Through calculation of the mass of  $SF_6$  released through the manifolds and the mass of  $SF_6$  measured at the inlet to the control device, the capture efficiency of the enclosure is calculated.

In addition, optional samples of the ambient air may be taken at locations around the perimeter of the enclosure to quantify the ambient concentration of  $SF_6$  and to identify those areas of the enclosure that may be performing less efficiently; these samples would be taken using disposable syringes and would be analyzed using a GC/ECD.

Finally, in addition to the requirements specified in this procedure, the data quality objectives (DQO) or lower confidence limit (LCL) criteria specified in appendix A to 40 CFR part 63, subpart KK, Data Quality Objective and Lower Confidence Limit Approaches for Alternative Capture Efficiency Protocols and Test Methods, must also be satisfied. A minimum of three test runs are required for this procedure; however, additional test runs may be required based on the results of the DQO or LCL analysis.

### 3.0 Definitions

- 3.1 Capture efficiency (CE). The weight per unit time of  $SF_6$  entering the control device divided by the weight per unit time of  $SF_6$  released through manifolds at multiple locations within the enclosure.
- 3.2 Control device (CD). The equipment used to reduce, by destruction or removal, press exhaust air pollutants prior to discharge to the ambient air.

- 3.3 Control/destruction efficiency (DE). The volatile organic compound or HAP removal efficiency of the control device.
- 3.4 Data Quality Objective (DQO) Approach. A statistical procedure to determine the precision of the data from a test series and to qualify the data in the determination of capture efficiency for compliance purposes. If the results of the DQO analysis of the initial three test runs do not satisfy the DQO criterion, the LCL approach can be used or additional test runs must be conducted. If additional test runs are conducted, then the DQO or LCL analysis is conducted using the data from both the initial test runs and all additional test runs.
- 3.5 Lower Confidence-Limit (LCL) Approach. An alternative statistical procedure that can be used to qualify data in the determination of capture efficiency for compliance purposes. If the results of the LCL approach produce a CE that is too low for demonstrating compliance, then additional test runs must be conducted until the LCL or DQO is met. As with the DQO, data from all valid test runs must be used in the calculation.
- 3.6 Minimum Measurement Level (MML). The minimum tracer gas concentration expected to be measured during the test series. This value is selected by the tester based on the capabilities of the IR spectrometer (or GC/ECD) and the other known or measured parameters of the hot press enclosure to be tested. The selected MML must be above the low-level calibration standard and preferably below the mid-level calibration standard.
- 3.7 Method 204. The U.S. EPA Method 204, "Criteria For and Verification of a
   Permanent or Temporary Total Enclosure" (40 CFR part 51, appendix M).
  - 3.8 Method 205. The U.S. EPA Method 205, "Verification of Gas Dilution Systems for Field Instrument Calibrations" (40 CFR part 51, appendix M).
  - 3.9 Method 320. The U.S. EPA Method 320, "Measurement of Vapor Phase Organic and Inorganic Emissions by Extractive Fourier Transform Infrared (FTIR) Spectroscopy" (40 CFR part 63, appendix A).
  - 3.10 Overall capture and control efficiency (CCE). The collection and control/destruction efficiency of both the PPE and CD combined. The CCE is calculated as the product of the CE and DE.
  - 3.11 Partial press enclosure (PPE). The physical barrier that "partially" encloses the press equipment, captures a significant amount of the associated emissions, and transports those emissions to the CD.
  - 3.12 Test series. A minimum of three test runs or, when more than three runs are conducted, all of the test runs conducted.

## 4.0 Interferences

There are no known interferences.

## 5.0 Safety

Sulfur hexafluoride is a colorless, odorless, nonflammable liquefied gas. It is stable and nonreactive and, because it is noncorrosive, most structural materials are compatible with it. The Occupational Safety and Health Administration Permissible Emission Limit-Time Weighted Average (PEL-TWA) and Threshold Limit Value-Time Weighted Average (TLV-TWA) concentrations are 1,000 parts per million. Sulfur hexafluoride is an asphyxiant. Exposure to an oxygen-deficient atmosphere (less than 19.5 percent oxygen) may cause dizziness, drowsiness, nausea, vomiting, excess salivation, diminished mental alertness, loss of consciousness, and death. Exposure to atmospheres containing less than 12 percent oxygen will bring about unconsciousness without warning and so quickly that the individuals cannot help themselves. Contact with liquid or cold vapor may cause frostbite. Avoid breathing sulfur hexafluoride gas. Self-contained breathing apparatus may be required by rescue workers. Sulfur hexafluoride is not listed as a carcinogen or a potential carcinogen.

### 6.0 Equipment and Supplies

This method requires equipment and supplies for: (a) the injection of tracer gas into the enclosure, (b) the measurement of the tracer gas concentration in the exhaust gas entering the control device, and (c) the measurement of the volumetric flow rate of the exhaust gas entering the control device. In addition, the requisite equipment needed for EPA Methods 1-4 in appendix A to 40 CFR part 60 will be required. Equipment and supplies for optional ambient air sampling are discussed in Section 8.6.

- 6.1 Tracer Gas Injection.
- 6.1.1 Manifolds. This method requires the use of tracer gas supply cylinder(s) along with the appropriate flow control elements. Figure 1 shows a schematic drawing of the injection system showing potential locations for the tracer gas manifolds. Figure 2 shows a schematic drawing of the recommended configuration of the injection manifold. Three tracer gas discharge manifolds are required at a minimum.
- 6.1.2 Flow Control Meter. Flow control and measurement meter for measuring the quantity of tracer gas injected. A mass flow, volumetric flow, or critical orifice control meter can be used for this method. The meter must be accurate to within  $\pm$  5 percent at the flow rate used. This means that the flow meter must be calibrated against a primary standard for flow measurement at the appropriate flow rate.
- 6.2 Measurement of Tracer Gas Concentration.

- 6.2.1 Sampling Probes. Use Pyrex or stainless steel sampling probes of sufficient length to reach the traverse points calculated according to EPA Method 1 (appendix A to 40 CFR part 60).
- 6.2.2 Sampling Line. Use a heated Teflon sampling line to transport the sample to the analytical instrument.
- 6.2.3 Sampling Pump. Use a sampling pump capable of extracting sufficient sample from the duct and transporting to the analytical instrument.
- 6.2.4 Sample Conditioning System. Use a particulate filter sufficient to protect the sampling pump and analytical instrument. At the discretion of the tester and depending on the equipment used and the moisture content of the exhaust gas, it may be necessary to further condition the sample by removing moisture using a condenser.
- 6.2.5 Analytical Instrument. Use one of the following analytical instruments.
- 6.2.5.1 Spectrometer. Use an infrared spectrometer designed to measuring SF₆ tracer gas and capable of meeting or exceeding the specifications of this procedure. An FTIR meeting the specifications of Method 320 in appendix A to 40 CFR part 63 may be used.
- 6.2.5.2 GC/ECD. Use a GC/ECD designed to measure SF₆ tracer gas and capable of meeting or exceeding the specifications of this procedure.
- 6.2.6 Recorder. At a minimum, use a recorder with linear strip chart. An automated data acquisition system (DAS) is recommended.
- 6.3 Exhaust Gas Flow Rate Measurement. Use equipment specified for EPA Methods 2, 3, and 4 in appendix A to 40 CFR part 60 for measuring flow rate of exhaust gas at the inlet to the control device.

### 7.0 Reagents and Standards

- 7.1 Tracer Gas. Use  $SF_6$  as the tracer gas. The manufacturer of the  $SF_6$  tracer gas should provide a recommended shelf life for the tracer gas cylinder over which the concentration does not change more than  $\pm 2$  percent from the certified value. A gas mixture of  $SF_6$  diluted with nitrogen should be used; based on experience and calculations, pure  $SF_6$  gas is not necessary to conduct tracer gas testing. Select a concentration and flow rate that is appropriate for the analytical instrument's detection limit, the MML, and the exhaust gas flow rate from the enclosure (see section 8.1.1). You may use a tracer gas other than  $SF_6$  with the prior approval of the EPA Administrator. If you use an approved tracer gas other than  $SF_6$ , all references to  $SF_6$  in this protocol instead refer to the approved tracer gas.
- 7.2 Calibration Gases. The SF₆ calibration gases required will be dependent on the selected MML and the appropriate span selected for the test. Commercial cylinder gases

certified by the manufacturer to be accurate to within 1 percent of the certified label value are preferable, although cylinder gases certified by the manufacturer to 2 percent accuracy are allowed. Additionally, the manufacturer of the SF₆ calibration gases should provide a recommended shelf life for each calibration gas cylinder over which the concentration does not change more than ± 2 percent from the certified value. Another option allowed by this method is for the tester to obtain high concentration certified cylinder gases and then use a dilution system meeting the requirements of EPA Method 205, 40 CFR part 51, appendix M, to make multi-level calibration gas standards. Low-level, mid-level, and high-level calibration gases will be required. The MML must be above the low-level standard, the high-level standard must be no more than four times the low-level standard, and the mid-level standard must be approximately halfway between the high- and low-level standards. See section 12.1 for an example calculation of this procedure.

#### Note:

If using an FTIR as the analytical instrument, the tester has the option of following the CTS procedures of Method 320 in appendix A to 40 CFR part 63; the calibration standards (and procedures) specified in Method 320 may be used in lieu of the calibration standards and procedures in this protocol.

- 7.2.1 Zero Gas. High purity nitrogen.
- 7.2.2 Low-Level Calibration Gas. An SF₆ calibration gas in nitrogen with a concentration equivalent to 20 to 30 percent of the applicable span value.
- 7.2.3 Mid-Level Calibration Gas. An SF₆ calibration gas in nitrogen with a concentration equivalent to 45 to 55 percent of the applicable span value.
- 7.2.4 High-Level Calibration Gas. An SF₆ calibration gas in nitrogen with a concentration equivalent to 80 to 90 percent of the applicable span value.
- 8.0 Sample Collection, Preservation, Storage, and Transport
- 8.1 Test Design.
- 8.1.1 Determination of Minimum Tracer Gas Flow Rate.
- 8.1.1.1 Determine (via design calculations or measurements) the approximate flow rate of the exhaust gas through the enclosure, actual cubic feet per minute (acfm).
- 8.1.1.2 Calculate the minimum tracer gas injection rate necessary to assure a detectable SF₆ concentration at the exhaust gas measurement point (see section 12.1 for calculation).
- 8.1.1,3 Select a flow meter for the injection system with an operating range appropriate

for the injection rate selected.

- 8.1.2 Determination of the Approximate Time to Reach Equilibrium.
- 8.1.2.1 Determine the volume of the enclosure.
- 8.1.2.2 Calculate the air changes per minute of the enclosure by dividing the approximate exhaust flow rate (8.1.1.1 above) by the enclosed volume (8.1.2.1 above).
- 8.1.2.3 Calculate the time at which the tracer concentration in the enclosure will achieve approximate equilibrium. Divide 3 by the air changes per minute (8.1.2.2 above) to establish this time. This is the approximate length of time for the system to come to equilibrium. Concentration equilibrium occurs when the tracer concentration in the enclosure stops changing as a function of time for a constant tracer release rate. Because the press is continuously cycling, equilibrium may be exhibited by a repeating, but stable, cyclic pattern rather than a single constant concentration value. Assure sufficient tracer gas is available to allow the system to come to equilibrium, and to sample for a minimum of 20 minutes and repeat the procedure for a minimum of three test runs. Additional test runs may be required based on the results of the DQO and LCL analyses described in 40 CFR part 63, subpart KK, appendix A.
- 8.1.3 Location of Injection Points. This method requires a minimum of three tracer gas injection points. The injection points should be located within leak prone, volatile organic compound/hazardous air pollutant (VOC/HAP) producing areas around the press, or horizontally within 12 inches of the defined equipment. One potential configuration of the injection points is depicted in Figure 1. The effect of wind, exfiltration through the building envelope, and air flowing through open building doors should be considered when locating tracer gas injection points within the enclosure. The injection points should also be located at a vertical elevation equal to the VOC/HAP generating zones. The injection points should not be located beneath obstructions that would prevent a natural dispersion of the gas. Document the selected injection points in a drawing(s).
- 8.1.4 Location of Flow Measurement and Tracer Sampling. Accurate CD inlet gas flow rate measurements are critical to the success of this procedure. Select a measurement location meeting the criteria of EPA Method 1 (40 CFR part 60, appendix A), Sampling and Velocity Traverses for Stationary Sources. Also, when selecting the measurement location, consider whether stratification of the tracer gas is likely at the location (e.g., do not select a location immediately after a point of air in-leakage to the duct).
- 8.2 Tracer Gas Release. Release the tracer gas at a calculated flow rate (see section 12.1 for calculation) through a minimum of three injection manifolds located as described above in 8.1.3. The tracer gas delivery lines must be routed into the enclosure and attached to the manifolds without violating the integrity of the enclosure.

# 8.3 Pretest Measurements.

- 8.3.1 Location of Sampling Point(s). If stratification is not suspected at the measurement location, select a single sample point located at the centroid of the CD inlet duct or at a point no closer to the CD inlet duct walls than 1 meter. If stratification is suspected, establish a "measurement line" that passes through the centroidal area and in the direction of any expected stratification. Locate three traverse points at 16.7, 50.0 and 83.3 percent of the measurement line and sample from each of these three points during each run, or follow the procedure in section 8.3.2 to verify whether stratification does or does not exist.
- 8.3.2 Stratification Verification. The presence or absence of stratification can be verified by using the following procedure. While the facility is operating normally, initiate tracer gas release into the enclosure. For rectangular ducts, locate at least nine sample points in the cross section such that the sample points are the centroids of similarly-shaped, equal area divisions of the cross section. Measure the tracer gas concentration at each point. Calculate the mean value for all sample points. For circular ducts, conduct a 12-point traverse (i.e., six points on each of the two perpendicular diameters) locating the sample points as described in 40 CFR part 60, appendix A, Method 1, Perform the measurements and calculations as described above. Determine if the mean pollutant concentration is more than 10 percent different from any single point. If so, the cross section is considered to be stratified, and the tester may not use a single sample point location, but must use the three traverse points at 16.7, 50.0, and 83.3 percent of the entire measurement line. Other traverse points may be selected, provided that they can be shown to the satisfaction of the Administrator to provide a representative sample over the stack or duct cross section.
- 8.4 CD Inlet Gas Flow Rate Measurements. The procedures of EPA Methods 1-4 (40 CFR part 60, appendix A) are used to determine the CD inlet gas flow rate. Molecular weight (Method 3) and moisture (Method 4) determinations are only required once for each test series. However, if the test series is not completed within 24 hours, then the molecular weight and moisture measurements should be repeated daily. As a minimum, velocity measurements are conducted according to the procedures of Methods 1 and 2 before and after each test run, as close to the start and end of the run as practicable. A velocity measurement between two runs satisfies both the criterion of "after" the run just completed and "before" the run to be initiated. Accurate exhaust gas flow rate measurements are critical to the success of this procedure. If significant temporal variations of flow rate are anticipated during the test run under normal process operating conditions, take appropriate steps to accurately measure the flow rate during the test. Examples of steps that might be taken include: (1) conducting additional velocity traverses during the test run; or (2) continuously monitoring a single point of average velocity during the run and using these data, in conjunction with the pre- and post-test traverses, to calculate an average velocity for the test run.
- 8.5 Tracer Gas Measurement Procedure.

8.5.1 Calibration Error Test. Immediately prior to the emission test (within 2 hours of the start of the test), introduce zero gas and high-level calibration gas at the calibration valve assembly. Zero and calibrate the analyzer according to the manufacturer's procedures using, respectively, nitrogen and the calibration gases. Calculate the predicted response for the low-level and mid-level gases based on a linear response line between the zero and high-level response. Then introduce the low-level and mid-level calibration gases successively to the measurement system. Record the analyzer responses for the low-level and mid-level calibration gases and determine the differences between the measurement system responses and the predicted responses using the equation in section 12.3. These differences must be less than 5 percent of the respective calibration gas value. If not, the measurement system must be replaced or repaired prior to testing. No adjustments to the measurement system shall be conducted after the calibration and before the drift determination (section 8.5.4). If adjustments are necessary before the completion of the test series, perform the drift checks prior to the required adjustments and repeat the calibration following the adjustments. If multiple electronic ranges are to be used, each additional range must be checked with a mid-level calibration gas to verify the multiplication factor.

#### Note:

- If using an FTIR for the analytical instrument, you may choose to follow the pretest preparation, evaluation, and calibration procedures of Method 320 (section 8.0) (40 CFR part 63, appendix A) in lieu of the above procedure.
- 8.5.2 Response Time Test. Conduct this test once prior to each test series. Introduce zero gas into the measurement system at the calibration valve assembly. When the system output has stabilized, switch quickly to the high-level calibration gas. Record the time from the concentration change to the measurement system response equivalent to 95 percent of the step change. Repeat the test three times and average the results.
  - 8.5.3 SF₆ Measurement, Sampling of the enclosure exhaust gas at the inlet to the CD should begin at the onset of tracer gas release. If necessary, adjust the tracer gas injection rate such that the measured tracer gas concentration at the CD inlet is within the spectrometer's calibration range (i.e., between the MML and the span value). Once the tracer gas concentration reaches equilibrium, the SF₆ concentration should be measured using the infrared spectrometer continuously for at least 20 minutes per run. Continuously record (i.e., record at least once per minute) the concentration. Conduct at least three test runs. On the recording chart, in the data acquisition system, or in a log book, make a note of periods of process interruption or cyclic operation such as the cycles of the hot press operation. Table 1 to this appendix summarizes the physical measurements required for the enclosure testing.

### Note:

If a GC/ECD is used as the analytical instrument, a continuous record (at least once per

minute) likely will not be possible; make a minimum of five injections during each test run. Also, the minimum test run duration criterion of 20 minutes applies.

- 8.5.4 Drift Determination. Immediately following the completion of the test run, reintroduce the zero and mid-level calibration gases, one at a time, to the measurement system at the calibration valve assembly. (Make no adjustments to the measurement system until both the zero and calibration drift checks are made.) Record the analyzer, responses for the zero and mid-level calibration gases and determine the difference between the instrument responses for each gas prior to and after the emission test run using the equation in section 12.4. If the drift values exceed the specified limits (section 13), invalidate the test results preceding the check and repeat the test following corrections to the measurement system. Alternatively, recalibrate the test measurement system as in section 8.5.1 and report the results using both sets of calibration data (i.e., data determined prior to the test period and data determined following the test period). Note: If using an FTIR for the analytical instrument, you may choose to follow the post-test calibration procedures of Method 320 in appendix A to 40 CFR part 63 (section 8.11.2) in lieu of the above procedures.
- 8.6 Ambient Air Sampling (Optional). Sampling the ambient air surrounding the enclosure is optional. However, taking these samples during the capture efficiency testing will identify those areas of the enclosure that may be performing less efficiently.
- 8.6.1 Location of Ambient Samples Outside the Enclosure (Optional). In selecting the sampling locations for collecting samples of the ambient air surrounding the enclosure, consider potential leak points, the direction of the release, and laminar flow characteristics in the area surrounding the enclosure. Samples should be collected from all sides of the enclosure, downstream in the prevailing room air flow, and in the operating personnel occupancy areas.
- 8.6.2 Collection of Ambient Samples (Optional). During the tracer gas release, collect ambient samples from the area surrounding the enclosure perimeter at predetermined location using disposable syringes or some other type of containers that are non-absorbent, inert, and that have low permeability (i.e., polyvinyl fluoride film or polyester film sample bags or polyethylene, polypropylene, nylon or glass bottles). The use of disposable syringes allows samples to be injected directly into a gas chromatograph. Concentration measurements taken around the perimeter of the enclosure provide evidence of capture performance and will assist in the identification of those areas of the enclosure that are performing less efficiently.
- 8.6.3 Analysis and Storage of Ambient Samples (Optional). Analyze the ambient samples using an analytical instrument calibrated and operated according to the procedures in this appendix or ASTM E 260 and ASTM E 697. Samples may be analyzed immediately after a sample is taken, or they may be stored for future analysis. Experience has shown no degradation of concentration in polypropylene syringes when stored for several months as long as the needle or syringe is plugged. Polypropylene syringes should be discarded after

one use to eliminate the possibility of cross contamination of samples.

## 9.0 Quality Control

- 9.1 Sampling, System Leak Check. A sampling system leak check should be conducted prior to and after each test run to ensure the integrity of the sampling system.
- 9.2 Zero and Calibration Drift Tests.

The state of the s	
Section	Quality control measure Effect
8.5.4	Zero and calibration Ensures that bias drift tests. Introduced by drift
	in the measurement  system output during
	the run is no greater than 3 percent of
	Boan.

### 10.0 Calibration and Standardization

- 10.1 Control Device Inlet Air Flow Rate Measurement Equipment. Follow the equipment calibration requirements specified in Methods 2, 3, and 4 (appendix A to 40 CFR part 60) for measuring the velocity, molecular weight, and moisture of the control device inlet air.
- 10.2 Tracer Gas Injection Rate. A dry gas volume flow meter, mass flow meter, or orifice can be used to measure the tracer gas injection flow rate. The selected flow measurement device must have an accuracy of greater than ± 5 percent at the field operating range. Prior to the test, verify the calibration of the selected flow measurement device using either a wet test meter, spirometer, or liquid displacement meter as the calibration device. Select a minimum of two flow rates to bracket the expected field operating range of the flow meter. Conduct three calibration runs at each of the two selected flow rates. For each run, note the exact quantity of gas as determined by the calibration standard and the gas volume indicated by the flow meter. For each flow rate, calculate the average percent difference of the indicated flow compared to the calibration standard.
- 10.3 Spectrometer. Follow the calibration requirements specified by the equipment manufacturer for infrared spectrometer measurements and conduct the pretest calibration error test specified in section 8.5.1. Note: if using an FTIR analytical instrument see Method 320, section 10 (appendix A to 40 CFR part 63).
- 10.5 Gas Chromatograph. Follow the pre-test calibration requirements specified in section 8.5.1.
- 10.4 Gas Chromatograph for Ambient Sampling (Optional). For the optional ambient

sampling, follow the calibration requirements specified in section 8.5.1 or ASTM E 260 and E 697 and by the equipment manufacturer for gas chromatograph measurements.

11.0 Analytical Procedures

The sample collection and analysis are concurrent for this method (see section 8.0).

12.0 Calculations and Data Analysis

12.1 Estimate MML and Span. The MML is the minimum measurement level. The selection of this level is at the discretion of the tester. However, the MML must be higher than the low-level calibration standard, and the tester must be able to measure at this level with a precision of ≤10 percent. As an example, select the MML as 10 times the instrument's published detection limit. The detection limit of one instrument is 0.01 parts per million by volume (ppmv). Therefore, the MML would be 0.10 ppmv. Select the low-level calibration standard as 0.08 ppmv. The high-level standard would be four times the low-level standard or 0.32 ppmv. A reasonable mid-level standard would then be 0.20 ppmv (halfway between the low-level standard and the high-level standard). Finally, the span value would be approximately 0.40 ppmv (the high-level value is 80 percent of the span). In this example, the following MML, calibration standards, and span values would apply:

MML = 0.10 ppmv

Low-level standard = 0.08 ppmv

Mid-level standard = 0.20 ppmv

High-level standard = 0.32 ppmv

Span value = 0.40 ppmv

12.2 Estimate Tracer Gas Injection Rate for the Given Span. To estimate the minimum and maximum tracer gas injection rate, assume a worst case capture efficiency of 80 percent, and calculate the tracer gas flow rate based on known or measured parameters. To estimate the minimum tracer gas injection rate, assume that the MML concentration (10 times the IR detection limit in this example) is desired at the measurement location. The following equation can be used to estimate the minimum tracer gas injection rate:

 $((QT-MIN \times 0.8)/Q_B) \times (C_T \div 100) \times 10^6 = MML$ 

QT-MIN =  $1.25 \times MML \times (Q_E/C_T) \times 10^{-4}$ 

Where:

QT-MIN = minimum volumetric flow rate of tracer gas injected, standard cubic feet per minute (scfm);

Q_B = volumetric flow rate of exhaust gas, scfm;

 $C_T = Tracer$  gas (SF₆) concentration in gas blend, percent by volume;

MML = minimum measured level, ppmv =  $10 \times IR_{DL}$  (for this example);

 $IR_{DL} = IR$  detection limit, ppmv.

Standard conditions: 20 °C, 760 millimeters of mercury (mm Hg).

To estimate the maximum tracer gas injection rate, assume that the span value is desired at the measurement location. The following equation can be used to estimate the maximum tracer gas injection rate:

 $((QT-MAX \times 0.8)/Q_B) \times (C_T \div 100) \times 10^6 = \text{span value}$ 

QT-MAX = 1.25 × span value ×  $(Q_B/C_T)$  ×  $10^{-4}$ 

Where:

QT-MAX = maximum volumetric flow rate of tracer gas injected, scfm;

Span value = instrument span value, ppmv.

The following example illustrates this calculation procedure:

Find the range of volumetric flow rate of tracer gas to be injected when the following parameters are known:

 $Q_B = 60,000$  scfm (typical exhaust gas flow rate from an enclosure);

 $C_T = 2$  percent  $SP_6$  in nitrogen;

IR_{DL} = 0.01 ppmy (per manufacturer's specifications);

 $MML = 10 \times IR_{DL} = 0.10 \text{ ppmv};$ 

Span value = 0.40 ppmv;

 $Q_T = ?$ 

Minimum tracer gas volumetric flow rate:

 $QT-MIN = 1.25 \times MML \times (Q_g/C_T) \times 10^{-4}$ 

QT-MIN =  $1.25 \times 0.10 \times (60,000/2) \times 10^{-4} = 0.375$  sofm

Maximum tracer gas volumetric flow rate:

QT-MAX =  $1.25 \times \text{span value} \times (Q_E/C_T) \times 10^{-4}$ 

QT-MAX =  $1.25 \times 0.40 \times (60,000/2) \times 10^{-4} = 1.5 \text{ scfm}$ 

In this example, the estimated total volumetric flow rate of the two percent SF₆ tracer gas injected through the manifolds in the enclosure lies between 0.375 and 1.5 scfm.

12.3 Calibration Error. Calculate the calibration error for the low-level and mid-level calibration gases using the following equation:

Err = &bond;  $C_{std}$  -  $C_{meas}$  &bond;  $\div C_{std} \times 100$ 

Where:

Err = calibration error, percent;

C_{std} = low-level or mid-level calibration gas value, ppmv;

C_{meas} = measured response to low-level or mid-level concentration gas, ppmv.

12.4 Calibration Drift. Calculate the calibration drift for the zero and low-level calibration gases using the following equation:

 $D = \&bond; C_{initial} - C_{final} \&bond; \div C_{span} \times 100$ 

Where:

D = calibration drift, percent;

C_{initial} = low-level or mid-level calibration gas value measured before test run, ppmv;

C_{final} = low-level or mid-level calibration gas value measured after test run, ppmv;

 $C_{\text{span}} = \text{span value, ppmv.}$ 

12.5 Calculate Capture Efficiency. The equation to calculate enclosure capture efficiency

is provided below:

 $CE = (SF6-CD \div SF6-INJ) \times 100$ 

Where:

CE = capture efficiency;

 $SF6-CD = mass of SF_6 measured at the inlet to the CD;$ 

SF6-INJ= mass of SF₆ injected from the tracer source into the enclosure.

Calculate the CE for each of the initial three test runs. Then follow the procedures outlined in section 12.6 to calculate the overall capture efficiency.

12.6 Calculate Overall Capture Efficiency. After calculating the capture efficiency for each of the initial three test runs, follow the procedures in 40 CFR part 63, subpart KK, appendix A, to determine if the results of the testing can be used in determining compliance with the requirements of the rule. There are two methods that can be used: the DQO and LCL methods. The DQO method is described in section 3 of 40 CFR part 63, subpart KK, appendix A, and provides a measure of the precision of the capture efficiency testing conducted. Section 3 of 40 CFR part 63, subpart KK, appendix A, provides an example calculation using results from a facility. If the DQO criteria are met using the first set of three test runs, then the facility can use the average capture efficiency of these test results to determine the capture efficiency of the enclosure. If the DQO criteria are not met, then the facility can conduct another set of three runs and run the DQO analysis again using the results from the six runs OR the facility can elect to use the LCL approach.

The LCL method is described in section 4 of 40 CFR part 63, subpart KK, appendix A, and provides sources that may be performing much better than their regulatory requirement, a screening option by which they can demonstrate compliance. The LCL approach compares the 80 percent lower confidence limit for the mean measured CE value to the applicable regulatory requirement. If the LCL capture efficiency is higher than the applicable limit, then the facility is in initial compliance and would use the LCL capture efficiency as the capture efficiency to determine compliance. If the LCL capture efficiency is lower than the applicable limit, then the facility must perform additional test runs and re-run the DQO or LCL analysis.

- 13.0 Method Performance
- 13.1 Measurement System Performance Specifications.
- 13.1.1 Zero Drift. Less than ± 3 percent of the span value.

- 13.1.2 Calibration Drift. Less than ± 3 percent of the span value.
- 13.1.3 Calibration Error. Less than ± 5 percent of the calibration gas value.
- 13.2 Flow Measurement Specifications. The mass flow, volumetric flow, or critical orifice control meter used should have an accuracy of greater than ± 5 percent at the flow rate used.
- 13.3 Calibration and Tracer Gas Specifications. The manufacturer of the calibration and tracer gases should provide a recommended shelf life for each calibration gas cylinder over which the concentration does not change more than  $\pm$  2 percent from the certified value.
- 14.0 Pollution Prevention [Reserved]
- 15.0 Waste Management [Reserved] 16.0 References
- 1. 40 CFR part 60, appendix A, EPA Method 1—Sample and velocity traverses for stationary sources.
- 2. 40 CFR part 60, appendix A, EPA Method 2—Determination of stack gas velocity and volumetric flow rate.
- 3. 40 CFR part 60, appendix A, EPA Method 3—Gas analysis for the determination of dry molecular weight.
- 4. 40 CFR part 60, appendix A, EPA Method 4—Determination of moisture content in stack gases.
- 5. SEMI F15-93 Test Method for Enclosures Using Sulfur Hexafluoride Tracer Gas and Gas Chromotography.
- 6. Memorandum from John S. Seitz, Director, Office of Air Quality Planning and Standards, to EPA Regional Directors, Revised Capture Efficiency Guidance for Control of Volatile Organic Compound Emissions, February 7, 1995. (That memorandum contains an attached technical document from Candace Sorrell, Emission Monitoring and Analysis Division, "Guidelines for Determining Capture Efficiency," January 9, 1994).
- 7. Technical Systems Audit of Testing at Plant "C," EPA-454/R-00-26, May 2000.
- 8. Material Safety Data Sheet for SF₆ Air Products and Chemicals, Inc. Website: www3.airproducts.com. October 2001.
- 17.0 Tables, Diagrams, Flowcharts, and Validation Data

Table 1 to Appendix A to Subpart DDDD of 40 CFR Part 63._Summary of Critical Physical Measurements for Enclosure

## Testing

frequency	Measurement Measurement site	Measurement instrumentation	Measurement
	injection rate		
concinuous.	Injection ma	volumetric flow meter	
(cylinder g			
,01++*******		or critical crifice.	
Tracer dee	concentration at control		Continuous
	Inlet duct to the		
device inl	<ol> <li>Mills Co. Co. Co. Co. Co. Co. Co. Co. Co. Co.</li></ol>	or GC/ECD.	one reading
	control device (outlet		
			minute) for
a minimum	duct of enclosure).		
			of 20
minutes.			
Volumetric	air flow rate	EPA Methods 1, 2, 3, 4	Each test ru
for	Inlet duct to the		
142		(40 CFR part 60,	velocity
(minimum);	control device (outle		
		appendix A).	Daily for
moisture ar	d duct of enclosure).		
		<ul> <li>Velocity sensor mo.</li> </ul>	
		(Manometer/Pitot tube)	
		• Thermocouple	
		Midget Impinger	
		sampler	
	하는데 많은 사람들이 걸었다.	• Orsat or Fyrite	

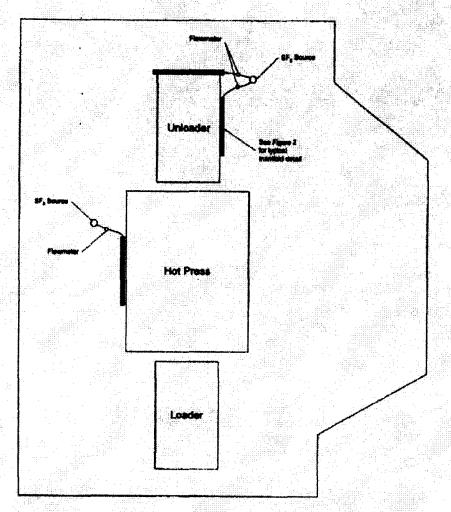


Figure 1. Plan view schematic of hot press and enclosure showing SF, manifold locations.

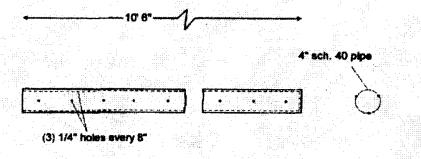


Figure 2. Schematic detail for manifold system for  $SF_{\nu}$  injection.

Elevation

Appendix B to Subpart DDDD of Part 63—Methodology and Criteria for Demonstrating That an

Affected Source Is Part of the Low-Risk Subcategory of Plywood and Composite Wood Products
Manufacturing Affected Sources >

## 1. Purpose

This appendix provides the methodology and criteria for demonstrating that your affected source is part of the low-risk subcategory of plywood and composite wood products (PCWP) manufacturing facilities. You must demonstrate that your affected source is part of the low-risk subcategory using either a look-up table analysis (based on the look-up tables included in this appendix) or using a site-specific risk assessment performed according to the criteria specified in this appendix. This appendix also specifies how and when you must obtain approval of the low-risk demonstrations for your affected source and how to ensure that your affected source remains in the low-risk subcategory of PCWP facilities.

2. Who Is Eligible To Demonstrate That They Are Part of the Low-Risk Subcategory of PCWP Affected Sources?

Each new, reconstructed, or existing affected source at a PCWP manufacturing facility may demonstrate that they are part of the low-risk subcategory of PCWP affected sources. Section 63.2232 of 40 CFR part 63, subpart DDDD, defines the affected source and explains which affected sources are new, existing, or reconstructed.

3. What Parts of My Affected Source Have To Be Included in the Low-Risk Demonstration?

Every process unit that is part of the PCWP affected source (as defined in §63.2292 of 40 CFR part 63, subpart DDDD) and that emits one or more hazardous air pollutant (HAP) listed in Table 1 to this appendix must be included in the low-risk demonstration. You are not required to include process units outside of the affected source in the low-risk demonstration.

- 4. What Are the Criteria for Determining if My Affected Source Is Low Risk?
- (a) Determine the individual HAP emission rates from each process unit within the affected source using the procedures specified in section 5 of this appendix.
- (b) Perform chronic and acute risk assessments using the dose-response values, as specified in paragraphs (b)(1) through (3) of this section.
- (1) For a look-up table analysis or site-specific chronic inhalation risk assessment, you should use the cancer and noncancer dose-response values listed on the Environmental Protection Agency (EPA) Air Toxics Web site (http://www.epa.gov/tm/atw/toxsource/summary.html) to estimate carcinogenic and noncarcinogenic chronic inhalation risk, respectively.

- (2) For site-specific acute inhalation risk assessment, you should use the acute exposure guidance level (AEGL-1) value for acrolein and the acute reference exposure level (REL) value for formaldehyde for estimating acute inhalation risk found at <a href="http://www.epa.gov/ttn/atw/toxsource/summary.html">http://www.epa.gov/ttn/atw/toxsource/summary.html</a>.
- (3) You may use dose-response values more health-protective than those posted on the EPA Air Toxics Web site (http://www.epa.gov/ttn/atw/toxsource/summary.html) to facilitate ongoing certification (as required in section 13 of this appendix) that your affected source remains in the low-risk subcategory.
- (c) Demonstrate that your affected source is part of the low-risk subcategory by estimating the maximum impacts of your affected source using the methods described in either section 6 of this appendix (look-up table analysis) or section 7 of this appendix (site-specific risk assessment) and comparing the results to the low-risk criteria presented in the applicable section.
- 5. How Do I Determine HAP Emissions From My Affected Source?
- (a) You must conduct HAP emissions tests according to the requirements in paragraphs (b) through (h) of this section and the methods specified in Table 2 to this appendix for every process unit within the affected source that emits one or more of the HAP listed in Table 1 to this appendix. You must test the process units at your affected source to obtain the emission rates in pounds per hour (lb/hr) for each of the pollutants listed in Table 1 to this appendix.
- (b) Periods when emissions tests must be conducted.
- (1) You must not conduct emissions tests during periods of startup, shutdown, or malfunction, as specified in 40 CFR 63.7(e)(1).
- (2) You must test under worst-case operating conditions as defined in this appendix. You must describe your worst-case operating conditions in your performance test report for the process and control systems (if applicable) and explain why the conditions are worst-case.
- (c) Number of test runs. You must conduct three separate test runs for each test required in this section, as specified in 40 CFR 63.7(e)(3). Each test run must last at least 1 hour except for: testing of a temporary total enclosure (TTE) conducted using Methods 204A through 204F in 40 CFR part 51, appendix M, which require three separate test runs of at least 3 hours each; and testing of an enclosure conducted using the alternative tracer gas method in appendix A to 40 CFR part 63, subpart DDDD, which requires a minimum of three separate runs of at least 20 minutes each.
- (d) Sampling locations. Sampling sites must be located at the emission point and prior to any releases to the atmosphere. For example, at the outlet of the control device, including

wet control devices, and prior to any releases to the atmosphere.

- (e) Collection of monitoring data for HAP control devices. During the emissions test, you must collect operating parameter monitoring system or continuous emissions monitoring system (CEMS) data at least every 15 minutes during the entire emissions test and establish the site-specific operating requirements (including the parameter limits or total hydrocarbon (THC) concentration limit) in Table 2 to 40 CFR part 63, subpart DDDD, using data from the monitoring system and the procedures specified in paragraphs (k) through (o) of §63.2262 of subpart DDDD of 40 CFR part 63.
- (f) Nondetect data. You may treat emissions of an individual HAP as zero if all of the test runs result in a nondetect measurement and the conditions in paragraphs (1) and (2) of this section are met for the relevant test method. Otherwise, nondetect data (as defined in §63.2292 of 40 CFR part 63, subpart DDDD) for individual HAP must be treated as one-half of the method detection limit.
- (1) The method detection limit is less than or equal to 1 part per million by volume, dry (ppmvd) for pollutant emissions measured using Method 320 in appendix A to 40 CFR part 63; or the NCASI Method IM/CAN/WP-99.02 (incorporated by reference (IBR), see 40 CFR 63.14(f)); or ASTM D6348-03 (IBR, see 40 CFR 63.14(b)).
- (2) For pollutants measured using Method 29 in appendix A to 40 CFR part 60, you
   analyze samples using atomic absorption spectroscopy (AAS).
  - (g) For purposes of your low-risk demonstration, you must assume that 17 percent of your total chromium measured using EPA Method 29 in appendix A to 40 CFR part 60 is chromium VI. You must assume that 65 percent of your total nickel measured using EPA Method 29 in appendix A to 40 CFR part 60 is nickel subsulfide.
  - (h) You may use emission rates higher than your measured emission rates (e.g., emissions rates 10 times your measured emission rate) to facilitate ongoing certification (as required in section 13 of this appendix) that your affected source remains in the low-risk subcategory.

### 6. How Do I Conduct a Look-Up Table Analysis?

Use the look-up tables (Tables 3 and 4 to this appendix) to demonstrate that your affected source is part of the low-risk subcategory, following the procedures in paragraphs (a) through (d) of this section.

(a) Using the emission rate of each HAP required to be included in your low-risk demonstration (measured according to section 5 of this appendix), calculate your total toxicity-weighted carcinogen and noncarcinogen emission rates for each of your process units using Equations 1 and 2 of this appendix, respectively.

 $TWCER = \sum_{i} (ER_{i} \times URE_{i})$  (Eq. 1)

TWCER = Toxicity-weighted carcinogenic emission rate for each process unit  $(1b/hr)/(\mu g/m^3)$ 

ER_i = Emission rate of pollutant i (lb/hr)

URE_i = Unit risk estimate for pollutant i, 1 per microgram per cubic meter (µg/m³)⁻¹

 $TWNER = \sum (ER/R/C_1) \quad (Eq. 2)$ 

TWNER = Toxicity-weighted noncarcinogenic emission rate for each process unit (lb/hr)/(µg/m³)

ER_i = Emission rate of pollutant i (lb/hr)

RfC_i = Reference concentration for pollutant i, micrograms per cubic meter (µg/m³)

- (b) Cancer risk. Calculate the total toxicity-weighted carcinogen emission rate for your affected source by summing the toxicity-weighted carcinogen emission rates for each of your process units. Identify the appropriate maximum allowable toxicity-weighted carcinogen emission rate from Table 3 to this appendix for your affected source using the average stack height of your emission points and the minimum distance between any emission point at the affected source and the property boundary. If one or both of these values do not match the exact values in the lookup table, then use the next lowest table value. (Note: If your average stack height is less than 5 meters (m), you must use the 5 m row.) Your affected source is considered low risk for carcinogenic effects if your toxicity-weighted carcinogen emission rate, determined using the methods specified in this appendix, does not exceed the values specified in Table 3 to this appendix.
- (c) Noncancer risk. Calculate the total central nervous system (CNS) and respiratory target organ specific toxicity-weighted noncarcinogen emission rate for your affected source by summing the toxicity-weighted emission rates for each of your process units. Identify the appropriate maximum allowable toxicity-weighted noncarcinogen emission rate from Table 4 to this appendix for your affected source using the average stack height of your emission points and the minimum distance between any emission point at the affected source and the property boundary. If one or both of these values do not match the exact values in the lookup table, then use the next lowest table value. (Note: If your average stack height is less than 5 m, you must use the 5 m row.) Your affected source is considered low risk for noncarcinogenic effects if your toxicity-weighted noncarcinogen emission rate, determined using the methods specified in this appendix, does not exceed the values specified in Table 4 to this appendix.
- (d) Low-risk demonstration. The EPA will approve your affected source as eligible for

membership in the low-risk subcategory of PCWP affected sources if it determines that:
(1) your affected source is low risk for both carcinogenic and noncarcinogenic effects using the look-up table analysis described in this section; and (2) you meet the criteria specified in section 11 of this appendix.

#### 7. How Do I Conduct a Site-Specific Risk Assessment?

- (a) Perform a site-specific risk assessment following the procedures specified in this section. You may use any scientifically-accepted peer-reviewed assessment methodology for your site-specific risk assessment. An example of one approach to performing a site-specific risk assessment for air toxics that may be appropriate for your affected source can be found in the "Air Toxics Risk Assessment Guidance Reference Library, Volume 2, Site-Specific Risk Assessment Technical Resource Document." You may obtain a copy of the "Air Toxics Risk Assessment Reference Library" through EPA's air toxics Web Site at www.epa.gov/ttn/atw.
- (b) At a minimum, you site-specific risk assessment must:
- (1) Estimate the long-term inhalation exposures through the estimation of annual or multiyear average ambient concentrations for the chronic portion of the assessment.
- -. (2) Estimate the acute exposures for formaldehyde and acrolein through the estimation of maximum 1-hour average ambient concentrations for the acute portion of the assessment.
  - (3) Estimate the inhalation exposure of the individual most exposed to the affected source's emissions.
  - (4) Estimate the individual risks over a 70-year lifetime for the chronic cancer risk assessment.
  - (5) Use site-specific, quality-assured data wherever possible.
  - (6) Use health-protective default assumptions wherever site-specific data are not available.
  - (7) Contain adequate documentation of the data and methods used for the assessment so that it is transparent and can be reproduced by an experienced risk assessor and emission measurement expert.
  - (c) Your site-specific risk assessment need not:
  - (1) Assume any attenuation of exposure concentrations due to the penetration of outdoor pollutants into indoor exposure areas.
  - (2) Assume any reaction or deposition of the emitted pollutants during transport from the

emission point to the point of exposure.

- (d) Your affected source is considered low risk for carcinogenic chronic inhalation effects if your site-specific risk assessment demonstrates that maximum off-site individual lifetime cancer risk at a location where people live is less than 1 in 1 million.
- (e) Your affected source is considered low risk for noncarcinogenic chronic inhalation effects if your site-specific risk assessment demonstrates that every maximum off-site target-organ specific hazard index (TOSHI), or appropriate set of site-specific hazard indices based on similar or complementary mechanisms of action that are reasonably likely to be additive at low dose or dose-response data for mixtures, at a location where people live is less than or equal to 1.0.
- (f) Your affected source is considered low risk for noncarcinogenic acute inhalation effects if your site-specific risk assessment demonstrates that the maximum off-site acute hazard quotients for both acrolein and formaldehyde are less than or equal to 1.0.
- (g) The EPA will approve your affected source as eligible for membership in the low-risk subcategory of PCWP affected sources if it determines that: (1) your affected source is low risk for all of the applicable effects listed in paragraphs (d) through (f) of this section; and (2) you meet the criteria specified in section 11 of this appendix.
- 8. What Information Must I Submit for the Low-Risk Demonstration?
- (a) Your low-risk demonstration must include at a minimum the information specified in paragraphs (a)(1) through (5) of this section and the information specified in either paragraph (b) or (c) of this section.
- (1) Identification of each process unit at the affected source.
- (2) Stack parameters for each emission point including, but not limited to, the parameters listed in paragraphs (a)(2)(i) through (iv) below:
- (i) Emission release type.
- (ii) Stack height, stack area, stack gas temperature, and stack gas exit velocity.
- (iii) Plot plan showing all emission points, nearby residences, and fenceline.
- (iv) Identification of any HAP control devices used to reduce emissions from each process unit.
- (3) Emission test reports for each pollutant and process unit based on the test methods specified in Table 2 to this appendix, including a description of the process parameters

identified as being worst case.

- (4) Identification of the dose-response values used in your risk analysis (look-up table analysis or site-specific risk assessment), according to section 4(b) of this appendix.
- (5) Identification of the controlling process factors (including, but not limited to, production rate, annual emission rate, type of control devices, process parameters documented as worst-case conditions during the emissions testing used for your low-risk demonstration) that will become Federally enforceable permit conditions used to show that your affected source remains in the low-risk subcategory.
- (b) If you use the look-up table analysis in section 6 of this appendix to demonstrate that your affected source is low risk, your low-risk demonstration must contain at a minimum the information in paragraphs (a) and (b)(1) through (5) of this section.
- (1) Identification of the stack heights for each emission point included in the calculation of average stack height.
- , (2) Identification of the emission point with the minimum distance to the property boundary.
  - (3) Calculations used to determine the toxicity-weighted carcinogen and noncarcinogen emission rates according to section 6(a) of this appendix.
- (4) Comparison of the values in the look-up tables (Tables 3 and 4 to this appendix) to your toxicity-weighted emission rates for carcinogenic and noncarcinogenic HAP.
  - (c) If you use a site-specific risk assessment as described in section 7 of this appendix to demonstrate that your affected source is low risk (for carcinogenic and noncarcinogenic chronic inhalation and acute inhalation risks), your low-risk demonstration must contain at a minimum the information in paragraphs (a) and (c)(1) through (8) of this section.
  - (1) Identification of the risk assessment methodology used.
  - (2) Documentation of the fate and transport model used.
  - (3) Documentation of the fate and transport model inputs, including the information described in paragraphs (a)(1) through (4) of this section converted to the dimensions required for the model and all of the following that apply: meteorological data; building, land use, and terrain data; receptor locations and population data; and other facility-specific parameters input into the model.
  - (4) Documentation of the fate and transport model outputs.

- (5) Documentation of exposure assessment and risk characterization calculations.
- (6) Comparison of the maximum off-site individual lifetime cancer risk at a location where people live to 1 in 1 million, as required in section 7(d) of this appendix for carcinogenic chronic inhalation risk.
- (7) Comparison of the maximum off-site TOSHI for respiratory effects and CNS effects at a location where people live to the limit of 1.0, as required in section 7(e) of this appendix for noncarcinogenic chronic inhalation risk.
- (8) Comparison of the maximum off-site acute inhalation hazard quotient (HQ) for both acrolein and formaldehyde to the limit of 1.0, as required in section 7(f) of this appendix for noncancinogenic acute inhalation effects.
- (d) The EPA may request any additional information it determines is necessary or appropriate to evaluate an affected source's low-risk demonstration.
- 9. Where Do I Send My Low-Risk Demonstration?

You must submit your low-risk demonstration to the EPA for review and approval. Send your low-risk demonstration either via e-mail to REAG@EPA.GOV or via U.S. mail or other mail delivery service to U.S. EPA, Risk and Exposure Assessment Group, Emission Standards Division (C404-01), Attn: Group Leader, Research Triangle Park, NC 27711, and send a copy to your permitting authority. Your affected source is not part of the low-risk subcategory of PCWP facilities unless and until EPA notifies you that it has determined that you meet the requirements of section 11 of this appendix.

#### 10. When Do I Submit My Low-Risk Demonstration?

- (a) If you have an existing affected source, you must complete and submit for approval your low-risk demonstration no later than July 31, 2006.
- (b) If you have an affected source that is an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP before September 28, 2004, then you must complete and submit for approval your low-risk demonstration no later than July 31, 2006. If you have an affected source that is an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP after September 28, 2004, then you must complete and submit for approval your low-risk demonstration no later than 12 months after you become a major source or after initial startup of your affected source as a major source, whichever is later.
- (c) If you have a new or reconstructed affected source you must conduct the emission tests specified in section 5 of this appendix upon initial startup and use the results of these emissions tests to complete and submit your low-risk demonstration within 180 days following your initial startup date. If your new or reconstructed affected source starts up

before September 28, 2004, for EPA to find that you are included in the low-risk subcategory, your low-risk demonstration must show that you were eligible to meet the criteria in section 11 of this appendix no later than September 28, 2004. If your new or reconstructed source starts up after September 28, 2004, for EPA to find that you are included in the low-risk subcategory, your low-risk demonstration must show that you were eligible to meet the criteria in section 11 of this appendix upon initial startup of your affected source. Affected sources that are not part of the low-risk subcategory by October 1, 2007, must comply with the requirements of 40 CFR part 63, subpart DDDD. Affected sources may not request compliance extensions from the permitting authority if they fail to demonstrate they are part of the low-risk subcategory or to request additional time to install controls to become part of the low-risk subcategory.

11. How Does My Affected Source Become Part of the Low-Risk Subcategory of PCWP Facilities?

To be included in the low-risk subcategory, EPA must find that you meet the criteria in paragraphs (a) and (b) of this section. Unless and until EPA finds that you meet these criteria, your affected source is subject to the applicable compliance options, operating requirements, and work practice requirements in 40 CFR part 63, subpart DDDD.

- (a) Your demonstration of low risk must be approved by EPA.
- (b) Following EPA approval, the parameters that defined your affected source as part of the low-risk subcategory (including, but not limited to, production rate, annual emission rate, type of control devices, process parameters reflecting the emissions rates used for your low-risk demonstration) must be incorporated as federally enforceable terms and conditions into your title V permit. You must submit an application for a significant permit modification to reopen your title V permit to incorporate such terms and conditions according to the procedures and schedules of 40 CFR part 71 or the EPA-approved program in effect under 40 CFR part 70, as applicable.

12. What Must I Do To Ensure My Affected Source Remains in the Low-Risk Subcategory of PCWP Facilities?

You must meet the requirements in Table 2 to 40 CFR part 63, subpart DDDD, for each HAP control device used at the time when you completed your low-risk demonstration. You must monitor and collect data according to §63.2270 of subpart DDDD to show continuous compliance with your control device operating requirements. You must demonstrate continuous compliance with the control device operating requirements that apply to you by collecting and recording the monitoring system data listed in Table 2 to 40 CFR part 63, subpart DDDD for the process unit according to §\$63.2269(a), (b), and (d) of subpart DDDD; and reducing the monitoring system data to the specified averages in units of the applicable requirement according to calculations in §63.2270 of subpart DDDD; and maintaining the average operating parameter at or above the minimum, at or below the maximum, or within the range (whichever applies) established according to

section 5(e) of this appendix.

#### 13. What Happens If the Criteria Used in the Risk Determination Change?

- (a) You must certify with each annual title V permit compliance certification that the basis for your affected source's low-risk determination has not changed. You must submit this certification to the permitting authority. You must consider the changes in paragraphs (a)(1) through (5) of this section.
- (1) Process changes that increase HAP emissions, including, but not limited to, a production rate increase, an annual emission rate increase, a change in type of control device, changes in process parameters reflecting emissions rates used for your approved low-risk demonstration.
- (2) Population shifts, such as if people move to a different location such that their risks from the affected source increase.
- (3) Unit risk estimate increases posted on the EPA website (http://www.epa.gov/ttn/atw/toxsource/summary.html) for the pollutants included in Table 1 to this appendix.
- (4) Reference concentration changes posted on the EPA website (http://www.epa.gov/ttn/atw/toxsource/summary.html) for the pollutants included in Table 1 to this appendix.
- (5) Acute dose-response value for formaldehyde or acrolein changes.
- (b) If your affected source commences operating outside of the low-risk subcategory, it is no longer part of the low-risk subcategory. You must be in compliance with 40 CFR part 63, subpart DDDD as specified in paragraphs (b)(1) through (3) of this section. Operating outside of the low-risk subcategory means that one of the changes listed in paragraphs (a)(1) through (5) of this section has occurred and that the change is inconsistent with your affected source's title V permit terms and conditions reflecting EPA's approval of the parameters used in your low risk demonstration.
- (1) You must notify the permitting authority as soon as you know, or could have reasonably known, that your affected source is or will be operating outside of the low-risk subcategory.
- (2) You must be in compliance with the requirements of 40 CFR part 63, subpart DDDD as specified in paragraph (b)(2)(i) or (ii) of this section, whichever applies.
- (i) If you are operating outside of the low-risk subcategory due to a change described in paragraph (a)(1) of this section, then you must comply with 40 CFR part 63, subpart DDDD beginning on the date when your affected source commences operating outside the

#### low-risk subcategory.

- (ii) If you are operating outside of the low-risk subcategory due to a change described in paragraphs (a)(2) through (5) of this section, then you must comply with 40 CFR part 63, subpart DDDD no later than three years from the date your affected source commences operating outside the low-risk subcategory.
- (3)(i) You must conduct performance tests no later than 180 calendar days after the applicable date specified in paragraph (b)(2) of this section.
- (ii) You must conduct initial compliance demonstrations that do not require performance tests 30 calendar days after the applicable date specified in paragraph (b)(2) of this section.
- (iii) For the purposes of affected sources affected by this section, you must refer to the requirements in paragraph (b) of this section instead of the requirements of §63.2233 when complying with 40 CFR part 63, subpart DDDD.

#### 14. What Records Must I Keep?

- (a) You must keep records of the information used in developing the low-risk demonstration for your affected source, including all of the information specified in section 8 of this appendix.
- (b) You must keep records demonstrating continuous compliance with the operating requirements for control devices.
- (c) For each THC CEMS, you must keep the records specified in §63,2282(c) of 40 CFR part 63, subpart DDDD.

#### 15. Definitions

The definitions in §63.2292 of 40 CFR part 63, subpart DDDD, apply to this appendix. Additional definitions applicable for this appendix are as follows:

Direct-fired process unit means a process unit that is heated by the passing of combustion exhaust directly through the process unit such that the process material is contacted by the combustion exhaust.

Emission point means an individual stack or vent from a process unit that emits HAP required for inclusion in the low-risk demonstration specified in this appendix. Process units may have multiple emission points.

Hazard Index (HI) means the sum of more than one hazard quotient for multiple

substances and/or multiple exposure pathways.

Hazard Quotient (HQ) means the ratio of the predicted media concentration of a pollutant to the media concentration at which no adverse effects are expected. For inhalation exposures, the HQ is calculated as the air concentration divided by the reference concentration (RfC).

Look-up table analysis means a risk screening analysis based on comparing the toxicityweighted HAP emission rate from the affected source to the maximum allowable toxicityweighted HAP emission rates specified in Tables 3 and 4 to this appendix.

Reference Concentration (RfC) means an estimate (with uncertainty spanning perhaps an order of magnitude) of a continuous inhalation exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime. It can be derived from various types of human or animal data, with uncertainty factors generally applied to reflect limitations of the data used.

Target organ specific hazard index (TOSHI) means the sum of hazard quotients for individual chemicals that affect the same organ or organ system (e.g., respiratory system, central nervous system).

Unit Risk Estimate (URE) means the upper-bound excess lifetime cancer risk estimated to result from continuous exposure to an agent at a concentration of 1 microgram per cubic meter (&µg/m³) in air.

Worst-case operating conditions means operation of a process unit during emissions testing under the conditions that result in the highest HAP emissions or that result in the emissions stream composition (including HAP and non-HAP) that is most challenging for the control device if a control device is used. For example, worst case conditions could include operation of the process unit at maximum throughput, at its highest temperature, with the wood species mix likely to produce the most HAP, and/or with the resin formulation containing the greatest HAP.

Table 1._to Appendix B to Subpart DDDD of 40 CFR Part 63._HAP That Must Be Included in the Demonstration of Eligibility for the Low-Risk PCWP Subcategory

Table 2 to Appendix B to Subpart DDDD of 40 CFR Part 63	
Methods	

		Methods	
For		You must	Using
(1) Each process un		Select sampling ports' location and the number of traverse points. Determine velocity and volumetric flow rate;	Method 1 or 1A of 40 CFR part 60, appendix A (as appropriate). Method 2 in addition to Method 2A, 2C,
(3) Each process un		Conduct gas molecular weight analysis.	2D, 2F, or 2G in appendix A to 40 CFR part 60 (as appropriate). Method 3, 3A, or 3B in appendix A to 40 CFR part 60.
- (4) Each process un	LE	Measure moisture content of the stack gas.	Method 4 in appendix A to 40 CFR part 60.
(5) Each process un		Measure emissions of the following HAP: acetaldehyde, acrolein, \1\formaldehyde, and phenol.	NCASI Method IM/ CAN/WP-99.02 (IBR, see 40 CFR 63.14(f)); OR Method 320 in appendix A to 40 CFR part 63; OR ASTM D6348-03* (IBR, see 40 CFR
			63.14(b)) provided that percent R as determined in Annex A5 of ASTM D6348-03 is equal or greater than
(6) Each process w	í <b>t</b>	Measure emissions	70 percent and less than or equal to 130 percent. Method 320 in
		of benzene\1\.	appendix A to 40 CFR part 63; OR ASTM D6348-03 (IBR, see 40 CFR 63:14(b))

(7) Each press that processes board containing MDI resin.

Measure emissions of MDI.

Measure emissions

of the following

HAP metals:

percent R as determined in Annex A5 of ASTM D6348-03 is equal or greater than 70 percent and less than or equal to 130 percent, Method 320 in appendix A to 40 CFR part 63; OR Conditional Test Method (CTM) 031 which is posted on http:// www.epa.gov/ttn/ emc/ctm.html Method 29 in appendix A to 40 CFR part 60.

provided that

(8) Each direct-fired process unit.

(9) Each reconstituted wood product press or reconstituted wood product board cooler with a HAP control device.

arsenic. beryllium, cadmium, chromium, lead, manganese, and nickel. Meet the design specifications included in the definition of wood products enclosure in § 63.2292 of subpart DDDD of 40 CFR part 63. Or..... Determine the percent capture efficiency of the enclosure directing emissions to an add-on control device.

Methods 204 and 204A through 204F of 40 CFR part 51, appendix M to determine capture efficiency (except for wood products enclosures as defined in § 63.2292). Enclosures that meet the definition of wood products enclosure or that meet Method 204 requirements for a PTE are assumed to have a capture efficiency of 100 percent. Enclosures that do not meet either the PTE requirements or design criteria for a wood products

(10) Each reconstituted wood product press or reconstituted wood product board cooler.

percent capture efficiency.

Determine the

(11) Each process unit with a HAP control device.

specific operating requirements (including the parameter limits or THC concentration limits) in Table 2 to subpart DDDD.

constructing a TTE according to the requirements of Method 204 and applying Methods 204A through 204F (as appropriate). As an alternative to Methods 204 and 204A through 204F, you may use the tracer gas method contained in appendix A to subpart DDDD. A TIE and Methods 204 and 204A through 204P (as appropriate) of 40 CFR part 51, appendix M. As an alternative to installing a TTE and using Methods 204 and 204A through 204F, you may use the tracer gas method contained in appendix A to subpart DDDD. Establish the site- Data from the

enclosure must determine the capture ' efficiency by

parameter monitoring system or THC CEMS and the applicable performance test method(s).

\1\ If EPA approves that your process unit will not emit detectable amounts of benzene or acrolein, that unit may be excluded from the benzene and/or acrolein (as applicable) testing requirement in this table.

Table 3 to Appendix B to Subpart DDDD of 40 CFR part 63._Maximum Allowable Toxicity-Weighted Carcinogen Emission Rate (lb/hr)/(mg/m \3\)

S	tack heig	ht (m)	) (m) 				
100	250	500	1000	0 1500	50 2000	100 3000	150 5000
		ille				8.72E-07 9	
25E-06	1 518-06	2 66P-06	0./2 // 25p_ns	G \U−3 905 N	./25-U/	E-06 4.39E	.636-07 -06 5 00%
)6							
Ô			2 47	E-06 2	47E-06	2.47E-06 2	47E-06
47E-06	2 61E-06	3 58E-06	5 03R-06	5 89E	-06 5 89	E-06 5.89E	-06 6 16F
)6	2.014 00	3.302 00	J. V.D. Y.	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
			5 81	E-06 5	81E-06	5.81E-06 5	.81E-06
						E-06 9.97E	
۱۳				officially saids			
0			7.74	E-06 7	.74E-06	7.74E-06 7	.74E-06
7.74E-06	7.74E-06	8.28E-06	9.49E-06	1.17E	-05 1.35	E-05 1.55E	-05 1.61F
)5							
10			9.20	E-06 9	.20B-06	9.20E-06 9	.20B-06
						E-05 1.98E	
)5							
50			1,02	E-05 1	.02E-05	1.02E-05 1	.02E-05
.02E-05	1.02E-05	1.02E-05	1.36E-05	1.53E	-05 1.66	E-05 2.378	-05 2.951
)5							
50			1.13	E-05 1	.13E-05	1,13E-05 I	.13E-05
	1.13E-05	1.13E-05	1.53E-05	1.76E	-05 1.85	E-05 2.51E	-05 3.451
)5		1 35 S				international design of the second	
						1.23E-05 1	
L.23E-05	1.23E-05	1.23E-05	1.72E-05	2.04E	-05 2.06	E-05 2.66E	-05 4.071
)5							
30		4.*****	1.34	E-05 1	.34E-05	1.34E-05 1	34E-05
L.34E-U5	1.34E-05	1.34E-05	1.92E-05	2.15E	-05 2.31	E-05 2.82E	I-05 4.34I
)5							
			1.52	E-05 1	.52E-05	1.52E-05 1	.52E-05
	1.52E-05	1.52E-05	1.97E-05	2.40E	-05 2.79	E-05 3.17E	-05 4.491
)5							
765 05	4 700 00	7.70	1 76	E-05 1	./6E-05	1.76E-05 1	./0E-U5
)5						E-05 4.03E	05 5.041

Emission rates in table expressed as equivalents normalized to theoretical HAP with URE = 1 (mg/m3) - 1

Table 4 to Appendix B to Subpart DDDD of 40 CFR Part 63._Maximum Allowable Toxicity-Weighted Noncarcinogen Emission Rate ((lb/hr)/mg/m3))

				0	50	100	150
200	250	500	1000	1500	2000	3000	5000
	3.16E-01				2,51E-01 3 E-01 6,21E		
10 5.62B-01	5.62E-01	5.62E-0	5 1 5.70E	.62E-01 ! -01 6.331	5.62E-01 5 E-01 7:71E	.62E-01 5 -01 1.13E	.62E-01 +00
1.97E+00 20				43E+00 3	L.43E+00 1	.43E+00 1	.43E+00
	1.43E+00				5+00   1.83E		
2.36E+00	2.36E+00	2.53E+0	2 0 3.04B	.36E+00 2 +00 3.041	2.36E+00 2 E+00 3,33E	.36E+00 2 +00 4.45E	.36B+00 +00
5.812+00 40 3.112+00		1		.11B+00 :	3.11E+00 3 E+00 5.51E	.11E+00 3	.11B+00 +00
9.63E+00					3.93E+00 3		
3.93E+00 1.25E+01	3.93E+00	4.49E+0	0 4.92E	+00 6.95	B+00 7.35E	.932. +00 8.99E	+00
60					4.83E+00 4 E+00 1.01E		
1.63E+01					5.77E+00 5		
	5.77E+00				E+00 1.18E		
80 6.74E+00	6.74E+00				6,74E+00 6 E+01 1.29E		
2.13E+01 100				,87E+00	8.87E+00 8	.87E+00 8	.87E+00
	8.87E+00		00 1.19E	+01 1.37	E+01 1.55E	+01 2.388	H01
200					1.70E+01 1 E+01 3.06E		

#### HI=1.

Emission rates in table expressed in lbs/hr as equivalents normalized to theoretical HAP with RfC =  $1.0 \text{ mg/m}\$ 3\.



#### Engineering, Compliance & Construction, Inc.

415 North McKinley Street, Suite 1180 . Little Rock, Arkansas 72205 . Phone 501.663.8247 . Fax 501.664.5005 . www.eccl.com

January 23, 2006

RECD JAN 24 2006

Mr. Cecil Harrell
Air Division
Arkansas Department of Environmental Quality
P. O. Box 8913
Little Rock, Arkansas 72219-8913

Re: Administrative Amendment

Anthony Timberlands, Inc. - Beirne, Arkansas AFIN: 10-00070; Permit Number: 1355-AOP-R1

Dear Mr. Harrell:

Anthony Timberlands, Inc. operates a hardwood sawmill located near Beirne, Arkansas (Beirne Plant). The facility utilizes a non-HAP, low-VOC coating in quantities directly tied to production limits. With the enclosed application, the facility requests the Department to add "Logo Painting" as a Group A, #13 Insignificant Activity in their air permit.

Logo Painting VOC Emissions =  $(375 \text{ gal/yr}) \times (0.583 \text{ lb/gal}) / (2000 \text{ lb/ton}) = 0.2 \text{ tpy}$ 

Thank you for your consideration of this application. Should you have any questions or require additional information, please do not hesitate to contact me.

Sincerely.

FCC

Donald W. Kite, E.I. Chemical Engineer

**Enclosures** 

pc: Steven M. Anthony, Esq - Anthony Timberlands, Inc.

# TITLE V OPERATION FORM GENERAL INFORMATION

AFIN:	10-00070	Dates	January 2006			
1. FACILI	TOVERTYSIC	ALTINEORMATION				
Facility Name		Anthony Timberlands, Inc.				
Physical Add	ress/Location:	Highway 51 South				
City, County,	State, Zip:	Beirne, Clark County, Arkansas 71721				
Contact Name	e and Position:	Steven M. Anthony, Esq., Pre	sident			
Phone and Fa	x Numbers:	(870) 687-2246	(870) 687-3712			
Email Addres	S:	santhony@alltel.net				
2. PACILI	TOWN ATTER	(e) INKORWATTON				
Organization	Name:	Anthony Timberlands, Inc.	Tento I marine a di accomina a annica di Pitana di Indiana di Indiana di Angara di Ang			
Mailing Addr	ess:	P.O. Box 128				
City, State, Z	ip:	Beirne, Arkansas 71721				
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Mailing Add	ress:	Post Office Box 137				
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Phone and Fa	x Numbers:	(870) 687-3611	(870) 687-3712			
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4. PERMI	TAPPLICA	TION CONTACT INFOR	MATION			
Organization	Name:	Engineering, Compliance and	Construction Inc. (ECCI)			
Mailing Add	ress:	415 N. McKinley, Suite 1180				
City, State, Z	ip:	Little Rock, Arkansas, 72205				
Contact Nam		Donald Kite, (501) 663-8247				
Phone and Fa	ax Numbers:	(501) 663-8247 (501) 663-8247				
Email Addre	ss:	Engineering, Compliance and	d Construction Inc. (ECCI)			

GENERAL INFORMATION (CONT'D) Date: January 2006 AFIN: 10-00070 5. Neighboring States Within 50 Miles of the permitted facility (check all that apply): Kentucky Tennessee Oklahoma Mississippi Kansas Missouri Louisiana 6. UTM Coordinates of Center of Plant UTM Zone 15 3749.77 UTM North (Km.00 to 2 decimal places) 480.94 UTM West (Km.00 to 2 decimal places) 7. NAICS Number: 321113 **NAICS Facility Description:** Sawmill, Kiln Drying 8. Type of Permit Application (check one): Initial Permit for New Facility If the AFIN is not known, list the County location: Initial Permit for Existing Facility List permit # for any current air permits: Significant Modification List current permit #: Minor Modification List current permit #: Renewal of Existing Permit List current permit # and expiration date: Administrative Amendment List current permit #: 1355-AOP-R1 List current permit #: Name change Transfer of Ownership List current permit #: 9. Expected Date of Commencement of Construction or N/A **Reconstruction:** N/A **Expected Date of Completion of Construction or Reconstruction:** 

**Anticipated Date of Operation:** 

N/A

风气 医乳球状炎 医温温性多性		res	NO
10. Is any source subject to	NSPS or NESHAP requirement?	X	
If yes, list subparts:	Subpart Dc, Subpart DDDDD		
<ol> <li>Will the facility engage in require a PSD application</li> </ol>	in construction, reconstruction, or modification that will n?		X
12. Will the facility engage in 112(g) application?	in construction or reconstruction that will require a		X
	y air conditioners or refrigeration equipment that uses one depleting substances?	X	
14. Does the air conditioner greater than 50 pounds p	or refrigeration equipment contain a refrigeration charge er unit?		X
	untain, service, repair or dispose of any motor vehicle ances (as defined in 40 CFR 82.152)?		X
16. Is the facility subject to \$112(r)?	the Accidental Release Prevention requirements of		X
If yes, is the facility	in compliance (If no, submit a compliance plan.)		<b></b> -
	그는 물건들은 일찍 인생이는 그는 그들은 그렇게를 느끼고 퇴원 판매했다. 그는 그는 그 가게 가	<del></del>	

17. Would you like to subscribe to the Air Permit Branch Email list? (A	Yes □ No X
periodic email from the ADEQ Air Permit Branch of notable events and	ale are the first and all of the
issues relating to air permits and permitting.)	
If yes, list the email address(es) you wish to use:	
(or you can email us at AirPermits@adeq.state.ar.us with "subscribe" (no quo	tes) in the
subject box	

## ORGANIATIONAL STATUS OF APPRICANT

Please check the box which appropriatel	y describes the legal organization of the applicant.
Solely Owned Proprietorship	Corporation X
General Partnership	Joint Venture
Limited Partnership	Government Entity
Other	Please Specify
(chartered outside of Arkansas) corporat  Domestic	e if it is a domestic (Arkansas) corporation or a foreign ion.  X Foreign  currently registered to do business with the Arkansas
YES	X NO
name of the registered corporation.)	ership, then list the names and addresses of all partners
	N/A
Attach an	additional sheet if necessary
If the applicant is organized as a joint ve principals involved:	enture, list the names and addresses of all of the

Attach an additional sheet if necessary



#### "Responsible official" means one of the following:

- For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
  - (i) the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
  - (ii) the delegation of authority to such representative is approved in advance by the permitting authority;
- (2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- (3) For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of EPA).

I certify under penalty of law that this application and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Steven M. Anthony, Esq. President typed/printed name of responsible official signature of responsible official Donald Kite, E.L. typed/printed name of person preparing application firm or company 415 N. McKinley St., Ste 1180, Little Rock, AR 72205 (501) 663-8247 Address of preparer=s firm telephone number (including area code)

DISCHARGE EFFLUENT GROSS VALUE EFFLUENT GROSS VALUE **LOCATION LIPETTE** STATE ATTAC LANGO TO BUILD VAN MAYOR MOUTH BURDETTE. 4000 AVG-5 4 COR HRU TREATMENT PLANT Samo ADDRESS WATER SYSTEM PERMITTEE NAME/ADDRESS Duted Facility Name/Localise VD (from THE LEAT GROSS VALUE PRIVATE SECOND VALUE .* 120 DEG. C 10 BURDETTE P.O. BOX 208 BURDETTE, TOWN OF VIOLENTANTONIO ANTONO MORA PROPERTY AVG. & DATILY MAX: IN MGD (MILLION GALLONS/DAY). THERE SHALL BE NO PARAMETER . wa bewia BURING THE PERSON APRIL . . . . . TO E OF-WIF **MEMBERS V** STATE . SAMPLE B AR 72321 72321 AVERAGE THROUGH NOVEMBER 30TH. QUANTITY OR LOADING ***** MATERIAL IN ***** NATIONAL POLLUTANT DISCHARGE BLIMMATION SYSTEM (MPDES)
DISCHARGE MONITORING REPORT (DMR) AR0044237 PERMIT NUMBER GBM (EO) ~ 120 Y 7*** * .BS/D [2 (A) MONITORING PERIOD N.C. ROLF WAY ***** **** TIMBUS QUALITY OR CONCENTRATION DISCHARGE NUMBER 601 B AVENACE THIS REPORT EACH MONTH REGARDLESS OF ** No Electronical XI was ON TABELLING ALBERTANDIA - 100 MINOR NOTE: Rud have MARKA 10 163300 DS 8 TELEPHONE 1001 (13 MIG 1 9 2003 0334 POST Form Approved. 

EPA Form 3320-1 (Rev. 389) Previous aditions may be used.

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DISCHARGE



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  - (i) the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
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I certify that this facility is in compliance with all applicable requirements of the Act or the compliance schedule submitted with this application, including any applicable enhanced monitoring and compliance certification requirements. The methods used for determining compliance, including a description of monitoring, recordkeeping, and reporting requirements and test methods, are attached to this form. A schedule for submission of compliance certifications during the permit term (no less frequently than annually) is attached. These attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Steven M. Anthony, Esq.	All the second of the second o	President	
typed/printed name of re		title 1/20/06	
signature of responsible	inea )	date	

#### Sudmeyer, Ann

From: Donald Kite [DKite@eccl.com]

Sent: Friday, January 27, 2008 4:57 PM

To: Sudmeyer, Ann

Subject: RE: Anthony - Beirne

Ann,

It takes 270 gal of logo paint to do 40 MMBF (6.75 gal/MMBF). At 55 MMBF the anticipated usage would be 371 gal rounded to 375 gal.

Don

From: Sudmeyer, Ann [mailto:SUDMEYER@adeq.state.ar.us]

Sent: Friday, January 27, 2006 11:23 AM

To: Donald Kite

Subject: RE: Anthony - Beirne

I am looking for the amount of paint used per bundle and how many bundles would be produced from the production limit (55 million board feet/year).

Thanks,

Ann

----Original Message-----

From: Donald Kite [mailto:DKite@ecci.com]
Sent: Friday, January 27, 2006 11:12 AM

To: Sudmeyer, Ann

Subject: RE: Anthony - Beirne

Hello Ann,

The Anthony logo is painted on the bundles of boards before they leave using a stencil...similar to GP or IP's products...the more production, the more paint used, obviously....the paint usage per bundle is constant and would only change if the stencil size changed.

Is this want youre looking for? If not please clarify.

Thanks,

Don Kite

From: Sudmeyer, Ann [mailto:SUDMEYER@adeq.state.ar.us]

Sent: Friday, January 27, 2006 11:07 AM

To: Donald Kite

Subject: Anthony - Beirne

Mr. Kite.

I am currently working on the Administrative Amendment submitted for Anthony Timberlands - Beirne. Please provide documentation of how the 375 gal/yr is tied to the production limits.

Thank you,

Ann



A R K A N S A S Department of Environmental Quality

January 25, 2006

VIA FAX to 663.5005 & Regular Mail

Donald W. Kite, E.I. Chemical Engineer ECCI 415 North McKinley Street, Suite 1180 Little Rock, AR 72205

RE: Insignificant Activities

Anthony Timberlands, Beirne

Logo Painting

AFIN: 10-00070, Permit No. 1355-AOP-R1

Dear Mr. Kite:

It is agreed that the logo painting operation described in your application received January 24, 2006 does qualify as an Insignificant Activity and, therefore, does not require a formal permitting action at this time. This letter is your authorization to install/operate the system as described in your submittal. Place this letter with the permit at the facility. Permit No. 1355-AOP-R1 will be modified within sixty days to incorporate the affected equipment. If you have any questions, please call me at 501.682.0737.

Sincerely,

Cecil Harrell

Compliance Engineer

Air Division

Copy: David Cornell

Records Management

Cal Hanell