ADEQ

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

December 17, 2008

Marty Reep, Plant EH&S Manager
Armstrong Hardwood Flooring Co. - Witt Facility
P.O. Box 950
Warren, AR 71671

Dear Mr. Reep:

The enclosed Permit No. 0427-AOP-R6 is issued pursuant to the Arkansas Operating Permit Program, Regulation # 26.

After considering the facts and requirements of A.C.A. §8-4-101 et seq., and implementing regulations, I have determined that Permit No. 0427-AOP-R6 for the construction, operation and maintenance of an air pollution control system for Armstrong Hardwood Flooring Co. - Witt Facility to be issued and effective on the date specified in the permit, unless a Commission review has been properly requested under §2.1.14 of Regulation No. 8, Arkansas Department of Pollution Control & Ecology Commission's Administrative Procedures, within thirty (30) days after service of this decision.

All persons submitting written comments during this thirty (30) day period, and all other persons entitled to do so, may request an adjudicatory hearing and Commission review on whether the decision of the Director should be reversed or modified. Such a request shall be in the form and manner required by §2.1.14 of Regulation No. 8.

Sincerely,

Mike Bates
Chief, Air Division

Armstrong Hardwood Flooring Co. –Witt Facility
Warren, AR 71671
AFIN: 06-00014

Response to Comments on Draft Title V Air Permit
0427-AOP-R6

On or about 10/23/2008, the Director of the Arkansas Department of Environmental Quality gave notice of the draft permitting decision for the above referenced facility. During the comment period one interested person submitted written comments, data views, or arguments on the draft permitting decision. The Department's response to these issues and comments follows.

Comment 1: Page 6, Fourth Paragraph: Delete the following two sentences: The clean air from the baghouses is routed back to the milling section. During periods of hot weather, the facility has the ability to vent the baghouses to the atmosphere (SN-37). Replace these sentences with: *Air from the baghouses is then exhausted to atmosphere.* (Note that the facility is currently not returning air from the baghouses back into the plant)

Response 1: The department agrees. The wording has been changed.

Comment 2: Page 13, Condition 5: Change Ethylene Glycol Mono Propyl Ether Maximum Allowable Content from 0.10 lb/gal to 0.16 lb/gal.

Response 2: The department agrees. The content limit for ethylene glycol mono propyl ether has been adjusted.

Comment 3: Page 14, Condition 8.A.: add the following: "... daily visual inspections, *when the plant is in operation,* of the duct system and silo..."

Response 3: The department agrees. The wording has been changed.

Comment 4: Page 14, Condition 8.B: Change the word "eliminate" to "reduce". Eliminate has the connotation that absolutely no visible emissions are allowed, however permit condition 7 on this same page allows opacity of 5%.

Response 4: The department agrees. The wording has been changed.

Comment 5: Page 14, Condition 9.B: Change one excursion to 9 excursions to match the threshold for a QIP spelled out in other sections of the permit.

Response 5: The department disagrees. The department is unaware of any excursions for this source. The need to increase the number of excursions to nine is unnecessary.

Comment 6: Page 18, Condition 22: Please eliminate this condition as the facility has previously conducted this testing in April 2004. It was the understanding at this time that once this testing was completed, it would not be required again.

Response 6: The department disagrees. The condition will remain in the permit. However, a statement was added the testing was completed in April of 2004.

Comment 7: Page 20, Source Description: Add the following: "... lumber's moisture content to *a typical range of* 5-8%."

Response 7: The department agrees. The wording has been changed.

Comment 8: Page 23, Condition 34: change "untreated" to "non-pressure treated".

Response 8: The department disagrees. The term untreated as used in Specific Condition 34 refers to wood that has not had any coatings applied, i.e. wood that has not gone thought the Finishing Line. The purpose of this condition is to prevent the combustion of wood contaminated with chemicals as the wood processed though the hogs can later be used as fuel.

Comment 9: Page 23, Condition 35. A, add the following: "... daily visual inspections, *when the plant is in operation,* of the duct system and silo..."

Response 9: The department agrees. The wording has been changed.

Comment 10: Page 23, Condition 35. B: Change the word "eliminate" to "reduce". Eliminate has the connotation that absolutely no visible emissions are allowed, however permit condition 33 on this same page allows opacity of 5%.

Response 10: The department agrees. The wording has been changed.

Comment 11: Page 23, Condition 36. B: Change one excursion to 9 excursions to match the threshold for a QIP spelled out in other sections of the permit.

Response 11: The department disagrees. The department is unaware of any excursions for this source. The need to increase the number of excursions to nine is unnecessary.

Comment 12: Page 27, Condition 7: Request that the condition requiring a SSM Plan be dropped since the regulatory provisions cited apply to NESHAPs. The facility is a minor source of HAPs, so this provision should not apply.

Response 12: The department agrees. The condition has been removed.

Comment 13: Statement of Basis, Page 8: Please add the following insignificant sources: Welding activities, parts washers, and hot water heaters.

Response 13: The department disagrees. These activities are covered under Group B insignificant activities and do not need to be listed in the permit or SOB.

Comment 14: Statement of Basis, Page 8: Solvent Distillation Unit. See enclosed spreadsheet with emission calculations demonstrating insignificance. Emission estimates for other sources listed in the insignificant list would have been previously provided to the agency.

Response 14: The department agrees. The emission rates were updated.

Comment 15: The following typographical errors were identified.

Location	Error	Correction
Page 5, First Paragraph:		688 Highway 278 Bypass.
Page 7, Emission Summary Table,	SO_2 emission rate 1.4 lb/hr	SO_2 emission rate: 2.1 lb/hr.
Page 9, Source Number SN-41:	SO_2 emission rate 1.3 lb/hr	SO_2 emission rate: 1.4 lb/hr
Page 12, Specific Condition 2	"...with this condition by 5&6."	"...with this condition by specific condition 5&6."
Page 13, Specific Condition 5	"...HAP content limit is at or below the above permitted limit."	"...HAP content limit is at or below the permitted limit."
Page 5, Process Description:	"Pre-dryer and".	Deleted "Pre-dryer and".

Response 15: The typographical errors have been corrected.

ADEQ
OPERATING
AIR PERMIT

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

Renewal # 2
Permit No. : 0427-AOP-R6

IS ISSUED TO:

Armstrong Hardwood Flooring Co. - Witt Facility
688 Hwy 278 Bypass
Warren, AR 71671
Bradley County
AFIN: 06-00014

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:

December 17, 2008 AND December 16, 2013

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

Signed:

Mike Bates
Chief, Air Division

December 17, 2008
Date

Armstrong Hardwood Flooring Co. - Witt Facility
Permit #: 0427-AOP-R6
AFIN: 06-00014

Table of Contents

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_x	Nitrogen Oxide
PM	Particulate Matter
PM_{10}	Particulate Matter Smaller Than Ten Microns
SNAP	Significant New Alternatives Program (SNAP)
SO_2	Sulfur Dioxide
SSM	Startup, Shutdown, and Malfunction Plan
Tpy	Tons Per Year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

SECTION I: FACILITY INFORMATION

PERMITTEE:	Armstrong Hardwood Flooring Co. - Witt Facility
AFIN:	06-00014
PERMIT NUMBER:	0427-AOP-R6
FACILITY ADDRESS:	688 Hwy 278 Bypass Warren, AR 71671
MAILING ADDRESS:	P.O. Box 950 Warren, AR 71671
COUNTY:	Bradley County
CONTACT NAME:	Marty Reep
CONTACT POSITION:	Plant EH&S Manager
TELEPHONE NUMBER:	870-226-7561
REVIEWING ENGINEER:	Jennifer Boyette
UTM North South (Y):	Zone 15: 3716849.85 m
UTM East West (X):	Zone 15: 585525.97 m

SECTION II: INTRODUCTION

Summary of Permit Activity

Armstrong Hardwood Flooring Company, formerly Robbins Hardwood Flooring, Inc., is located at 688 Highway 278 Bypass, Warren, Arkansas. The facility manufactures finished hardwood flooring.

This permit is being issued as a renewal for a Title V operating permit # 0427-AOP-R5. The facility proposes to install a conveying system which will feed general plant wood waste directly into the hog system (SN-38) in order to improve plant wood recycling; modify the Finishing line rail system and sander to improve efficiency; and install a baghouse at the Finishing Line (SN-01 to SN-12) to provide additional emissions control. These modifications will not result in an increase of VOC or HAP emissions.

Nine kilns (SN-30 though SN-35, SN-39, SN-40, and SN-42) have been permanently retired. One small (11 gallon) solvent distillation unit, drums and containers for coating and cleanup solvent storage, one diesel-fired fire pump, and one 150-kW natural gas fired emergency generator were added to the insignificant activities list.

The facility proposes to revise the CO emission limit for the large wood-fired boiler (SN-41) based on recently revised CO emission test data, adjust PM emissions to include the PM condensable fraction, use at uniform safety factor of 30%, and to apply a ratio of 1.3 to the average stack test data.

The permitted emissions changes are: 29.2 tpy increase in PM/PM_{10}, 33.8 tpy increase in CO, and 0.1 tpy decrease in VOC.

Process Description

Rough lumber is brought to the site and air-dried for approximately 90 days during summer months and up to 150 days during winter months. The lumber is then dried in one of sixteen (16) kilns (SN-15 through SN-29). The length of time in the kilns depends on the moisture content of the lumber, but typically takes about 8 days. The steam used to dry the lumber in the drying kilns is provided by one of two (2) boilers (SN-13 and SN-41), which are fired by wood waste generated at the site.

Lumber from the drying kilns is allowed to cool before it is taken to the milling section (SN-37). In the milling section, lumber is ripped to 2 9/16" and 3 9/16" widths. Rough cut boards are run through knotsaws, sidematcher, and endmatcher. Sawdust emissions from the milling section are picked up by suction fans and routed to the dust collection system. Wood waste is routed to one of two (2) hammer mills (hogs) (SN-38).

Wood from the milling section is sent to the Finishing Line (SN-01 through SN-12) or to a packaging area. The flooring banded in pallets is sent to the front of the Finishing Line. At the

Finishing Line, the flooring goes through a number of processes: sanders (which are vented to a dust collector), stain roll coater (SN-01), high mass oven (SN-02), UV reactor (SN-03), first coat sealer (SN-04), UV oven (SN-05), second coat sealer (SN-06), UV reactor with third coat sealer (SN-07), UV oven (SN-08), first coat top coat (SN-09), UV oven (SN-10), second & third coat top coat (SN-11), and final cure oven (SN-12, two stacks).

VOC emissions are combined and routed to the atmosphere. Emissions from sources 1-12 are bubbled and permitted as the Finishing Line (SN-1 through SN-12). A small (11 gallon) solvent distillation unit is sued to recover solvent from coating and cleanup solvent wastes (insignificant activity). All particulate matter emissions generated at the Finish Line are collected and routed through the dust collection system.

Wood waste generated at the milling section or the finishing line is conveyed to the two hogs. Wood waste generated at the rework station is conveyed to the larger hog located on the west side of the plant. The smaller hog located on the east side of the facility receives waste from the milling section only. Dust from both units is collected and sent to cyclone #'s 1&4. The clean air from these two cyclones is routed to one of the baghouses. From these cyclones, the dust is combined with baghouse dust and routed to cyclone #2 located at the truck loading area or to cyclone #3 in the boiler house area. From cyclone #2, dust is separated from the air and sent either to the dust collection silo#1 or the truck bin. The sawdust in the truck bin is loaded into trucks (SN-43) and shipped off-site. The facility has installed a dust collection system inside the truck loading station to minimize particulate matter emissions during loading operations. From cyclone #3, dust is separated from air and fed into silo#2 or #3. These two silos then feed the dust to the boiler feed system.

The dust collection system consists of three baghouses and four cyclones. Particulate matter collected from the milling section and the finishing line is exhausted to the baghouses. Air from the baghouse is then exhausted to the atmosphere. Dust from the baghouses and cyclones #1 and #4 is pneumatically conveyed to one of three dust collection silos or the truck loading bin. Prior to entering the silos, dirty air is sent though a cyclone. Cyclone #2 is located on top of dust collection silo #1 and can feed this silo or the truck loading bin. Cylcone #3 is located on top of the dust collection silo #2 and can feed either silo #2 or silo #3. Clean air from these two cyclones (#2 and #3) is part of a closed system that is routed back to the baghouse area.

The facility plans to install a fourth baghouse at source SN-01 through SN-12 (Finishing Line) to provide additional emissions control. Particulate emissions from the dust collection system are permitted under SN-37 & 38 bubbled, with the exception of the fourth baghouse where the emissions are permitted under the finishing line.

Wood waste from the dust collection silos is used to feed the boilers. Particulate emissions from boiler SN-13 are controlled by a fourth cyclone with flyash re-injection. Clean air is emitted to the atmosphere. Particulate emissions from boiler SN-41 are controlled with an electrostatic precipitator (ESP). The boilers have rated heat imputs of 28.08 MMBtu/hr (SN-13) and 53.3 MMBtu/hr (SN-41) and both are subject to federal NSPS Subpart Dc standards.

Regulations

The following table contains the regulations applicable to this permit.

Regulations
Arkansas Air Pollution Control Code, Regulation 18, effective February 15, 1999
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective October 15, 2007
Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective September 26, 2002
40 CFR Subpart Dc - *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*

Emission Summary

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 Number	Description	Pollutant	Emission Rates	
			lb/hr	Tpy
Total Allowable Emissions		PM	31.2	120.9
		PM_{10}	31.2	120.9
		SO_2	2.1	9.0
		VOC	145.1	242.8
		CO	23.1	101.2
		NO_X	40.0	175.1
		Lead	0.02	0.03
HAPs		Acrolein*	0.34	**
		Benzene*	0.35	
		Beryllium	0.02	
		Cadmium	0.02	
		Chromium, IV	0.02	
		Chlorine	0.08	
		Ethyl benzene*	3.02	
		Ethylene Glycol Mono Propyl Ether*	3.00	
		Formaldehyde*	0.37	
		Hydrochloric Acid	1.56	
		Manganese	0.14	
		Mercury	0.10	

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	Tpy
		Methyl Isobutyl Ketone*	3.00	
		Phenol*	0.02	
		Styrene*	0.17	
		Toluene*	3.08	
		Xylene*	3.02	
SN-01 – SN-12	Finishing Lines	VOC	133.0	189.9
		PM	2.0	8.5
		PM_{10}	2.0	8.5
		Ethyl benzene*	3.00	**
		Ethylene Glycol Mono Propyl Ether*	3.00	
		Methyl Isobutyl Ketone*	3.00	
		Toluene*	3.00	
		Xylene*	3.00	
SN-13	Wood-fired Boiler (28.08 MMBTU/hr)	PM	14.6	63.9
		PM_{10}	14.6	63.9
		SO_2	0.7	3.1
		VOC	1.1	4.8
		CO	9.3	40.7
		NO_X	13.8	60.3
		Lead	0.01	0.01
		Acrolein*	0.12	0.50
		Benzene*	0.12	0.52
		Beryllium	0.01	0.01
		Cadmium	0.01	0.01
		Chromium, IV	0.01	0.01
		Chlorine	0.03	0.10
		Ethyl benzene*	0.01	0.01
		Formaldehyde*	0.13	0.55
		Hydrochloric Acid	0.54	2.34
		Manganese	0.05	0.20
		Mercury	0.01	0.01
		Phenol*	0.01	0.01
		Styrene*	0.06	0.24
		Toluene*	0.03	0.12
		Xylene*	0.01	0.01
SN-15 -	Hardwood Lumber	PM	1.9	8.1

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	Tpy
SN-15 - SN-29	Hardwood Lumber Drying Kilns	PM	1.9	8.1
		PM_{10}	1.9	8.1
		VOC	8.9	39.0
SN-30 to SN-35, 39,40, 42	Hardwood Lumber Drying Kilns	Permanently Retired		
37/38	Wood Processing	PM	6.3	27.3
		PM_{10}	6.3	27.3
41	Wood-fired Boiler (53.5 MMBTU/hr)	PM	1.9	8.3
		PM_{10}	1.9	8.3
		SO_2	1.4	5.9
		VOC	2.1	9.1
		CO	13.8	60.5
		NO_X	26.2	114.8
		Lead	0.01	0.02
		Acrolein*	0.22	0.94
		Benzene*	0.23	0.99
		Beryllium	0.01	0.01
		Cadmium	0.01	0.01
		Chromium, IV	0.01	0.01
		Chlorine	0.05	0.19
		Ethyl benzene*	0.01	0.01
		Formaldehyde*	0.24	1.04
		Hydrochloric Acid	1.02	4.46
		Manganese	0.09	0.38
		Mercury	0.01	0.01
		Phenol*	0.01	0.02
		Styrene*	0.11	0.45
		Toluene*	0.05	0.22
		Xylene*	0.01	0.01
43	Truck Loadout Station	PM	4.5	4.8
		PM_{10}	4.5	4.8

*HAPs included in the VOC totals. Other HAPs are not included in any other totals unless specifically stated.
**Subject to a Plantwide Limit of 9.5 tpy of a single HAP and 23.75 tpy of combined HAPs

SECTION III: PERMIT HISTORY

427-A Issued to Branwood Corporation in September, 1977. The permit authorized the construction and operation of a new facility to produce unfinished wood furniture parts. The permit included nine drying kilns and two Wicks package boilers burning wood waste. Wood particulate emissions from manufacturing process were controlled by two fabric filters. Emissions from boilers and kilns were not quantified.

427-AR-1 Issued to Robbins, Inc. in November, 1988. The permit reflected the acquisition of the facility by Robbins, Inc. Visible emissions from boilers were limited to 20% opacity. No other emission limits were included in the permit.

427-AR-2 Issued in July, 1989. The permit modification allowed installation and operation of a finishing line. Only VOC emissions from the finishing line were quantified in the permit. Individual sources were combined into two groups.

427-AR-3 Issued in June, 1992. The permit modification allowed an increase in VOC emissions from the finishing line. The permit contains estimations of VOC emissions from each individual source. The operation of the finishing line was limited to 8 hours per day, 5 days per week, and 2000 hours per year. Boilers and kilns were not included in the permit.

427-AR-3 Amended in June, 1997 to reflect the acquisition of the facility by Robbins Hardwood Flooring, Inc.

427-AOP-R0 Issued on July 31, 1998. This was the initial Title V permit for this facility. It allowed the construction of two (2) 28.08 MMBtu/hr wood waste fueled boilers, construction of twelve (12) drying kilns, removal of limit of hours of operation and increase of production rate at the finishing line, and permitting of the existing previously un-permitted sources. Carbon Monoxide emission rates listed in this permit exceeded the 250 tpy level of significance for PSD.

427-AOP-R1 Issued on September 12, 2000. First, this modification permitted the installation of a larger (53.5 MMBtu/hr) boiler (SN-41) in place of the 28.08 MMBtu/hr boiler (SN-41). The larger boiler lowered CO emissions so that the facility fell below the threshold for a major stationary source under PSD regulations. Second, the modification also added the chemicals used in the cleaning processes to the permit and emissions from the hammer mills. Finally, it allowed the installation of 16 new drying kilns (SN-15 through SN-26 and SN-39, SN-40, and SN-42) and an insignificant diesel storage tank.

427-AOP-R2 Issued on April 25, 2002. Facility installed an emission control system for the truck loadout station associated with the milling process. The system will consist of new piping and a new material handling fan to collect the dust.

427-AOP-R3 Issued on November 10, 2003. The facility went through a renewal of their Title V air permit, which included the addition of CAM requirements for SN-37 (Milling Process baghouses) and SN-41 (wood-fired boiler). SN-36, a 28.08 MMBTU/hr wood-fired boiler, was removed from the permit. There were no changes to the method of operation associated with the renewal.

427-AOP-R4 Issued on June 24, 2004. This minor modification incorporated a change to the CAM requirements for the ESP which controls particulate from a wood-fired boiler, SN-41. Information obtained through the manufacturer recommended the change in monitored parameters of the ESP. There was no emission change associated with this modification. The facility also submitted a minor modification in order to increase the allowable unloading limit at SN-43 from 173 trucks per month to 350. There was a 2.4 ton/yr emission increase of particulate from this change.

427-AOP-R5 Issued on July 6, 2006. This minor modification limited the facility's total plantwide HAP emissions to 9.5 ton/yr single HAP and 23.75 tpy of total HAPs. By lowering plantwide totals of HAP emissions, the facility is not subject to NESHAP QQQQ – *National Emission Standards for Hazardous Air Pollutants for Surface Coating of Wood Building Products*. In addition to a plantwide HAP limit, HAPs from SN-13 and SN-41 were reviewed and several additional HAPs were added to the permit. There were no actual criteria pollutant changes but because of the HAP review, 0.03 tpy of Pb were added to the permit.

SECTION IV: SPECIFIC CONDITIONS

SN-01 through SN-12

Source Description

The flooring banded in pallets is routed at the front of the Finishing Line. The Finishing Line consists of a number of sanding operations, spray application of wood stains and sealers, gas-fired oven drying, ultraviolet and infrared oven drying including stain roll coater (SN-01), high mass oven (SN-02), UV reactor (SN-03), sealer spray booth (SN-04), first coat sealer (SN-05), UV reactor (SN-06), second coat sealer (SN-07), IR oven and UV reactor (SN-08), first coat – top coat roll coater (SN-09), UV reactor (SN-10), 2nd and 3rd top coat roll coaters (SN-11), and IR oven & UV reactor (SN-12).

Particulate matter from the enclosed sanding machines is collected and routed to the baghouse at SN-12 and the older dust collection system. VOC emissions are combined and routed to the atmosphere. All VOC emissions from the Finishing Line are bubbled. The facility uses different chemicals at the Finishing Line which may contain toxic components. HAPs emitted from the Finishing Line are also bubbled.

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 Specific Conditions 3&4. [Regulation 19, §19.501 et seq., and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
01-12	Finishing Line	VOC	133.0	189.9
01-12	Finishing Line	PM_{10}	2.0	8.5

2. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions 5 & 6. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
01-12	Finishing Line	PM	2.0	8.5
		Ethyl benzene	3.00	*
		Ethylene Glycol Mono Propyl Ether	3.00	

SN	Description	Pollutant	lb/hr	tpy
		Toluene	3.00	
		Xylene	3.00	
		Methyl Isobutyl Ketone	3.00	

*Subject to facility wide HAP limit of 9.5 tpy Single HAP or 23.75 total HAP.

Limits and Recordkeeping Requirements

3. The VOC content of all coating compounds used at the facility shall not exceed 7.0 lb/gal. [§19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

4. The permittee shall maintain monthly totals of VOC emissions, in tons, which demonstrate compliance with the limits of Specific Conditions 1 & 3. The VOC usage records shall indicate the lb VOC per gallon of each compound. These records shall be maintained on a monthly basis and updated by the 15th day of the month following the month to which the records pertain. These records and associated MSDS, a manufacturer's specification, or equivalent documentation data shall be kept on site, and shall be made available to Department personnel upon request. A 12-month rolling total and each individual month's data shall be submitted in accordance with General Provision 7. [Regulation No.§18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

5. The permittee shall not exceed the following HAP content limits in any coating, solvent, or adhesive material used at the facility. To demonstrate compliance with this condition: MSDS, a manufacturer's specification, or equivalent documentation shall be maintained on site for all coatings and solvent materials used at the facility which proves the HAP content is at or below the permitted limit. This documentation will be made available to Department personnel upon request. [§18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Hazardous Pollutant	Maximum Allowable Content (lb/gal)
Ethyl benzene	0.16
Ethylene Glycol Mono Propyl Ether	0.16
Toluene	0.16
Xylene	0.16
Methyl Isobutyl Ketone	0.16

6. The permittee shall maintain monthly totals of individual HAP emissions, in tons, to demonstrate compliance with Specific Conditions 2. These records shall be maintained on a monthly basis and updated by the 15th 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. A 12-month rolling total and each individual month's data shall be submitted in accordance with General Provision 7. [Regulation No.§18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

7. Visible emissions from the baghouse at SN-12 shall not exceed 5% opacity. [§18.501 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

CAM Requirements for SN-01-12 Baghouse

8. For the baghouse at the Finishing Line, SN-10-12, the permittee shall:

   A. Conduct daily visual inspections, when the plant is in operation, of the duct system and the silo for possible sawdust emissions. [40 CFR Part §64.6I(1)]

   B. Record the presence of any visible emissions and the subsequent actions taken to reduce visible emissions. [40 CFR Part §64.6I(1)]

9. For the baghouse at SN-01-12, the permittee shall:

   A. Maintain records that summarize the number, duration, and cause of excursions or exceedances of limits as well as corrective action taken. [40 CFR §64.9(a)(2)(i) and §64.9(b)]

   B. Maintain a QIP (quality improvement plan) threshold of no more than one excursion per six-month reporting period. Upon exceedance of this threshold, the permittee shall then develop a QIP. [40 CFR §64.9(a)(2)(iii) and §64.9(b)]

   C. Maintain records that describe the actions taken to implement a quality improvement plan (QIP), and upon completion of the QIP, documentation shall be maintained to confirm that the plan was completed and reduced the likelihood of similar excursions or exceedances. [40 CFR §64.9(a)(2)(iii) and §64.9(b)]

   D. Submit information pertaining to exceedances or excursions from permitted values in semi-annual reports in accordance with General Provision #7. [40 CFR§70.6(a)(3)(iii)(A)]

11. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions 17 & 18. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
13	Wood-fired Boiler (28.08 MMBTU/hr)	PM	14.6	63.9
		Acrolein*	0.12	0.50
		Benzene*	0.12	0.52
		Beryllium	0.01	0.01
		Cadmium	0.01	0.01
		Chlorine	0.03	0.10
		Ethyl benzene*	0.01	0.01
		Formaldehyde*	0.13	0.55
		Hydrochloric Acid	0.54	2.34
		Manganese	0.05	0.20
		Mercury	0.01	0.01
		Phenol*	0.01	0.01
		Styrene*	0.06	0.24
		Toluene*	0.03	0.12
		Xylene*	0.01	0.01
41	Wood-fired Boiler (53.5 MMBTU/hr	PM	1.9	8.3
		Acrolein*	0.22	0.94
		Benzene*	0.23	0.99
		Beryllium	0.01	0.01
		Cadmium	0.01	0.01
		Chlorine	0.05	0.19
		Ethyl benzene*	0.01	0.01
		Formaldehyde*	0.24	1.04
		Hydrochloric Acid	1.02	4.46

SN-13 and SN-41
Wood Fired Boilers

Source Description

Steam generated by two boilers is used in the drying kilns. The boilers are subject to the provisions of 40 CFR 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

SN-13. The boiler has a maximum design heat input capacity of 28.08 MMBtu/hr. It is a wood waste fired boiler with a stocker firing configuration. The boiler was constructed in 1997. Particulate emissions from the boiler are controlled by a cyclone with flyash re-injection.

SN-41. The boiler has a maximum design heat input capacity of 53.5 MMBtu/hr. It is a wood waste fired boiler with a stocker firing configuration. Particulate emissions from the boiler are controlled by flyash reinjection and an electrostatic precipitator.

Specific Conditions

10. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions 17&18. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
13	Wood-fired Boiler (28.08 MMBTU/hr)	PM_{10}	14.6	63.9
		SO_2	0.7	3.1
		VOC	1.1	4.8
		CO	9.3	40.7
		NO_x	13.8	60.3
		Lead	0.01	0.01
41	Wood-fired Boiler (53.5 MMBTU/hr)	PM_{10}	1.9	8.3
		SO_2	1.3	5.9
		VOC	2.1	9.1
		CO	13.8	60.5
		NO_x	26.2	114.8
		Lead	0.01	0.02

SN	Description	Pollutant	lb/hr	tpy
		Manganese	0.09	0.38
		Mercury	0.01	0.01
		Phenol*	0.01	0.02
		Styrene*	0.11	0.45
		Toluene*	0.05	0.22
		Xylene*	0.01	0.01

*HAPs are included in VOC totals.

12. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

SN	Limit	Regulatory Citation
13	20%	Regulation 19, §19.304
41		

13. The permittee shall conduct daily 6-minute opacity readings required under Specific Condition 12 in accordance with EPA Reference Method 9. The results of these observations shall be kept on site and shall be provided to Department personnel upon request. [§19.702 of Regulation 19 and 40 CFR 52, Subpart E]

NSPS Conditions

14. The permittee shall record and maintain daily records of the amounts of wood combusted in each of the boilers, SN-13 and SN-41. [Regulation 19, §19.304 and 40 CFR §60.48c(g)]

15. The permittee shall maintain records required under Specific Condition 14 for a period of two years following the date of such records. [Regulation 19, §19.304 and 40 CFR §60.48c(i)]

16. The particulate emissions from SN-41 shall not exceed 0.1 lb/MMBtu. [Regulation 19, §19.304 and 40 CFR §60.43c(b)(1)]

Throughput Limits

17. The permittee shall not use more than 15,600 tons of wood as a fuel at SN-13 for any consecutive twelve 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]

18. The permittee shall not use more than 31,300 tons of wood as a fuel at SN-41 for any consecutive twelve 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]

19. The permittee shall maintain records which demonstrate compliance with the limits set in Specific Conditions 17 and 18. These records shall be maintained on a monthly basis and updated by the 15th day of the month following the month to which the records pertain. These records shall be kept on site for five years in accordance with General Provision 6, and shall be provided to Department personnel upon request. An annual 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]

HAP Calculations

20. The permittee shall calculate and maintain a record of HAPs emitted from the wood boilers on a monthly basis. In lieu of actual testing, the permittee shall use AP-42 factors for wood waste combustion, Tables 1.6-3 and 1.6-4. The permittee shall base HAP calculations upon actual usage of wood. The permittee shall update these factors before the end of each calendar year. These records shall be kept on site for five years in accordance with General Provision 6, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with General Provision 7.

Testing Requirements

21. The permittee shall perform stack testing of SN-13 and SN-41 for particulate matter (PM) and carbon monoxide (CO) emissions. Testing shall be performed in accordance with Plantwide Conditions 3 and 4 and Referenced Methods 1 through 5 and 10, respectively. Stack testing of SN-13 and SN-41 for these pollutants shall be repeated every five (5) years. [Regulation 19, §19.702 and 40 CFR 52, Subpart E]

22. The permittee shall perform a one-time stack test of SN-13 and SN-41 for NO_x emissions. Testing shall be performed in accordance with Plantwide Conditions 3 and 4 and Reference Method 10E. This test was conducted in April of 2004. [Regulation 19, §19.702 and 40 CFR 52, Subpart E]

CAM Requirements for SN-41 ESP

23. The permittee shall:

    A. Install, operate, calibrate, and maintain a device to monitor the secondary current. The secondary current shall be maintained at a minimum of 10 mADC. [40 CFR Part §64.6I(1)]

B. Install, operate, calibrate, and maintain a device to monitor the secondary voltage. The secondary voltage shall be maintained at a minimum of 20 kV. [40 CFR Part §64.6I(1)]

C. Monitor and record measurements for the secondary current and secondary voltage on a daily basis. These records shall be maintained on site and be made available to Department personnel upon request. [40 CFR Part §64.6I(3)]

D. Confirm secondary current and secondary voltage is zero when the unit is not operating. [40 CFR Part §64.6I(1)]

E. Maintain documentation of routine inspections and any maintenance activities performed. [40 CFR Part §64.9(b)]

24. The permittee shall:

A. Maintain records that summarize the number, duration, and cause of excursions or exceedances of limits as well as corrective action taken. [40 CFR §64.9(a)(2)(i) and §64.9(b)]

B. Maintain records that summarize the number, duration, and cause of monitoring equipment downtime incidents, other than routine downtime for calibration checks. [40 CFR §64.9(a)(2)(ii) and §64.9(b)]

C. Maintain a QIP (quality improvement plan) threshold of no more than nine excursions per six-month reporting period. Upon exceedance of this threshold, the permittee shall then develop a QIP. [40 CFR §64.9(a)(2)(iii) and §64.9(b)]

D. Maintain records that describe the actions taken to implement a quality improvement plan (QIP), and upon completion of the QIP, documentation shall be maintained to confirm that the plan was completed and reduced the likelihood of similar excursions or exceedances. [40 CFR §64.9(a)(2)(iii) and §64.9(b)]

E. Submit information pertaining to exceedances or excursions from permitted values in semi-annual reports in accordance with General Provision #7. [40 CFR§70.6(a)(3)(iii)(A)]

SN-15 through SN-29
Drying Kilns

Source Description

Drying Kilns (SN-15 through SN-29) are used to reduce the lumber's moisture content to a typical range of 5-8%. The typical lumber is 1'x1" hardwood (oak) boards. The steam used in the Drying Kilns is supplied by the boilers (SN-13 and SN-41).

Specific Conditions

25. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through Specific Condition 29. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
SN-15 through SN-29	Drying Kilns	PM_{10}	1.9	8.1
		VOC	8.9	39.0

26. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through Specific Condition 29. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
SN-15 through SN-29	Drying Kilns	PM	1.9	8.1

27. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

SN	Limit	Regulatory Citation
SN-15 through SN-29	10%	Regulation 18, §18.501

28. The permittee shall conduct a weekly, 6-minute opacity reading in accordance with EPA Reference Method 9. The results of these observations shall be kept on site and shall be provided to Department personnel upon request. [Regulation 19, §19.702 and 40 CFR 52, Subpart E]

29. The permittee shall not dry more than 76,470,000 board feet of hardwood lumber for any consecutive twelve 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]

30. The permittee shall maintain records which demonstrate compliance with the limit set in Specific Condition 29. These records shall be maintained on a monthly basis and updated by the 15th day of the month following the month to which the records pertain. These records shall be kept on site for five years in accordance with General Provision 6, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with General Provision 7. [Regulation 19, §19.705 and 40 CFR 52, Subpart E]

SN-37 & SN-38
Material Handling

Source Description

SN-37 Milling Process. The kiln dried lumber is routed to the milling section for unfinished hardwood flooring manufacturing. The sawdust emissions from the saws, side matchers, end matchers, and planers are picked up by suction fans and routed to the milling process dust collection baghouses. There are three (3) baghouses. The clean air from the baghouse is routed back to the milling section. The collected sawdust is fed pneumatically into the silo. There is a cyclone on the top of the silo. The exhaust air from the cyclone is routed back to the baghouses. The sawdust from the silo is fed pneumatically into the boilers. Some excess sawdust is loaded and shipped off site by trucks. There are some fugitive particulate matter emissions due to leaks from duct system and the silo.

SN-38 Hammer Mills. Wood waste generated at the milling section or the finishing line is conveyed to the hogs. The large hog on the west side of the building goes to cyclone #1. The smaller hog on the east side of the building goes to cyclone #4. The clean air from these two cyclones is routed to the baghouses. Particulate emissions from SN-37 and SN-38 are bubbled and based on the baghouse control.

Specific Conditions

31. The permittee shall not exceed the emission rates set forth in the following table. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
SN-37&38	Material Handling	PM_{10}	6.3	27.3

32. The permittee shall not exceed the emission rates set forth in the following table. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
SN-37&38	Material Handling	PM	6.3	27.3

33. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

SN	Limit	Regulatory Citation
37 & 38	5%	Regulation 18, §18.501

34. The permittee shall only process untreated wood-waste in the hogs of the Hammer Mill (SN-38). Untreated wood refers to wood which has had no coatings applied. [Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

CAM Requirements Baghouses

35. The permittee shall:

A. Conduct daily visual inspections, when the plant is in operation, of the duct system and the silo for possible sawdust emissions. [40 CFR Part §64.6I(1)]

B. Record the presence of any visible emissions and the subsequent actions taken to reduce visible emissions. [40 CFR Part §64.6I(1)]

36. The permittee shall:

A. Maintain records that summarize the number, duration, and cause of excursions or exceedances of limits as well as corrective action taken. [40 CFR §64.9(a)(2)(i) and §64.9(b)]

B. Maintain a QIP (quality improvement plan) threshold of no more than one excursion per six-month reporting period. Upon exceedance of this threshold, the permittee shall then develop a QIP. [40 CFR §64.9(a)(2)(iii) and §64.9(b)]

C. Maintain records that describe the actions taken to implement a quality improvement plan (QIP), and upon completion of the QIP, documentation shall be maintained to confirm that the plan was completed and reduced the likelihood of similar excursions or exceedances. [40 CFR §64.9(a)(2)(iii) and §64.9(b)]

D. Submit information pertaining to exceedances or excursions from permitted values in semi-annual reports in accordance with General Provision #7. [40 CFR§70.6(a)(3)(iii)(A)]

SN-43
Truck Loadout Station

Source Description

Emissions for a truck loadout station have not been accounted for in past permits. With the installation of a dust collection system, which will be operated during truck loading, this source has been quantified. The system consists of new piping and a new material handling fan to collect the dust. The collected material will be rerouted into the existing dust collection system from the material handling.

Specific Conditions

37. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through Specific Condition 41. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
SN-43	Truck Loadout Station	PM_{10}	4.5	4.8

38. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through Specific Condition 41. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
SN-43	Truck Loadout Station	PM	4.5	4.8

39. Visible emissions from the truck loadout station (SN-43) shall not exceed 10% opacity. [Regulation 18, §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

40. The permittee shall conduct daily 6-minute opacity readings during truck loading operations at SN-43 in accordance with EPA Reference Method 9. The results of these observations shall be kept on site and shall be provided to Department personnel upon request. [Regulation 19, §19.702 and 40 CFR 52, Subpart E]

41. The permittee shall not load more than 350 trucks a month. The permittee shall maintain records of the number of trucks loaded at this source. These records shall be maintained on a monthly basis and updated by the 15th day of the month following the month to which the records pertain. These records shall be maintained on site and made available to Department personnel upon request. [Regulation 19, §19.705 A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 70.6]

SECTION V: COMPLIANCE PLAN AND SCHEDULE

Armstrong Hardwood Flooring Co. - Witt Facility 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

1. 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 otherwise 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:

   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.

   [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]

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]

Plantwide HAP Limits

7. The permittee shall emit no more than 9.50 tons of a single hazardous air pollutant (HAPs) or 23.75 tpy of total hazardous air pollutants from The Finishing Line (SN-01 through SN-12) and from the Wood-Fired Boilers (SN-13 and SN-41) at the facility during any consecutive 12-month period. [§18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

8. The permittee shall maintain monthly records which demonstrate compliance with Plantwide Condition 8. These records shall be maintained in a spreadsheet, database, or other well-organized format. These records shall indicate the total and individual HAPs emitted from The Finishing Line (SN-01 through SN-12) and from the permitted limits of Wood-Fired Boilers (SN-13 and SN-41). [§18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Acid Rain (Title IV)

9. The Director prohibits the permittee to cause any emissions exceeding any allowances the source lawfully holds under Title IV of the Act or the regulations promulgated under the Act. No permit revision is required for increases in emissions allowed by allowances acquired pursuant to the acid rain program, if such increases do not require a permit revision under any other applicable requirement. This permit establishes no limit on the number of allowances held by the permittee. However, the source may not use allowances as a defense for noncompliance with any other applicable requirement of this permit or the Act. The permittee will account for any such allowance according to the procedures established in regulations promulgated under Title IV of the Act. [Regulation No. 26 §26.701 of and 40 CFR 70.6(a)(4)]

Title VI Provisions

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

    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.

11. 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.

12. 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.

13. 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.

14. 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.

SECTION VII: INSIGNIFICANT ACTIVITIES

The following sources are insignificant activities. 0. Any activity that has a state or federal applicable requirement shall be considered a significant activity even if this activity meets the criteria of §26.304 of Regulation 26 or listed in the table below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated May 9, 2008.

Description	Category
1,000 gallon diesel tank	A-3
Chemical storage room and exhaust fan	A-13
Small (11 gallon) Solvent Distillation Unit	A-10
Drums and small containers for coating and cleanup solvent storage and handling	A-2
Diesel-Fired Fire Pump (345 hp)	A-1
150-kW Natural Gas Fired Emergency Generator	A-1

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)]

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.

    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.

    [40 CFR 70.6(a)(3)(ii)(A) and Regulation 26, §26.701(C)(2)]

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 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:

    Arkansas Department of Environmental Quality
    Air Division
    ATTN: Compliance Inspector Supervisor
    5301 Northshore Drive
    North Little Rock, AR 72118-5317

    [40 C.F.R. 70.6(a)(3)(iii)(A) and Regulation 26, §26.701(C)(3)(a)]

8. The permittee shall 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 Regulation19, § 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 shall 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 shall 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 by the initial and full reports required in 8a.

[Regulation 19, §19.601 and §19.602, Regulation 26, §26.701(C)(3)(b), and 40 CFR 70.6(a)(3)(iii)(B)]

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)]

20. 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;
    b. 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. All compliance certifications required by this permit must include the following: [40 CFR 70.6(c)(5) and Regulation 26, §26.703(E)(3)]

a. The identification of each term or condition of the permit that is the basis of the certification;
b. The compliance status;
c. Whether compliance was continuous or intermittent;
d. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit; and
e. Such other facts as the Department may require elsewhere in this permit or by §114(a)(3) and §504(b) of the Act.

22. Nothing in this permit will alter or affect the following: [Regulation 26, §26.704(C)]

a. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
b. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
c. The applicable requirements of the acid rain program, consistent with §408(a) of the Act; or
d. The ability of EPA to obtain information from a source pursuant to §114 of the Act.

23. This permit authorizes only those pollutant emitting activities addressed in this permit. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

24. The permittee may request in writing and at least 15 days in advance of the deadline, an extension to any testing, compliance or other dates in this permit. No such extensions are authorized until the permittee receives written Department approval. The Department may grant such a request, at its discretion in the following circumstances:

a. Such an extension does not violate a federal requirement;
b. The permittee demonstrates the need for the extension; and
c. The permittee documents that all reasonable measures have been taken to meet the current deadline and documents reasons it cannot be met.

[Regulation 18, §18.102(C-D), Regulation 19, §19.103(D), A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and CFR Part 52, Subpart E]

25. The permittee may request in writing and at least 30 days in advance, temporary emissions and/or testing that would otherwise exceed an emission rate, throughput requirement, or other limit in this permit. No such activities are authorized until the permittee receives written Department approval. Any such emissions shall be included in the facility's total emissions and reported as such. The Department may grant such a request, at its discretion under the following conditions:

    a. Such a request does not violate a federal requirement;
    b. Such a request is temporary in nature;
    c. Such a request will not result in a condition of air pollution;
    d. The request contains such information necessary for the Department to evaluate the request, including but not limited to, quantification of such emissions and the date/time such emission will occur;
    e. Such a request will result in increased emissions less than five tons of any individual criteria pollutant, one ton of any single HAP and 2.5 tons of total HAPs; and
    f. The permittee maintains records of the dates and results of such temporary emissions/testing.

[Regulation 18, §18.102(C-D), Regulation 19, §19.103(D), A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and CFR Part 52, Subpart E]

26. The permittee may request in writing and at least 30 days in advance, an alternative to the specified monitoring in this permit. No such alternatives are authorized until the permittee receives written Department approval. The Department may grant such a request, at its discretion under the following conditions:

    a. The request does not violate a federal requirement;
    b. The request provides an equivalent or greater degree of actual monitoring to the current requirements; and
    c. Any such request, if approved, is incorporated in the next permit modification application by the permittee.

[Regulation 18, §18.102(C-D), Regulation19, §19.103(D), A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and CFR Part 52, Subpart E]

Appendix A

40 CFR Subpart Dc - *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*

e-CFR Data is current as of December 1, 2008

Title 40: Protection of Environment
PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Browse Previous | Browse Next

Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

Source: 72 FR 32759, June 13, 2007, 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 British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/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 that meet the applicability requirements in paragraph (a) of this section are not subject to the sulfur dioxide (SO_2) 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.

(e) Heat recovery steam generators that are associated with combined cycle gas turbines and meet the applicability requirements of subpart GG or KKKK of this part are not subject to this subpart. This subpart will continue to apply to all other heat recovery steam generators that are capable of combusting more than or equal to 2.9 MW (10 MMBtu/hr) heat input of fossil fuel but less than or equal to 29 MW (100 MMBtu/hr) heat input of fossil fuel. If the heat recovery steam generator is subject to this subpart, only emissions resulting from combustion of fuels in the steam generating unit are subject to this subpart. (The gas turbine emissions are subject to subpart GG or KKKK, as applicable, of this part).

(f) Any facility covered by subpart AAAA of this part is not covered by this subpart.

(g) Any facility covered by an EPA approved State or Federal section 111(d)/129 plan implementing subpart BBBB of this part is not covered by this subpart.

§ 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 generating unit been operated for 8,760 hours during that 12-month period at the maximum design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility during a period of 12 consecutive calendar months.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see §60.17), coal refuse, and petroleum coke. Coal-derived synthetic fuels derived from coal for the purposes of creating useful heat, including but not limited to solvent refined coal, gasified coal, coal-oil mixtures, and coal-water

mixtures, are also 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 (incorporated by reference, see §60.17).

Dry flue gas desulfurization technology means a SO_2control 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 reagent and water, whether introduced separately or as a premixed 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 SO_2control 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 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 (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 SO_2 emissions (nanograms per joule (ng/J) or lb/MMBtu 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 (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 SO_2 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 PM or SO_2.

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.

§ 60.42c Standard for sulfur dioxide (SO_2).

(a) Except as provided in paragraphs (b), (c), and (e) of this section, on and after the date on which the performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that combusts only coal shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2 in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO_2 emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2 in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2 in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO_2 emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2 in excess of 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 performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that:

(1) Combusts only 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 SO_2 in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 20 percent (0.20) of the potential SO_2 emission rate (80 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of SO_2 in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is fired with coal refuse, the affected facility 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 87 ng/J (0.20 lb/MMBtu) heat input SO_2 emissions limit or the 90 percent SO_2 reduction requirement specified in paragraph (a) of this section and the emission limit is determined pursuant to paragraph (e)(2) of this section.

(2) Combusts only coal and that uses an emerging technology for the control of SO_2 emissions shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 50 percent (0.50) of the potential SO_2 emission rate (50 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 260 ng/J (0.60 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility is subject to the 50 percent SO_2 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, 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 SO_2 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 MMBtu/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, 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 SO_2 in excess of 215 ng/J (0.50 lb/MMBtu) 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, 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 SO_2 in excess of the following:

(1) The percent of potential SO_2 emission rate or numerical SO_2 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 MMBtu/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:

$$E_s = \frac{(K_a H_a + K_b H_b + K_c H_c)}{(H_a + H_b + H_c)}$$

Where:

E_s= SO_2 emission limit, expressed in ng/J or lb/MMBtu heat input;

K_a= 520 ng/J (1.2 lb/MMBtu);

K_b= 260 ng/J (0.60 lb/MMBtu);

K_c= 215 ng/J (0.50 lb/MMBtu);

H_a= 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) [MMBtu];

H_b= Heat input from the combustion of coal in an affected facility subject to paragraph (b)(2) of this section, in J (MMBtu); and

$H_c K_a H_b$= Heat input from the combustion of oil, in J (MMBtu).

(f) Reduction in the potential SO_2 emission rate through fuel pretreatment is not credited toward the percent reduction requirement under paragraph (b)(2) of this section unless:

(1) Fuel pretreatment results in a 50 percent (0.50) or greater reduction in the potential SO_2 emission rate; and

(2) Emissions from the pretreated fuel (without either combustion or post-combustion SO_2 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), as applicable.

(1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 MMBtu/hr).

(2) Residual oil-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/hr).

(3) Coal-fired facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/hr).

(i) The SO_2 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.

§ 60.43c Standard for particulate matter (PM).

(a) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts coal or combusts mixtures of coal with other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/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/MMBtu) 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/MMBtu) heat input 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, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts wood or combusts mixtures of wood with other fuels (except coal) and has a heat input capacity of 8.7 MW (30 MMBtu/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/MMBtu) 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/MMBtu) 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, 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 MMBtu/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.

(e)(1) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 13 ng/J (0.030 lb/MMBtu) heat input, except as provided in paragraphs (e)(2), (e)(3), and (e)(4) of this section.

(2) As an alternative to meeting the requirements of paragraph (e)(1) of this section, the owner or

operator of an affected facility for which modification commenced after February 28, 2005, may elect to meet the requirements of this paragraph. On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005 shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of both:

(i) 22 ng/J (0.051 lb/MMBtu) heat input derived from the combustion of coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels; and

(ii) 0.2 percent of the combustion concentration (99.8 percent reduction) when combusting coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels.

(3) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005, and that combusts over 30 percent wood (by heat input) on an annual basis and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 43 ng/J (0.10 lb/MMBtu) heat input.

(4) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, an owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a PM standard under §60.43c and not using a post-combustion technology (except a wet scrubber) to reduce PM or SO_2emissions is not subject to the PM limit in this section.

§ 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 §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 SO_2emission 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) of this section and §60.8, compliance with the percent reduction requirements and SO_2emission limits under §60.42c is based on the average percent reduction and the average SO_2emission 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 SO_2emission 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 of appendix A of this part are used to determine the hourly SO_2emission rate (E_{ho}) and the 30-day average SO_2emission rate (E_{ao}). The hourly averages used to compute the 30-day averages are obtained from the CEMS. Method 19 of appendix A of this part shall be used to calculate $E_{ao}$when using daily fuel sampling or Method 6B of appendix A of this part.

(e) If coal, oil, or coal and oil are combusted with other fuels:

(1) An adjusted E_{ho}($E_{ho}o$) is used in Equation 19–19 of Method 19 of appendix A of this part to compute the adjusted E_{ao}($E_{ao}o$). The $E_{ho}o$ is computed using the following formula:

$$E_{ho}o = \frac{E_{ho} - E_w(1 - X_k)}{X_k}$$

Where:

$E_{ho}o$ = Adjusted E_{ho}, ng/J (lb/MMBtu);

E_{ho}= Hourly SO_2emission rate, ng/J (lb/MMBtu);

E_w= SO_2concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 9 of appendix A of this part, ng/J (lb/MMBtu). 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= Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(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 of appendix A of this part.

(f) Affected facilities subject to the percent reduction requirements under §60.42c(a) or (b) shall determine compliance with the SO_2emission 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 SO_2emission rate is computed using the following formula:

$$\%P_s = 100\left(1 - \frac{\%R_g}{100}\right)\left(1 - \frac{\%R_f}{100}\right)$$

Where:

$\%P_s$= Potential SO_2emission rate, in percent;

$\%R_g$= SO_2removal efficiency of the control device as determined by Method 19 of appendix A of this part, in percent; and

$\%R_f$= SO_2removal efficiency of fuel pretreatment as determined by Method 19 of appendix A of this part, 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 $\%R_g$($\%R_g$o) is computed from E_{ao}o from paragraph (e)(1) of this section and an adjusted average SO_2inlet rate (E_{ai}o) using the following formula:

$$\%R_g o = 100\left(1 - \frac{E^{\circ}_{ao}}{E^{\circ}_{ai}}\right)$$

Where:

$\%R_g o$ = Adjusted $\%R_g$, in percent;

$E_{ao} o$ = Adjusted E_{ao}, ng/J (lb/MMBtu); and

$E_{ai} o$ = Adjusted average SO_2 inlet rate, ng/J (lb/MMBtu).

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

$$E_{hi} o = \frac{E_{hi} - E_w(1 - X_k)}{X_k}$$

Where:

$E_{hi} o$ = Adjusted E_{hi}, ng/J (lb/MMBtu);

E_{hi} = Hourly SO_2 inlet rate, ng/J (lb/MMBtu);

E_w = 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 of appendix A of this part, ng/J (lb/MMBtu). 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; and

X_k = Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(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 §60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under §60.48c (f), as applicable.

(i) The owner or operator of an affected facility seeking to demonstrate compliance with the SO_2 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 §60.46c(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.

§ 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, except as specified in paragraph (c) of this section.

(1) Method 1 of appendix A of this part shall be used to select the sampling site and the number of traverse sampling points.

(2) Method 3 of appendix A of this part shall be used for gas analysis when applying Method 5, 5B, or 17 of appendix A of this part.

(3) Method 5, 5B, or 17 of appendix A of this part shall be used to measure the concentration of PM as follows:

(i) Method 5 of appendix A of this part may be used only at affected facilities without wet scrubber systems.

(ii) Method 17 of appendix A of this part 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 of appendix A of this part may be used in Method 17 of appendix A of this part only if Method 17 of appendix A of this part is used in conjunction with a wet scrubber system. Method 17 of appendix A of this part shall not be used in conjunction with a wet scrubber system if the effluent is saturated or laden with water droplets.

(iii) Method 5B of appendix A of this part 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 5B of appendix A of this part, 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 (O_2) or carbon dioxide (CO_2) measurement shall be obtained simultaneously with each run of Method 5, 5B, or 17 of appendix A of this part by traversing the duct at the same sampling location.

(7) For each run using Method 5, 5B, or 17 of appendix A of this part, the emission rates expressed in ng/J (lb/MMBtu) heat input shall be determined using:

(i) The O_2or CO_2measurements 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 of appendix A of this part.

(8) Method 9 of appendix A of this part (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.

(c) In place of PM testing with EPA Reference Method 5, 5B, or 17 of appendix A of this part, an owner or operator may elect to install, calibrate, maintain, and operate a CEMS for monitoring PM emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility who elects to continuously monitor PM emissions instead of conducting performance testing using EPA Method 5, 5B, or 17 of appendix A of this part shall install, calibrate, maintain, and operate a CEMS and shall comply with the requirements specified in paragraphs (c)(1) through (c)(13) of this section.

(1) Notify the Administrator 1 month before starting use of the system.

(2) Notify the Administrator 1 month before stopping use of the system.

(3) The monitor shall be installed, evaluated, and operated in accordance with §60.13 of subpart A of this part.

(4) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under §60.8 of subpart A of this part or within 180 days of notification to the Administrator of use of CEMS if the owner or operator was previously determining compliance by Method 5, 5B, or 17 of appendix A of this part performance tests, whichever is later.

(5) The owner or operator of an affected facility shall conduct an initial performance test for PM emissions as required under §60.8 of subpart A of this part. Compliance with the PM emission limit shall be determined by using the CEMS specified in paragraph (d) of this section to measure PM and calculating a 24-hour block arithmetic average emission concentration using EPA Reference Method 19 of appendix A of this part, section 4.1.

(6) Compliance with the PM emission limit shall be determined based on the 24-hour daily (block) average of the hourly arithmetic average emission concentrations using CEMS outlet data.

(7) At a minimum, valid CEMS hourly averages shall be obtained as specified in paragraph (d)(7)(i) of this section for 75 percent of the total operating hours per 30-day rolling average.

(i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.

(ii) [Reserved]

(8) The 1-hour arithmetic averages required under paragraph (d)(7) of this section shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the boiler operating day daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under §60.13(e)(2) of subpart A of this part.

(9) All valid CEMS data shall be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph (d)(7) of this section are not met.

(10) The CEMS shall be operated according to Performance Specification 11 in appendix B of this part.

(11) During the correlation testing runs of the CEMS required by Performance Specification 11 in appendix B of this part, PM and O_2(or CO_2) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraph (d)(7)(i) of this section.

(i) For PM, EPA Reference Method 5, 5B, or 17 of appendix A of this part shall be used.

(ii) For O_2(or CO_2), EPA reference Method 3, 3A, or 3B of appendix A of this part, as applicable shall be used.

(12) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 2 in appendix F of this part. Relative Response Audit's must be performed annually and Response Correlation Audits must be performed every 3 years.

(13) When PM emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring

systems as approved by the Administrator or EPA Reference Method 19 of appendix A of this part to provide, as necessary, valid emissions data for a minimum of 75 percent of total operating hours on a 30-day rolling average.

(d) The owner or operator of an affected facility seeking to demonstrate compliance under §60.43c(e)(4) shall follow the applicable procedures under §60.48c(f). For residual oil-fired affected facilities, fuel supplier certifications are only allowed for facilities with heat input capacities between 2.9 and 8.7 MW (10 to 30 MMBtu/hr).

§ 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 SO_2 emission limits under §60.42c shall install, calibrate, maintain, and operate a CEMS for measuring SO_2 concentrations and either O_2 or CO_2 concentrations at the outlet of the SO_2 control device (or the outlet of the steam generating unit if no SO_2 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 SO_2 concentrations and either O_2 or CO_2 concentrations at both the inlet and outlet of the SO_2 control device.

(b) The 1-hour average SO_2 emission rates measured by a CEMS shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under §60.42c. Each 1-hour average SO_2 emission rate must be based on at least 30 minutes of operation, and shall be calculated using the data points required under §60.13(h)(2). Hourly SO_2 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 of appendix B of this part.

(2) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of appendix F of this part.

(3) For affected facilities subject to the percent reduction requirements under §60.42c, the span value of the SO_2 CEMS at the inlet to the SO_2 control device shall be 125 percent of the maximum estimated hourly potential SO_2 emission rate of the fuel combusted, and the span value of the SO_2 CEMS at the outlet from the SO_2 control device shall be 50 percent of the maximum estimated hourly potential SO_2 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 SO_2 CEMS at the outlet from the SO_2 control device (or outlet of the steam generating unit if no SO_2 control device is used) shall be 125 percent of the maximum estimated hourly potential SO_2 emission rate of the fuel combusted.

(d) As an alternative to operating a CEMS at the inlet to the SO_2 control device (or outlet of the steam generating unit if no SO_2 control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO_2 emission rate by sampling the fuel prior to combustion. As an alternative to operating a CEMS at the outlet from the SO_2 control device (or outlet of the steam generating unit if no SO_2 control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO_2 emission rate by using Method 6B of appendix A of this part. Fuel sampling shall be conducted pursuant to either paragraph (d)(1) or (d)(2) of this section. Method 6B of appendix A of this part 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 of appendix A of this part. Method 19 of appendix A of this part provides procedures for converting these measurements into the format to be used in calculating the average SO_2 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 fuel 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 of appendix A of this part may be used in lieu of CEMS to measure SO_2 at the inlet or outlet of the SO_2 control system. An initial stratification test is required to verify the adequacy of the Method 6B of appendix A of this part sampling location. The stratification test shall consist of three paired runs of a suitable SO_2 and CO_2 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 of appendix B of this part. Method 6B of appendix A of this part, Method 6A of appendix A of this part, or a combination of Methods 6 and 3 of appendix A of this part or Methods 6C and 3A of appendix A of this part are suitable measurement techniques. If Method 6B of appendix A of this part 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 of appendix A of this part 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 SO_2 standards based on fuel supplier certification, as described under §60.48c(f), 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.

§ 60.47c Emission monitoring for particulate matter.

(a) Except as provided in paragraphs (c), (d), (e), and (f) of this section, the owner or operator of an affected facility combusting coal, 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 of appendix B of this part. The span value of the opacity COMS shall be between 60 and 80 percent.

(c) Affected facilities that burn only distillate oil that contains no more than 0.5 weight percent sulfur and/or liquid or gaseous fuels with potential sulfur dioxide emission rates of 26 ng/J (0.06 lb/MMBtu) heat input or less and that do not use a post-combustion technology to reduce SO_2 or PM emissions are not required to operate a CEMS for measuring opacity if they follow the applicable procedures under §60.48c(f).

(d) Owners or operators complying with the PM emission limit by using a PM CEMS monitor instead of monitoring opacity must calibrate, maintain, and operate a CEMS, and record the output of the system, for PM emissions discharged to the atmosphere as specified in §60.45c(d). The CEMS specified in paragraph §60.45c(d) shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero

and span adjustments.

(e) An affected facility that does not use post-combustion technology (except a wet scrubber) for reducing PM, SO_2, or carbon monoxide (CO) emissions, burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur, and is operated such that emissions of CO to the atmosphere from the affected facility are maintained at levels less than or equal to 0.15 lb/MMBtu on a boiler operating day average basis is not required to operate a COMS for measuring opacity. Owners and operators of affected facilities electing to comply with this paragraph must demonstrate compliance according to the procedures specified in paragraphs (e)(1) through (4) of this section.

(1) You must monitor CO emissions using a CEMS according to the procedures specified in paragraphs (e)(1)(i) through (iv) of this section.

(i) The CO CEMS must be installed, certified, maintained, and operated according to the provisions in §60.58b(i)(3) of subpart Eb of this part.

(ii) Each 1-hour CO emissions average is calculated using the data points generated by the CO CEMS expressed in parts per million by volume corrected to 3 percent oxygen (dry basis).

(iii) At a minimum, valid 1-hour CO emissions averages must be obtained for at least 90 percent of the operating hours on a 30-day rolling average basis. At least two data points per hour must be used to calculate each 1-hour average.

(iv) Quarterly accuracy determinations and daily calibration drift tests for the CO CEMS must be performed in accordance with procedure 1 in appendix F of this part.

(2) You must calculate the 1-hour average CO emissions levels for each steam generating unit operating day by multiplying the average hourly CO output concentration measured by the CO CEMS times the corresponding average hourly flue gas flow rate and divided by the corresponding average hourly heat input to the affected source. The 24-hour average CO emission level is determined by calculating the arithmetic average of the hourly CO emission levels computed for each steam generating unit operating day.

(3) You must evaluate the preceding 24-hour average CO emission level each steam generating unit operating day excluding periods of affected source startup, shutdown, or malfunction. If the 24-hour average CO emission level is greater than 0.15 lb/MMBtu, you must initiate investigation of the relevant equipment and control systems within 24 hours of the first discovery of the high emission incident and, take the appropriate corrective action as soon as practicable to adjust control settings or repair equipment to reduce the 24-hour average CO emission level to 0.15 lb/MMBtu or less.

(4) You must record the CO measurements and calculations performed according to paragraph (e) of this section and any corrective actions taken. The record of corrective action taken must include the date and time during which the 24-hour average CO emission level was greater than 0.15 lb/MMBtu, and the date, time, and description of the corrective action.

(f) An affected facility that burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur and operates according to a written site-specific monitoring plan approved by the appropriate delegated permitting authority is not required to operate a COMS for measuring opacity. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard.

§ 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 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 SO_2 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 SO_2 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 of this part.

(c) The owner or operator of each coal-fired, 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 that occur during the reporting period.

(d) The owner or operator of each affected facility subject to the SO_2 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 SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.42c 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 SO_2 emission rate (ng/J or lb/MMBtu), 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 SO_2 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 SO_2 or diluent (O_2 or CO_2) 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 of appendix B of this part.

(10) If a CEMS is used, results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part.

(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), (3), or (4) 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:

(1) For distillate oil:

(i) The name of the oil supplier;

(ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c; and

(iii) The sulfur content of the oil.

(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.

(4) For other fuels:

(i) The name of the supplier of the fuel;

(ii) The potential sulfur emissions rate of the fuel in ng/J heat input; and

(iii) The method used to determine the potential sulfur emissions rate of the fuel.

(g)(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.

(2) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in §60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount

of each fuel combusted during each calendar month.

(3) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas, wood, distillate oil meeting the most current requirements in §60.42C to use fuel certification to demonstrate compliance with the SO_2standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

(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

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CERTIFICATE OF SERVICE

I, Cynthia Hook, hereby certify that a copy of this permit has been mailed by first class mail to Armstrong Hardwood Flooring Co. - Witt Facility, P.O. Box 950, Warren, AR, 71671, on this 11th day of December December, 2008.

C Hook

Cynthia Hook, AAII, Air Division