

# ADEQ

ARKANSAS  
Department of Environmental Quality

March 27, 2009

Terry Freeman  
President  
Bibler Brothers Lumber Company  
P.O. Box 490  
Russellville, AR 72811-0490

Dear Mr. Freeman:

The enclosed Permit No. 1628-AOP-R6 is issued pursuant to the Arkansas Operating Permit Program, Regulation # 26.

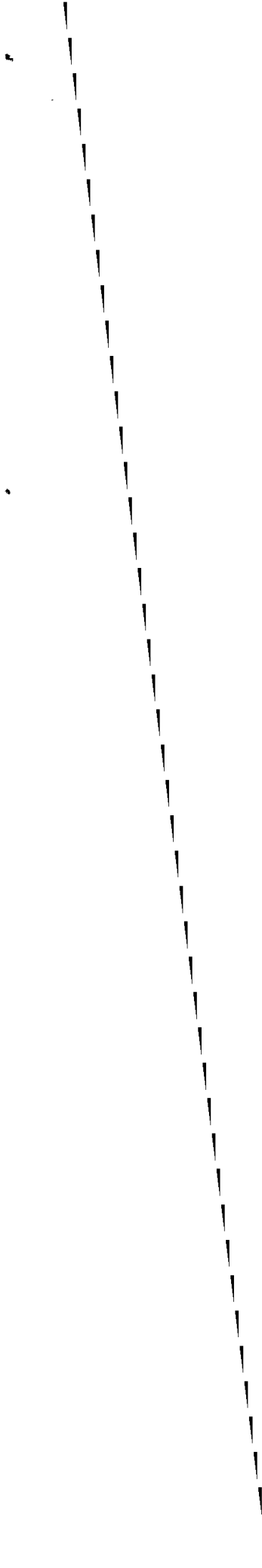
After considering the facts and requirements of A.C.A. §8-4-101 et seq., and implementing regulations, I have determined that Permit No. 1628-AOP-R6 for the construction, operation and maintenance of an air pollution control system for Bibler Brothers Lumber Company to be issued and effective on the 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



# ADEQ OPERATING AIR PERMIT

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

Permit No. : 1628-AOP-R6

IS ISSUED TO:


Bibler Brothers Lumber Company  
2401 South Arkansas Avenue  
Russellville, AR 72801  
Pope County  
AFIN: 58-00014

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:

JANUARY 22, 2008 AND JANUARY 21, 2013

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

Signed:

  
Mike Bates  
Chief, Air Division

March 27, 2009  
Date Modified

Facility: Bibler Brothers Lumber Company  
Permit No.: 1628-AOP-R6  
AFIN: 58-00014

## Table of Contents

<b>SECTION I: FACILITY INFORMATION</b> .....	4
<b>SECTION II: INTRODUCTION</b> .....	5
SUMMARY OF PERMIT ACTIVITY .....	5
PROCESS DESCRIPTION.....	5
REGULATIONS.....	8
EMISSION SUMMARY.....	8
<b>SECTION III: PERMIT HISTORY</b> .....	12
<b>SECTION IV: SPECIFIC CONDITIONS</b> .....	16
LOG DEBARKING OPERATION.....	16
CHIP AND SAWDUST BINS AND LOADOUT .....	18
PLANER MILL OPERATIONS .....	20
DRYING KILNS AND BOILERS .....	22
ROAD EMISSIONS .....	28
KILN FUEL HANDLING EMISSIONS.....	29
<b>SECTION V: COMPLIANCE PLAN AND SCHEDULE</b> .....	30
<b>SECTION VI: PLANT WIDE CONDITIONS</b> .....	31
TITLE VI PROVISIONS.....	32
PERMIT SHIELD .....	34
<b>SECTION VII: INSIGNIFICANT ACTIVITIES</b> .....	36
<b>SECTION VIII: GENERAL PROVISIONS</b> .....	37
<b>APPENDIX A</b> .....	44
40 CFR PART 60, SUBPART DC- <i>NEW SOURCE PERFORMANCE STANDARDS FOR SMALL INDUSTRIAL-COMMERCIAL-     INSTITUTIONAL STEAM GENERATING UNITS</i> .....	44

**Facility: Bibler Brothers Lumber Company**  
**Permit No.: 1628-AOP-R6**  
**AFIN: 58-00014**

### List of Acronyms

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
MBF	1,000 Board Feet
MVAC	Motor Vehicle Air Conditioner
No.	Number
NO <sub>x</sub>	Nitrogen Oxide
PM	Particulate matter
PM <sub>10</sub>	Particulate matter smaller than ten microns
SNAP	Significant New Alternatives Program (SNAP)
SO <sub>2</sub>	Sulfur dioxide
SSM	Startup, Shutdown, and Malfunction Plan
tpy	Ton per year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

**Facility: Bibler Brothers Lumber Company**  
**Permit No.: 1628-AOP-R6**  
**AFIN: 58-00014**

**Section I: FACILITY INFORMATION**

PERMITTEE: Bibler Brothers Lumber Company

AFIN: 58-00014

PERMIT NUMBER: 1628-AOP-R6

FACILITY ADDRESS: 2401 South Arkansas Avenue  
Russellville, AR 72801

MAILING ADDRESS: PO Box 490  
Russellville, AR 72811-0490

COUNTY: Pope County

CONTACT NAME: Terry Freeman

CONTACT POSITION: President

TELEPHONE NUMBER: 479-968-4986

REVIEWING ENGINEER: Charles Hurt, P.E.

UTM North South (Y): Zone 15: 3901177.77 m

UTM East West (X): Zone 15: 487846.66 m

Facility: Bibler Brothers Lumber Company  
Permit No.: 1628-AOP-R6  
AFIN: 58-00014

## Section II: INTRODUCTION

### Summary of Permit Activity

Bibler Brothers Lumber Company (AFIN: 58-00014) owns and operates a lumber mill located at 2401 South Arkansas Avenue (Highway 7 South), Russellville, Arkansas 72801. Bibler Brothers modified the design of SN-07G and SN-13G such that particulate filters will not be installed on those kilns. Due to the changes in kiln design test methods and locations for PM/PM<sub>10</sub> were revised. Permitted PM decreased by 1.8 tpy, and permitted PM<sub>10</sub> increased by 2.5 tpy.

### Process Description

The production operations at the Bibler Brothers facility consist of the following: debarking of raw pine logs; cutting and trimming of the logs to form green lumber; drying of the wood in several kilns; and, trimming and planing of the dry lumber to yield the finished products. The Russellville sawmill is capable of operating 24 hours per day, 365 days per year.

A description of the lumber manufacturing operations is provided below:

#### Log Storage

Pine logs are obtained from forests and wood yards located throughout Arkansas, Missouri and Oklahoma. The raw wood is transported to the Russellville facility by truck.

The pine logs are unloaded at one of several locations. Wood slated for immediate processing is unloaded directly within the sawmill. Logs that will be stored temporarily are placed in the "dry storage" lot.

Green wood that will be stored on-site for long periods of time is stockpiled within the "wet deck" area. It consists of a storage yard, a holding pond and a sprinkler system. The logs are continuously sprayed with water during long-term storage to prevent staining and cracking. The runoff from the wet deck area flows by gravity back into the pond for reuse.

#### Log Debarking

When needed, the raw pine logs are transferred from storage to the sawmill. The logs are then conveyed through two "debarker" machines, which are operated in parallel. These units (SN-01) are used to mechanically remove the bark from the logs. The stripped logs are then routed to a sorting area, whereas the bark is transferred to a mechanical grinder for size reduction. The material is then conveyed into an elevated storage bin.

The bark is subsequently loaded (SN-02) into trucks and shipped off-site as a marketable by-product. The vehicles are filled one at a time. A truck is positioned beneath the storage bin, and then the bark is transferred by gravity into the vehicle.

The bark may also be stored in piles. This material is placed onto trucks (SN-02) using a front-end loader.

**Facility: Bibler Brothers Lumber Company**  
**Permit No.: 1628-AOP-R6**  
**AFIN: 58-00014**

### Sawmill Operations

After debarking, the raw pine logs are sorted and then conveyed into the sawmill. The units are then cut into a variety of sizes and lengths of lumber. A series of saws and trimmers are operated. Several computerized optical scanners are utilized during the sawmill operations. These devices are used to determine the best places to cut each individual log and calculate the number of boards that can be made. Use of the raw lumber is optimized using this equipment.

The green lumber is subsequently routed to a mechanical sorter machine. The material is separated by size and grade. The lumber is then stacked. The wood is later transferred to the kilns for drying.

Wood chips and sawdust are generated during the sawmill operations. These materials fall onto various conveyor lines. The wood scrap is then transferred to a centralized shaker unit. This equipment is used to mechanically separate the wood chips from the sawdust. The two streams are then conveyed into separate storage bins which are designated as SN-03 & SN-04 respectively. Emissions from the sawing operations are permitted under the conveying and storage operations which are designated as chip bin (SN-03) and sawdust bin (SN-04).

The wood chips are subsequently loaded (SN-05) into trucks and shipped off-site as a saleable by-product. The vehicles are filled one at a time. A truck is positioned underneath the storage bin, and then the chips are transferred by gravity into the vehicle.

The sawdust is handled in a similar manner. The material is transferred from the storage bin into trucks (SN-12) and shipped off-site for further use. The sawdust is also used as fuel for Kiln #1 and Kiln #3.

### Lumber Drying Operations

Three kilns, two direct-fired, woodwaste (SN-07G and SN-13G) and one steam heated (SN-10B) are used to remove the moisture from the lumber. The kilns heat and circulate air in a closed system. The steam-heated kiln is used primarily for wood that requires a longer drying time. The lumber is subsequently finished in the planer mill.

The direct-fired kilns are continuously operated, and the steam heated kiln is batch operated. The batch drying cycle takes between 12 and 48 hours to complete, depending on the product being made. The moisture content of the wood is typically reduced from approximately 50% to about 16%. The kilns are equipped with computerized air circulation systems and burner controls to optimize the drying cycle and fuel usage.

Two natural gas-fired boilers (SN-10A1 & SN-10A2) are operated at the Russellville facility. These units provide steam for Kiln #4 (SN-10B). The "firetube" boilers each have rated heat input capacity of 24.38 MMBtu/hr.

### Lumber Finishing Operations



**Facility: Bibler Brothers Lumber Company**  
**Permit No.: 1628-AOP-R6**  
**AFIN: 58-00014**

After drying, the lumber is transferred to the planer mill for finishing. The wood is planed, trimmed and cut to the final dimensions. A series of saw and trimmer stations are operated for this purpose. The lumber is then stacked.

The finished wood products are subsequently stored in warehouses pending shipment to customers. The pine lumber is primarily shipped off-site by truck. Rail cars are occasionally used.

Wood shavings are generated when finishing the lumber in the planer mill. The scrap material is collected using two baghouses and a cyclone (SN-08). The shavings are then pneumatically conveyed into a large elevated storage bin.

The shavings are subsequently loaded (SN-09) into trucks and shipped off-site as a marketable by product. The vehicles are filled one at a time. A truck is positioned beneath the storage bin, and then the shavings are transferred by gravity into the vehicle.

#### Miscellaneous Operations and Emission Sources

The Russellville sawmill features several miscellaneous production operations and emission sources. These items are described below:

Portable Tub Grinder: Bark and other wood scrap are generated during the manufacturing operations at the Bibler facility. These materials are processed in a portable tub grinder to reduce the volume of waste and create a marketable by-product. The equipment is brought on-site by truck, set up and then run for several days until processing of the bark stockpile has been completed. The unit is then demobilized and moved off-site.

The portable tub grinder (SN-17) is driven by a 625-horsepower diesel engine. The grinder and engine are not equipped with air pollution control devices. The equipment is an insignificant source of air emissions.

Dual Compartment Fuel Tank: A large aboveground horizontal storage vessel with two compartments is operated on-site. Unleaded gasoline is stored in one tank (SN-14). This unit has a capacity of 2,000 gallons. Diesel fuel is stored in the other compartment (SN 15). It has a capacity of 10,000 gallons. The two petroleum products are used to fuel various plant vehicles and equipment. The dual compartment fuel tank is an insignificant source of air emissions.

Used Oil Tank: This vessel (SN-18) is used to store waste oil, which is generated during the servicing of plant vehicles and equipment. The tank is an aboveground horizontal unit with a capacity of 2,000 gallons. The used oil tank is an insignificant emission source.

#### Emission Sources

The air emissions at the Russellville facility are generated by the following activities and equipment: the storage, handling and loading of bark, wood chips and sawdust (emissions of particulate matter); the drying of green lumber in three kilns (emissions of volatile organic compounds and hazardous air pollutants); operation of two sets of natural gas-fired boilers

Facility: Bibler Brothers Lumber Company  
 Permit No.: 1628-AOP-R6  
 AFIN: 58-00014

(combustion emissions); and, several miscellaneous production operations and units. (One of the kilns and two of the boilers have not yet been constructed.)

Truck traffic generates fugitive emissions of particulate matter (PM and PM<sub>10</sub>) as they travel on the paved and unpaved roads (SN-19). Sweeping and watering is performed to minimize the dust emissions.

### Regulations

The following table contains the regulations applicable to this permit.

SN	Regulation Citations
Facility	Regulation 18 - <i>Arkansas Air Pollution Control Code</i>
Facility	Regulation 19 - <i>Regulations of the Arkansas Plan of Implementation for Air Pollution Control</i>
Facility	Regulation 26, <i>Regulations of the Arkansas Operating Air Permit Program</i>
Facility	40 CFR §52.21 - <i>Prevention of Significant Deterioration</i>
07G, 10B, and 13G	40 CFR Part 63, Subpart DDDD- <i>National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products (Parts §63.2252 and §63.2280(b) only)</i>
SN-10A1 and SN-10A2	40 CFR Part 60, Subpart Dc- <i>New Source Performance Standards for Small Industrial-Commercial- Institutional Steam Generating Units</i>

### Emission Summary

The following table is a summary of emissions from the facility. The following table contains cross-references to the pages containing specific conditions and emissions for each source. 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 Criteria Emissions		PM <sub>10</sub>	6.0	17.7
		SO <sub>2</sub>	1.6	5.6
		VOC	154.7	390.9
		CO	20.6	77.0
		NO <sub>x</sub>	11.6	39.1

Facility: Bibler Brothers Lumber Company  
 Permit No.: 1628-AOP-R6  
 AFIN: 58-00014

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
Total Allowable Non-Criteria Emissions <sup>C</sup>		PM	64.2	145.8
		Acetaldehyde	0.79	1.77
		Acrolein	0.09	0.52
		Benzene	0.22	0.92
		Chlorine	0.04	0.18
		Formaldehyde	0.95	4.53
		HCl	0.96	4.17
		Lead	0.02	0.01
		Manganese	0.06	0.19
		Methanol	8.54	26.35
		MIBK	0.06	0.15
		Phenol	0.74	2.01
		Propionaldehyde	0.08	0.17
		Selenium	0.02	0.01
		Styrene	0.10	0.42
		Toluene	0.09	0.24
	Xylenes	0.03	0.02	
Total Allowable Air Contaminant Emissions <sup>D</sup>		Acetone	1.99	6.84
01	Debarkers	PM	1.4	3.1
		PM <sub>10</sub>	0.2	0.4
02	Bark Loadout	PM	2.7	6.2
		PM <sub>10</sub>	0.3	0.7
03	Chip Bin	PM	1.6	3.6
		PM <sub>10</sub>	0.2	0.4
04	Sawdust Bin	PM	17.3	40.6
		PM <sub>10</sub>	0.1	0.1
05	Chip Bin Loadout	PM	3.1	7.2
		PM <sub>10</sub>	0.4	0.8

Facility: Bibler Brothers Lumber Company  
 Permit No.: 1628-AOP-R6  
 AFIN: 58-00014

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
07G	Kiln #3 25.0 MMBTU/hr (Wood Waste, Direct Fired)	PM	1.1	9.1 <sup>A</sup>
		PM <sub>10</sub>	1.1	9.1 <sup>A</sup>
		SO <sub>2</sub>	0.7	5.5 <sup>A</sup>
		VOC	46.5	390.9 <sup>B</sup>
		CO	8.2	68.1 <sup>A</sup>
		NO <sub>x</sub>	3.4	28.5 <sup>A</sup>
		Acetaldehyde	0.05	0.40 <sup>A</sup>
		Acrolein	0.04	0.31 <sup>A</sup>
		Benzene	0.11	0.92 <sup>A</sup>
		Chlorine	0.02	0.18 <sup>A</sup>
		Formaldehyde	0.46	3.86 <sup>A</sup>
		HCl	0.48	4.17 <sup>A</sup>
		Lead	0.01	0.01 <sup>A</sup>
		Manganese	0.03	0.19 <sup>A</sup>
		Methanol	1.95	17.07 <sup>A</sup>
		MIBK	0.02	0.11 <sup>A</sup>
		Phenol	0.13	1.06 <sup>A</sup>
		Propionaldehyde	0.03	0.13 <sup>A</sup>
		Selenium	0.01	0.01 <sup>A</sup>
		Styrene	0.05	0.42 <sup>A</sup>
Toluene	0.04	0.23 <sup>A</sup>		
Xylenes	0.01	0.01 <sup>A</sup>		
Acetone	0.67	5.54 <sup>A</sup>		
08	Planer Mill Vent System (one cyclone & two baghouses)	PM	1.5	2.0
		PM <sub>10</sub>	0.2	0.2
09	Shavings Loadout	PM	10.3	14.3
		PM <sub>10</sub>	0.1	0.1
10A1	Natural Gas Fired Boiler (24.38 MMBTU/hr)	PM	0.2	0.9
		PM <sub>10</sub>	0.2	0.9
		SO <sub>2</sub>	0.1	0.1
		VOC	0.2	0.7
		CO	2.1	8.9
		NO <sub>x</sub>	2.4	10.6
10A2	Natural Gas Fired Boiler (24.38 MMBTU/hr)	PM	0.2	0.9
		PM <sub>10</sub>	0.2	0.9
		SO <sub>2</sub>	0.1	0.1
		VOC	0.2	0.7
		CO	2.1	8.9
		NO <sub>x</sub>	2.4	10.6

Facility: Bibler Brothers Lumber Company  
 Permit No.: 1628-AOP-R6  
 AFIN: 58-00014

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
10B	Kiln #4 (Steam Heated)	VOC	61.3	122.5
		Acetaldehyde	0.69	1.37 <sup>A</sup>
		Acrolein	0.01	0.21 <sup>A</sup>
		Formaldehyde	0.03	0.67 <sup>A</sup>
		Methanol	4.64	9.28 <sup>A</sup>
		MIBK	0.02	0.04 <sup>A</sup>
		Phenol	0.48	0.95 <sup>A</sup>
		Propionaldehyde	0.02	0.04 <sup>A</sup>
		Toluene	0.01	0.01 <sup>A</sup>
		o-Xylene	0.01	0.01 <sup>A</sup>
		Acetone	0.65	1.30 <sup>A</sup>
		12	Sawdust Bin Loadout	PM
PM <sub>10</sub>	0.1			0.1
13G	Kiln #1 25.0 MMBTU/hr (Wood Waste, Direct Fired)	PM	1.1	9.1 <sup>A</sup>
		PM <sub>10</sub>	1.1	9.1 <sup>A</sup>
		SO <sub>2</sub>	0.7	5.5 <sup>A</sup>
		VOC	46.5	390.9 <sup>B</sup>
		CO	8.2	68.1 <sup>A</sup>
		NO <sub>x</sub>	3.4	28.5 <sup>A</sup>
		Acetaldehyde	0.05	0.40 <sup>A</sup>
		Acrolein	0.04	0.31 <sup>A</sup>
		Benzene	0.11	0.92 <sup>A</sup>
		Chlorine	0.02	0.18 <sup>A</sup>
		Formaldehyde	0.46	3.86 <sup>A</sup>
		HCl	0.48	4.17 <sup>A</sup>
		Lead	0.01	0.01 <sup>A</sup>
		Manganese	0.03	0.19 <sup>A</sup>
		Methanol	1.95	17.07 <sup>A</sup>
		MIBK	0.02	0.11 <sup>A</sup>
		Phenol	0.13	1.06 <sup>A</sup>
		Propionaldehyde	0.03	0.13 <sup>A</sup>
		Selenium	0.01	0.01 <sup>A</sup>
		Styrene	0.05	0.42 <sup>A</sup>
Toluene	0.04	0.23 <sup>A</sup>		
Xylenes	0.01	0.01 <sup>A</sup>		
Acetone	0.67	5.54 <sup>A</sup>		
19	Road Emissions	PM	6.2	18.0
		PM <sub>10</sub>	1.6	4.7
20	Sawdust Unloading Station	PM	0.1	0.1
		PM <sub>10</sub>	0.1	0.1
21	Sawdust Storage Silo	PM	0.1	0.1
		PM <sub>10</sub>	0.1	0.1

<sup>A</sup> Total combined emissions from Kiln #1 and Kiln #3

<sup>B</sup> Plantwide VOC total

<sup>C</sup> Included in VOC or PM total unless noted otherwise

<sup>D</sup> Air Contaminants such as ammonia, acetone, and certain halogenated solvents are not VOCs or HAPs

**Facility: Bibler Brothers Lumber Company**  
**Permit No.: 1628-AOP-R6**  
**AFIN: 58-00014**

### **Section III: PERMIT HISTORY**

Bibler Brothers, Inc. began operation in the early 1960s. Modifications and/or additions were made in 1972, 1987, 1993, 1994, and 1995.

Permit #1628-A was issued to Bibler Brothers, Inc. on July 24, 1995. This was the first air permit issued to this facility. Emission limits were set for all of the criteria pollutants with the exception of lead.

Permit #1628-AR-1 was issued to Bibler Brothers, Inc. on July 31, 1997. This air permit allowed the facility to increase production and permitted two non-NSPS fuel storage tanks. This permit also defined this facility as a major source pursuant to 40 CFR 52.21 due to VOC emissions of approximately 298 tons per year.

Permit #1628-AOP-R0 was issued to Bibler Brothers, Inc. - West Facility on February 11, 1998. This was the first operating permit issued to this facility under Regulation 26. The steam heated kiln as well as the boiler used to produce the steam were replaced. A lower production limit was taken by the facility in order to stay below the PSD significant increase level.

Permit #1628-AOP-R1 was the second operating permit issued to Freeman Brothers, Inc. d.b.a. Bibler Brothers Lumber Company - West Facility (November 24, 1998). The only physical change that occurred with the issuance of this permit was the installation of a new dual compartment storage tank. Throughputs at the dual compartment fuel tank were increased which resulted in an increase in the permitted emissions from these sources. Production increases were requested and as a result the increase in VOC emissions exceeded the "significance level. Therefore, the replacement kiln and its associated boilers were subject to a retroactive Prevention of Significant Deterioration (PSD) review.

Permit #1628-AOP-R2 was the third operating permit issued to Freeman Brothers, Inc. d.b.a. Bibler Brothers Lumber Company (March 30, 2000). With this modification, Freeman Brothers proposed to install a new lumber drying kiln (SN-16B) and two associated boilers (SN-16A1 & -16A2), increased the permitted production by 23 million board feet to a production limit of 203 million board feet per year, updated the emission rates for some of the particulate matter emission sources due to new emission factors, and increased some of the hourly emission rates due to increased capability made possible by the installation of the new drying kiln. (The proposed kiln and boilers were never installed.)

The permitted increase in VOC emissions was in excess of the PSD Significant Increase Level of 40 tons per year. No netting of VOC emissions was allowed for this permit because the Department relied upon the VOC emission increases and decreases in issuing Permit #1628-AOP-R1. Therefore, the net emission increase of VOCs was considered to be the total permitted increase of 123.7 tons per year. Permitted increases of other criteria pollutants were below the respective PSD Significant Increase Levels.

**Facility: Bibler Brothers Lumber Company**  
**Permit No.: 1628-AOP-R6**  
**AFIN: 58-00014**

A BACT analysis was conducted for existing Kiln #4 (SN-10B) and its associated boilers (SN-10A1 & -10A2). A BACT analysis was required for the two boilers because they were installed at the same time as Kiln #4 and were considered an affected source.

The RACT/BACT/LAER Clearinghouse was searched for historical and transient control technologies associated with lumber drying kilns. Several similar kiln installations subject to PSD/BACT were found. The clearinghouse did not identify BACT as add-on and/or pollution prevention controls for lumber drying kilns. The NSR and CTC bulletin boards did not contain control information for lumber drying kilns. Thus, controls were not employed on other lumber drying kilns. Since proposed Kiln #5 at Bibler was similar, controls were not feasible for this source. Bibler Brothers would operate the kiln in such a manner as to minimize emissions from this source.

Natural gas would be the only fuel used to fire the Kiln #5 Boilers. None of the natural gas-fired units contained in the RACT/BACT/LAER Clearinghouse identified add-on controls for VOCs from combustion sources. The typical control listed for VOC from a natural gas combustion source was good combustion practice. Bibler Brothers would exercise good combustion practice in order to minimize the emissions from this source.

The increase in ozone concentration from the affected sources (0.0154 ppm) was determined using the Sheffe Method. The sum of the increase in ozone concentration and the background ozone concentration (0.1064 ppm) was below the NAAQS for ozone (0.12 ppm). The modification was not expected to have any adverse impacts to the Upper Buffalo Class I Area. Also, as the only pollutant triggering PSD review was VOC, no visibility impacts were expected as a result of the increase.

Permit #1628-AOP-R3, which was valid between June 20, 2002 and June 19, 2007, was the first renewal of this Title V operating air permit. Along with the renewal, the following changes were incorporated:

- The ton per year VOC emission rates from the kilns were bubbled in a manner that coincided with the specific conditions of the permit;
- SN-14 and SN-15 were classified as Insignificant Activities;
- The emission rates for some (non-PSD) sources were corrected using updated AP 42 emission factors;
- The 18-month window for beginning conversion of Kiln #2 (SN-06) from direct heat to steam heat, and the construction of Kiln #5 (SN-16B) and its associated boilers (SN-16A1 & -16A2) was extended; and
- The deadline for updating the previous month's records was changed from the tenth to the last day of each month.

**Facility: Bibler Brothers Lumber Company**  
**Permit No.: 1628-AOP-R6**  
**AFIN: 58-00014**

Permit #1628-AOP-R4 was issued January 22, 2008 to Freeman Brothers, Inc. doing business as (d.b.a.) Bibler Brothers Lumber Company. The primary purpose for issuance of this permit was to renew the facility's previous Title V Operating Air Permit #1628-AOP-R3. The permitted annual lumber throughput rates remained the same. The most significant changes were:

- The modified permit identified and incorporated emissions of hazardous air pollutants (HAPs) and acetone from the lumber kilns for the first time.
- The permit included authorization to install a steam-heated Kiln #5 (SN-16B) and two (2) natural gas-fired boilers (SN-16A1 and SN-16A2) to provide steam for the kiln. Bibler Brothers was permitted to install these units in March 2000 (Permit No. 1628-AOP-R2) and a PSD review was performed for the new kiln and boilers. However, the kiln and boilers were never built for economic reasons and approval to construct this equipment expired. (Refer to Section III – Permit History).
- The permit included one insignificant source not previously identified, an existing used oil storage tank (SN-18).
- A diesel-powered tub grinder (SN-11) that was deleted from the permit. This equipment has been permanently removed from service.
- The permit incorporated increases in the emission rates for two criteria pollutants, NO<sub>x</sub> at 11.2 tpy and VOC at 29.2 tpy. These increases were the result of using the applicable AP 42 emission factors which do not include a correction for flue gas recirculation in the kilns or low NO<sub>x</sub> burners for the boilers.
- The permit also incorporated particulate emissions which are a result of truck traffic on the haul roads (SN-19). The potential fugitive emissions were quantified at 18.0 tpy PM and 4.7 tpy PM<sub>10</sub>.

Permit #1628-AOP-R5 was issued on August 25, 2008. Bibler converted two existing batch operated, natural gas, direct fired lumber drying kilns (SN-07 and SN-13) to continuously operating, wood waste, direct fired lumber drying kilns (SN-07G and SN-13G). An additional sawdust unloading station (SN-20) and storage silo (SN-21) were also installed as part of the kiln conversion project. Kiln #2 (SN-06) and Kiln #5 (SN-16B) and associated boilers (SN-16A1 and SN-16A2) were removed from the permit. Permitted PM, PM<sub>10</sub>, SO<sub>2</sub>, VOC, and CO emission rates increased by 5.4 tpy, 1.1 tpy, 4.9 tpy, 0.2 tpy, and 77.0 tpy, respectively. Permitted NO<sub>x</sub> decreased by 39.1 tpy.

The emissions increase for VOC associated with the modification was large enough to trigger Prevention of Significant Deterioration (PSD) review. Below is a summary of emissions for pollutants subject to PSD review. The emissions increases for the remaining criteria pollutants were not large enough to trigger PSD review for those pollutants.



**Facility: Bibler Brothers Lumber Company**  
**Permit No.: 1628-AOP-R6**  
**AFIN: 58-00014**

**BACT Determination Summary**

<b>SN</b>	<b>Description</b>	<b>BACT Determination</b>	<b>BACT Limit</b>	<b>Compliance Determination</b>
SN-07G	Kiln #3	Good Combustion Practices and Proper Kiln Design and Maintenance	3.8 lb VOC/MBF	Stack Test
SN-13G	Kiln #1	Good Combustion Practices and Proper Kiln Design and Maintenance	3.8 lb VOC/MBF	Stack Test

**Section IV: SPECIFIC CONDITIONS**

SN-01 and SN-02

Log Debarking Operation

Source Description

Two conveyors transfer logs to two debarkers units (SN-01) which remove all of the bark from the logs. The removed bark is collected in a bin (SN-02) for storage before being loaded and shipped out in trucks.

Specific Conditions

1. The permittee shall not exceed the emission rates set forth in the following table at the designated sources. The hourly rates are based upon the capacity of the equipment. Compliance with the annual rates will be demonstrated through compliance with Plantwide Condition #7, which limits the amount of board feet of lumber that may be processed at this facility. [Regulation 19 §19.501 *et seq.* effective January 25, 2009 and 40 CFR Part 52, Subpart E]

SN	Pollutant	lb/hr	tpy
01	PM <sub>10</sub>	0.2	0.4
02	PM <sub>10</sub>	0.3	0.7

2. The permittee shall not exceed the emission rates set forth in the following table at the designated sources. The hourly rates are based upon the capacity of the equipment. Compliance with the annual rates will be demonstrated through compliance with Plantwide Condition #7, which limits the amount of board feet of lumber that may be processed at this facility. [Regulation 18 §18.801, effective January 25, 2009, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Pollutant	lb/hr	tpy
01	PM	1.4	3.1
02	PM	2.7	6.2

3. The permittee shall not exceed 20% opacity from SN-01 and SN-02. [Regulation 19 §19.503 and 40 CFR Part 52, Subpart E]
4. The permittee shall conduct weekly observations of the opacity from SN-01 and SN-02 and keep a record of these observations. If visible emissions are detected which appear to exceed 20% opacity, the permittee shall immediately undertake corrective actions to identify the cause of the excess visible emissions, implement corrective actions, and document that there are no excess visible emissions following the corrective actions. The permittee shall maintain records of all corrective actions taken following the observance of visible emissions. These records shall include the cause of the excess visible emissions, what action was taken to correct the problem, and if excess visible emissions

**Facility: Bibler Brothers Lumber Company**  
**Permit No.: 1628-AOP-R6**  
**AFIN: 58-00014**

were detected after the corrective action was taken. [Regulation 19 §19.705 and 40 CFR Part 52, Subpart E]

Facility: Bibler Brothers Lumber Company  
 Permit No.: 1628-AOP-R6  
 AFIN: 58-00014

SN-03, SN-04, SN-05, and SN-12

Chip and Sawdust Bins and Loadout

Source Description

The chips and sawdust generated during cutting of the logs in the sawmill fall onto a conveyor. The conveyor carries the material to a shaker which separates the chips from the sawdust. The chips are conveyed to a chip bin (SN-03) while the sawdust is conveyed to a sawdust bin (SN-04). The chips and sawdust are stored in their respective bins prior to being loaded into a truck and shipped off-site. Emissions from chips being loaded out and the sawdust being loaded out have been designated as SN-05 and SN-12 respectively and shipped off site.

Specific Conditions

- The permittee shall not exceed the emission rates set forth in the following table at the designated sources. The hourly rates are based upon the capacity of the equipment. Compliance with the annual rates will be demonstrated through compliance with Plantwide Condition #7, which limits the amount of board feet of lumber that may be processed at this facility. [Regulation 19 §19.501 *et seq.* effective January 25, 2009 and 40 CFR Part 52, Subpart E]

SN	Pollutant	lb/hr	tpy
03	PM <sub>10</sub>	0.2	0.4
04	PM <sub>10</sub>	0.1	0.1
05	PM <sub>10</sub>	0.4	0.8
12	PM <sub>10</sub>	0.1	0.1

- The permittee shall not exceed the emission rates set forth in the following table at the designated sources. The hourly rates are based upon the capacity of the equipment. Compliance with the annual rates will be demonstrated through compliance with Plantwide Condition #7, which limits the amount of board feet of lumber that may be processed at this facility. [Regulation 18 §18.801, effective January 25, 2009, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Pollutant	lb/hr	tpy
03	PM	1.6	3.6
04	PM	17.3	40.6
05	PM	3.1	7.2
12	PM	17.3	40.6

- The permittee shall not exceed 20% opacity from SN-03, SN-04, SN-05, and SN-12. [Regulation 19 §19.503 and 40 CFR Part 52, Subpart E]
- The permittee shall conduct weekly observations of the opacity from SN-03, SN-04, SN-05, and SN-12 and keep a record of these observations. If visible emissions are detected which appear to exceed 20% opacity, the permittee shall immediately undertake

**Facility: Bibler Brothers Lumber Company**  
**Permit No.: 1628-AOP-R6**  
**AFIN: 58-00014**

corrective actions to identify the cause of the excess visible emissions, implement corrective actions, and document that there are no excess visible emissions following the corrective actions. The permittee shall maintain records of all corrective actions taken following the observance of visible emissions. These records shall include the cause of the excess visible emissions, what action was taken to correct the problem, and if excess visible emissions were detected after the corrective action was taken. [Regulation 19 §19.705 and 40 CFR Part 52, Subpart E]

Facility: Bibler Brothers Lumber Company  
 Permit No.: 1628-AOP-R6  
 AFIN: 58-00014

SN-08 and SN-09

Planer Mill Operations

Source Description

Dried lumber is sent from the kilns to the planer mill. The planer mill uses 20 knives to smooth the rough lumber. The wood shavings generated from the smoothing operations are collected by a cyclone and two baghouses in series (SN-08) through a pneumatic conveying system. A bin collects the shavings which are then loaded (SN-09) onto a truck.

Specific Conditions

9. The permittee shall not exceed the emission rates set forth in the following table at the designated sources. The hourly rates are based upon the capacity of the equipment. Compliance with the annual rates will be demonstrated through compliance with Plantwide Condition #7, which limits the amount of board feet of lumber that may be processed at this facility. [Regulation 19 §19.501 *et seq.* effective January 25, 2009 and 40 CFR Part 52, Subpart E]

SN	Pollutant	lb/hr	tpy
08	PM <sub>10</sub>	0.2	0.2
09	PM <sub>10</sub>	0.1	0.1

10. The permittee shall not exceed the emission rates set forth in the following table at the designated sources. The hourly rates are based upon the capacity of the equipment. Compliance with the annual rates will be demonstrated through compliance with Plantwide Condition #7, which limits the amount of board feet of lumber that may be processed at this facility. [Regulation 18 §18.801, effective January 25, 2009, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Pollutant	lb/hr	tpy
08	PM	1.5	2.0
09	PM	10.3	14.3

11. The permittee shall not exceed 20% opacity from SN-09. [Regulation 19 §19.503 and 40 CFR Part 52, Subpart E]
12. The permittee shall not exceed 5% opacity from SN-08. [Regulation 19 §19.503 and 40 CFR Part 52, Subpart E]
13. The permittee shall conduct weekly observations of the opacity from SN-08 and SN-09 and keep a record of these observations. If visible emissions are detected which appear to exceed the opacities in either Specific Condition #11 or #12, the permittee shall immediately undertake corrective actions to identify the cause of the excess visible emissions, implement corrective actions, and document that there are no excess visible emissions following the corrective actions. The permittee shall maintain records of all

**Facility: Bibler Brothers Lumber Company**  
**Permit No.: 1628-AOP-R6**  
**AFIN: 58-00014**

corrective actions taken following the observance of visible emissions. These records shall include the cause of the excess visible emissions, what action was taken to correct the problem, and if excess visible emissions were detected after the corrective action was taken. [Regulation 19 §19.705 and 40 CFR Part 52, Subpart E]

Facility: Bibler Brothers Lumber Company  
 Permit No.: 1628-AOP-R6  
 AFIN: 58-00014

SN-07G, SN-10B, and SN-13G

SN-10A1 and SN-10A2

Drying Kilns and Boilers

Source Description

All of the lumber processed at this facility is dried in one of three kilns (#1, #3 or #4). Kiln #1 (SN-13G) and Kiln #3 (SN-07G) are continuously operating, wood waste-fired units. Kiln #4 (SN-10B) is a batch, steam-heated unit. Kilns #1 and #3 are equipped with "green sawdust gasifiers." Each gasifier has a rated heat input capacity of 25 mmBTU/hr. Two natural gas-fired boilers (SN-10A and SN-10B) provide steam for Kiln #4. Each boiler has an input capacity of 24.38 mmBTU/hr.

Specific Conditions

14. The permittee shall not exceed the emission rates set forth in the following table at the designated sources. The hourly rates are based upon the capacity of the equipment. Compliance with the annual rates for SN-10A and SN-10A2 will be demonstrated through compliance with Specific Condition #19. Compliance with the annual rates for SN-10B will be demonstrated through compliance with Plantwide Condition #7. Compliance with the annual rates for SN-07G and SN-13G will be demonstrated through compliance with Specific Condition #25 and Plantwide Condition #7. [Regulation 19 §19.501 *et seq.* effective January 25, 2009 and 40 CFR Part 52, Subpart E]

SN	Pollutant	lb/hr	tpy
07G <sup>A</sup>	PM <sub>10</sub>	1.1	9.1
	SO <sub>2</sub>	0.7	5.5
	CO	8.2	68.1
	NO <sub>x</sub>	3.4	28.5
10A1	PM <sub>10</sub>	0.2	0.9
	SO <sub>2</sub>	0.1	0.1
	CO	2.1	8.9
	NO <sub>x</sub>	2.4	10.6
10A2	PM <sub>10</sub>	0.2	0.9
	SO <sub>2</sub>	0.1	0.1
	CO	2.1	8.9
	NO <sub>x</sub>	2.4	10.6
13G <sup>A</sup>	PM <sub>10</sub>	1.1	9.1
	SO <sub>2</sub>	0.7	5.5
	CO	8.2	68.1
	NO <sub>x</sub>	3.4	28.5

<sup>A</sup> The tpy limits are the total combined emissions from Kiln #1 and Kiln #3.



Facility: Bibler Brothers Lumber Company  
 Permit No.: 1628-AOP-R6  
 AFIN: 58-00014

15. The permittee shall not exceed the emission rates set forth in the following table at the designated sources. Compliance with the emission rates shall be demonstrated based on the maximum capacity of the equipment and compliance with Specific Conditions #18 and #19. [§19.501 *et. seq.* and §19.901 *et. seq.* of Regulation 19 and 40 CFR Part 52, Subpart E]

SN	Pollutant	lb/hr	tpy
07G	VOC (lumber drying)	46.0	390.9 <sup>A</sup>
	VOC (fuel combustion)	0.5	3.8 <sup>B,C</sup>
10A1	VOC	0.2	0.7 <sup>C</sup>
10A2	VOC	0.2	0.7 <sup>C</sup>
10B	VOC	61.3	122.5 <sup>C</sup>
13G	VOC (lumber drying)	46.0	390.9 <sup>A</sup>
	VOC (fuel combustion)	0.5	3.8 <sup>B,C</sup>

- <sup>A</sup> Plantwide total for VOC  
<sup>B</sup> Total combined emissions from Kiln #1 and Kiln #3  
<sup>C</sup> Included in plantwide total for VOC

16. The permittee shall not exceed the emission rates set forth in the following table at the designated sources. The hourly rates are based upon the capacity of the equipment. Compliance with the annual rates for SN-10A and SN-10A2 will be demonstrated through compliance with Specific Condition #19. Compliance with the annual rates for SN-07G and SN-13G will be demonstrated through compliance with Specific Condition #25 and Plantwide Condition #7. [Regulation 18 §18.801, effective January 25, 2009, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Pollutant	lb/hr	tpy
07G <sup>A</sup>	PM	1.1	9.1
	Acetaldehyde	0.05	0.40
	Acrolein	0.04	0.31
	Benzene	0.11	0.92
	Chlorine	0.02	0.18
	Formaldehyde	0.46	3.86
	HCl	0.48	4.17
	Lead	0.01	0.01
	Manganese	0.03	0.19
	Methanol	1.95	17.07
	MIBK	0.02	0.11
	Phenol	0.13	1.06
	Propionaldehyde	0.03	0.13
	Selenium	0.01	0.01
	Styrene	0.05	0.42
	Toluene	0.04	0.23
	Xylenes	0.01	0.01
Acetone	0.67	5.54	
10A1	PM	0.2	0.9
10A2	PM	0.2	0.9

Facility: Bibler Brothers Lumber Company  
 Permit No.: 1628-AOP-R6  
 AFIN: 58-00014

SN	Pollutant	lb/hr	tpy
10B	Acetaldehyde	0.69	1.37
	Acrolein	0.01	0.21
	Formaldehyde	0.03	0.67
	Methanol	4.64	9.28
	MIBK	0.02	0.04
	Phenol	0.48	0.95
	Propionaldehyde	0.02	0.04
	Toluene	0.01	0.01
	o-Xylene	0.01	0.01
	Acetone	0.65	1.30
	13G <sup>A</sup>	PM	1.1
Acetaldehyde		0.05	0.40
Acrolein		0.04	0.31
Benzene		0.11	0.92
Chlorine		0.02	0.18
Formaldehyde		0.46	3.86
HCl		0.48	4.17
Lead		0.01	0.01
Manganese		0.03	0.19
Methanol		1.95	17.07
MIBK		0.02	0.11
Phenol		0.13	1.06
Propionaldehyde		0.03	0.13
Selenium		0.01	0.01
Styrene		0.05	0.42
Toluene		0.04	0.23
Xylenes		0.01	0.01
Acetone	0.67	5.54	

<sup>A</sup> The tpy limits are the total combined emissions from Kiln #1 and Kiln #3.

17. Visible emissions as measured by EPA Reference Method 9 must not exceed the limits specified in the following table. Compliance with the opacity limits for SN-07G and SN-13G will be demonstrated through compliance with Specific Condition #18. Compliance with the opacity limits for SN-10A1 and SN-10A2 will be demonstrated through compliance with Specific Condition #19. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Opacity Limit	Regulatory Citation
07G	20%	§19.503
10A1	5%	§18.501
10A2	5%	§18.501
13G	20%	§19.503

18. The permittee shall conduct weekly observations of the opacity from SN-07G and SN-13G and keep a record of these observations. If visible emissions are detected which appear to exceed 20% opacity, the permittee shall immediately undertake corrective actions to identify the cause of the excess visible emissions, implement corrective actions, and document that there are no excess visible emissions following the corrective actions. The permittee shall maintain records of all corrective actions taken following the observance of visible emissions. These records shall include the cause of the excess

**Facility: Bibler Brothers Lumber Company**  
**Permit No.: 1628-AOP-R6**  
**AFIN: 58-00014**

- visible emissions, what action was taken to correct the problem, and if excess visible emissions were detected after the corrective action was taken. [Regulation 19 §19.705 and 40 CFR Part 52, Subpart E]
19. Natural gas shall be the only fuel combusted at SN-10A1 and SN-10A2. [Regulation 19 §19.901 and 40 CFR Part 52, Subpart E]
  20. The permittee shall not produce more than 70 million board-feet of dried lumber at SN-10B in any consecutive 12-month period. (Note: These limits are also included in the facility wide total in order to give the permittee the flexibility to dry additional lumber at the other kilns.) [§19.501 *et. seq.* and §19.901 *et. seq.* of Regulation 19, 40 CFR Part 52, Subpart E, 40 CFR 70.6, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
  21. The permittee shall maintain records of the board feet of lumber dried at SN-10B in order to demonstrate compliance with Specific Condition #20. This information may be used by the Department for enforcement purposes. These records shall be updated no later than the last day of the month following the month which the records represent, 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 to the Department in accordance with General Provision #7. The submittals shall be due on February 1 and August 1 of each year. [§19.501 *et. seq.* and §19.901 *et. seq.* of Regulation 19 and 40 CFR Part 52, Subpart E]
  22. SN-10A1 and SN-10A2 are affected sources of 40 CFR Part 60, Subpart Dc – *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* due to installation dates after 1989 and heat input capacities greater than 10 MM BTU/hr. The applicable requirements of the subpart include, but are not limited to, Specific Conditions #23 and #24. [Regulation 19 §19.304 and 40 CFR Part 60, Subpart Dc]
  23. The permittee shall maintain records of the amount of fuel combusted during each month at SN-10A1 and SN-10A2. Note: 40 CFR Part 60, Subpart Dc requires facilities to record the daily amounts of fuel used. However, the Department has been granted permission to only require monthly recording when the boiler burns only natural gas. This determination may be found in the EPA's Applicability Determination Index (Control Number: 9300003.) [Regulation 19 §19.304 and 40 CFR §60.48c(g)]
  24. The permittee shall maintain all records required by Specific Condition #23 for a period of at least two years following the date of such record. [Regulation 19 §19.304 and 40 CFR §60.48c(i)]
  25. The total amount of sawdust combusted at SN-07G and SN-13G shall not exceed 54,750 tons in any consecutive 12-month period. [Regulation 19 §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]
  26. The facility shall maintain monthly records that demonstrate compliance with the limit set in Specific Condition #25 which may be used by the Department for enforcement

Facility: Bibler Brothers Lumber Company  
 Permit No.: 1628-AOP-R6  
 AFIN: 58-00014

purposes. These records shall be updated by the last 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 to the Department in accordance with General Provision #7. [Regulation 19 §19.705 and 40 CFR Part 52, Subpart E]

27. The permittee will apply water and maintain a moisture content to all ash generated by the gasifiers so there will be no visible emissions from the handling of gasifier ash prior to removal of the facility. [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]
28. The permittee shall test SN-07G and SN-13G according to test methods and provisions listed below. The test for CO and NO<sub>x</sub> shall be conducted simultaneously. All tests shall be conducted in accordance with Plantwide Condition #3. Test results shall be maintained on-site, made available to Department personnel upon request, and shall be submitted to the Department in accordance with General Provision #7. If the permittee passes a given test for two consecutive tests, then the permittee is required to repeat the test only once every five years.

The permittee is required to test only one kiln at a time in order to meet the requirements of this condition. In order to allow both kilns to be tested, the permittee shall test the untested kiln during the next testing period. [Regulation 19 §19.702 and 40 CFR Part 52, Subpart E]

SN	Limit	Test Method	Test Frequency
07G	0.090 lb PM <sub>10</sub> /MBF	5	Every 2 Years
	0.670 lb CO/MBF	10	Every 2 Years
	0.280 lb NO <sub>x</sub> /MBF	7E	Every 2 years
	0.038 lb Formaldehyde/MBF	316	Every 2 years
	3.8 lb VOC/MBF	25	One Time
13G	0.090 lb PM <sub>10</sub> /MBF	5	Every 2 years
	0.670 lb CO/MBF	10	Every 2 years
	0.280 lb NO <sub>x</sub> /MBF	7E	Every 2 years
	0.038 lb Formaldehyde/MBF	316	Every 2 years
	3.8 lb VOC/MBF	25	One Time

29. The permittee shall conduct all tests while the kiln being tested is operated at 90% capacity or greater. In order to demonstrate the kiln is operated at 90% capacity or greater during the test, the permittee will track and document the heat input from the fuel feed rate exceeds 22.5 MMBTU/hr and the dried lumber throughput exceeds 10.89 MBF/hr. [Regulation 19 §19.702 and 40 CFR Part 52, Subpart E]

#### Kiln Conversion Project BACT

30. The permittee shall comply with the following BACT determination for SN-07G and SN-13G. Compliance with the emission limits set forth in the following table shall be

Facility: Bibler Brothers Lumber Company  
Permit No.: 1628-AOP-R6  
AFIN: 58-00014

demonstrated through compliance with good combustion practices, proper kiln design and maintenance, and stack testing for VOC (Specific Condition #28). [Regulation No. 19 §19.901 *et seq.* effective January 25, 2009, and 40 CFR Part 52, Subpart E]

Table 15 – Kiln Conversion Project BACT

SN	Description	BACT Determination	BACT Limit	Compliance Determination
SN-07G	Kiln #3	Good Combustion Practices and Proper Kiln Design and Maintenance	3.8 lb VOC/MBF	Stack Test
SN-13G	Kiln #1	Good Combustion Practices and Proper Kiln Design and Maintenance	3.8 lb VOC/MBF	Stack Test

Facility: Bibler Brothers Lumber Company  
Permit No.: 1628-AOP-R6  
AFIN: 58-00014

SN-19

Road Emissions

Source Description

Several types of trucks travel on paved and unpaved roads throughout the plant. Dust is generated by the truck traffic. The fugitive particulate matter emissions are minimized by sweeping and watering.

Specific Conditions

31. The permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition shall be demonstrated through compliance with Plantwide Condition #9. [Regulation 19 §19.501 *et seq.* and 40 CFR Part 52, Subpart E]

SN	Pollutant	lb/hr	tpy
19	PM <sub>10</sub>	1.6	4.7

32. The permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition shall be demonstrated through compliance with Plantwide Condition #9. [Regulation 18 §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Pollutant	lb/hr	tpy
19	PM	6.2	18.0

Facility: Bibler Brothers Lumber Company  
Permit No.: 1628-AOP-R6  
AFIN: 58-00014

SN-20 and SN-21

Kiln Fuel Handling Emissions

Source Description

Sawdust is burned as fuel for the gasifiers for Kiln #1 (SN-13G) and Kiln #3 (SN-07G). The fuel is generated onsite and may also be purchased as needed. The sawdust is delivered to the Sawdust Unloading Station (SN-20) and transferred to Sawdust Storage Silo (SN-21). The silo is located between Kiln #1 and Kiln #3.

Specific Conditions

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

SN	Pollutant	lb/hr	tpy
20	PM <sub>10</sub>	0.1	0.1
21	PM <sub>10</sub>	0.1	0.1

34. The permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition shall be demonstrated through compliance with Specific Condition #25. [Regulation 18 §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Pollutant	lb/hr	tpy
20	PM	0.1	0.1
21	PM	0.1	0.1

**Facility: Bibler Brothers Lumber Company**  
**Permit No.: 1628-AOP-R6**  
**AFIN: 58-00014**

### **Section V: COMPLIANCE PLAN AND SCHEDULE**

Bibler Brothers Lumber Company 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.



Facility: Bibler Brothers Lumber Company  
Permit No.: 1628-AOP-R6  
AFIN: 58-00014

### Section VI: PLANT WIDE CONDITIONS

1. The permittee will 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 No. 19 §19.704, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §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 No.19 §19.410(B) and 40 CFR Part 52, Subpart E]
3. The permittee must test any equipment scheduled for testing, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) New Equipment or newly modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start-up of the permitted source or (2) operating equipment according to the time frames set forth by the Department or within 180 days of permit issuance if no date is specified. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. The permittee will submit the compliance test results to the Department within thirty (30) days after completing the testing. [Regulation No.19 §19.702 and/or Regulation No.18 §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
4. The permittee must provide: [Regulation No.19 §19.702 and/or Regulation No.18 §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
  - a. Sampling ports adequate for applicable test methods;
  - b. Safe sampling platforms;
  - c. Safe access to sampling platforms; and
  - d. Utilities for sampling and testing equipment.
5. The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee will maintain the equipment in good condition at all times. [Regulation No.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 No. 26 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
7. The permittee shall not process more than 203 million board feet of lumber in 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]

**Facility: Bibler Brothers Lumber Company**  
**Permit No.: 1628-AOP-R6**  
**AFIN: 58-00014**

8. The permittee shall maintain records of the amount of board feet processed in order to show compliance with Plantwide Condition #7. This information may be used by the Department for enforcement purposes. These records shall be updated no later than the last day of the month following the month which the records represent, shall be kept on site, and shall be made available to Department personnel upon request. An annual total and each month's individual data shall be submitted to the Department in accordance with General Provision 7. The submittals shall be due semi-annually on February 1 and August 1. [Regulation 19 §19.705 and 40 CFR Part 52, Subpart E]
9. The permittee will not conduct operations in such a manner as to unnecessarily cause air contaminants and other pollutants to become airborne. The permittee shall prepare a road cleaning and maintenance plan for the control of road dust emissions. The plan will include routine sweeping and/or watering the roadways. This plan shall be kept on site, and provided to Department personnel upon request. In order to minimize dust emissions the permittee will routinely sweep or water the roadways. [§18.801 of Regulation 18, §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
10. The permittee may initiate new production programs without a permit modification provided that no permit conditions are violated. The permittee shall notify the Department at least fifteen working days prior to the implementation of any new production program. This notification shall include the following items: a description of the new program, the date when the new program will be implemented, whether the new program is temporary or permanent, the length of time the program will take if it is temporary, annual and hourly emission calculations, and a comparison of the new emission rates to the currently permitted emission rates. [Regulation 26 §26.802 A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR Part 70.6]

#### Title VI Provisions

11. 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.

**Facility: Bibler Brothers Lumber Company**  
**Permit No.: 1628-AOP-R6**  
**AFIN: 58-00014**

12. 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.
13. 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.
14. 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.
15. 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, "Significant New Alternatives Policy Program".

Facility: Bibler Brothers Lumber Company  
 Permit No.: 1628-AOP-R6  
 AFIN: 58-00014

Permit Shield

16. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements, as of the date of permit issuance, included in and specifically identified in the following table.

a. The permit specifically identifies the following as applicable requirements based upon the information submitted by the permittee in an application dated May 6, 2008.

SN	Regulation	Description
Facility	19	Regulations of the Arkansas Plan of Implementation for Air Pollution Control, regulation 19, effective January 25, 2009.
Facility	26	Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective January 25, 2009
10A1 & 10A2, 16A1 & 16A2	40 CFR Part 60, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
06 ,07, 10B, 13, & 16B	40 CFR Part 63, Subpart DDDD	<i>National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products. (§63.2252 and § 63.2280(b) only)</i>

b. The permit specifically identifies the following as inapplicable based upon information submitted by the permittee in an application dated May 6, 2008.

Description of Regulation	Regulatory Citation	Affected Source	Basis for Determination
Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	40 CFR Part 60, Subpart Dc	SN-06, SN-07 and SN-13	These sources are direct heated and do not meet the definition of a steam generating unit.
Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after 6/11/73 and prior to 5/19/78	40 CFR Part 60, Subpart K	SN-14, SN-15 & SN-18	These sources have capacities less than 40,000 gallons each.
Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after 5/18/78 and prior to 7/23/84.	40 CFR Part 60, Subpart Ka	SN-14, SN-15 & SN-18	These sources have capacities less than 40,000 gallons each.
Standards of Performance for	40 CFR Part	SN-14, SN-15 &	These sources have

**Facility: Bibler Brothers Lumber Company**  
**Permit No.: 1628-AOP-R6**  
**AFIN: 58-00014**

Description of Regulation	Regulatory Citation	Affected Source	Basis for Determination
Storage Vessels for Volatile Organic Liquids (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after 7/23/84.	60, Subpart Kb	SN-18	capacities less than 75 m <sup>3</sup> (10,567 gallons) each
National Emission Standards for Hazardous Air Pollutants	40 CFR Part 61	Facility	This facility does not manufacture process and/or otherwise use any of the HAPs specified in these requirements.

Facility: Bibler Brothers Lumber Company  
Permit No.: 1628-AOP-R6  
AFIN: 58-00014

### Section VII: INSIGNIFICANT ACTIVITIES

The following sources are insignificant activities. Any activity that has a state or federal applicable requirement is a significant activity even if this activity meets the criteria of §304 of Regulation 26 or listed in the table below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated 5/6/2008.

Description	Category
SN-14: 2,000 gallon gasoline tank (Dual Compartment Storage Tank)	A-3
SN-15: 10,000 gallon Diesel fuel tank (Dual Compartment Storage Tank)	A-3
SN-17: Portable Diesel - Powered Tub Grinder	A-13
SN-18: 2,000-Gallon Used Oil Storage Tank	A-3

Pursuant to §26.304 of Regulation 26, the Department determined the emission units, operations, or activities contained in Regulation 19, Appendix A, Group B, to be insignificant activities. Activities included in this list are allowable under this permit and need not be specifically identified.

**Facility: Bibler Brothers Lumber Company**  
**Permit No.: 1628-AOP-R6**  
**AFIN: 58-00014**

### **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. [40 CFR 70.6(a)(3)(ii)(A) and Regulation 26, §26.701(C)(2)]
  - a. The date, place as defined in this permit, and time of sampling or measurements;
  - b. The date(s) analyses performed;
  - c. The company or entity performing the analyses;
  - d. The analytical techniques or methods used;
  - e. The results of such analyses; and
  - f. The operating conditions existing at the time of sampling or measurement.

**Facility: Bibler Brothers Lumber Company**  
**Permit No.: 1628-AOP-R6**  
**AFIN: 58-00014**

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

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

8. The permittee shall report to the Department all deviations from permit requirements, including those attributable to upset conditions as defined in the permit. [Regulation 19, §19.601 and §19.602, Regulation 26, §26.701(C)(3)(b), and 40 CFR 70.6(a)(3)(iii)(B)]
  - a. For all upset conditions (as defined in Regulation 19, § 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;



**Facility: Bibler Brothers Lumber Company**  
**Permit No.: 1628-AOP-R6**  
**AFIN: 58-00014**

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.
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)]

**Facility: Bibler Brothers Lumber Company**  
**Permit No.: 1628-AOP-R6**  
**AFIN: 58-00014**

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

**Facility: Bibler Brothers Lumber Company**  
**Permit No.: 1628-AOP-R6**  
**AFIN: 58-00014**

- 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: [Regulation

**Facility: Bibler Brothers Lumber Company**  
**Permit No.: 1628-AOP-R6**  
**AFIN: 58-00014**

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]

- 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.
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: [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]
- 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.
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: [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]
- 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

**Facility: Bibler Brothers Lumber Company**  
**Permit No.: 1628-AOP-R6**  
**AFIN: 58-00014**

- c. Any such request, if approved, is incorporated in the next permit modification application by the permittee.



**Facility: Bibler Brothers Lumber Company**  
**Permit No.: 1628-AOP-R6**  
**AFIN: 58-00014**

**APPENDIX A**

**40 CFR Part 60, Subpart Dc- *New Source Performance Standards for Small Industrial-  
Commercial- Institutional Steam Generating Units***





[Home Page](#) > [Executive Branch](#) > [Code of Federal Regulations](#) > [Electronic Code of Federal Regulations](#)

## Electronic Code of Federal Regulations

**e-CFR**  
TM

**e-CFR Data is current as of January 5, 2009**

### **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<sub>2</sub>) 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<sub>2</sub> 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 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<sub>2</sub> control system that is not defined as a conventional technology under this section, and for which the owner or operator of the affected facility has received approval from the Administrator to operate as an emerging technology under §60.48c(a)(4).

*Federally enforceable* means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 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<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub>.

*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<sub>2</sub>).**

(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<sub>2</sub> in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO<sub>2</sub> emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO<sub>2</sub> 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<sub>2</sub> in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO<sub>2</sub> emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO<sub>2</sub> 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<sub>2</sub> in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 20 percent (0.20) of the potential SO<sub>2</sub> emission rate (80 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> 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<sub>2</sub> emissions limit or the 90 percent SO<sub>2</sub> 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<sub>2</sub> emissions shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of 50 percent (0.50) of the potential SO<sub>2</sub> emission rate (50 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> in excess of the following:

(1) The percent of potential SO<sub>2</sub> emission rate or numerical SO<sub>2</sub> 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<sub>s</sub> = SO<sub>2</sub> emission limit, expressed in ng/J or lb/MMBtu heat input;

K<sub>a</sub> = 520 ng/J (1.2 lb/MMBtu);

K<sub>b</sub> = 260 ng/J (0.60 lb/MMBtu);

K<sub>c</sub> = 215 ng/J (0.50 lb/MMBtu);

H<sub>a</sub> = 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<sub>b</sub> = Heat input from the combustion of coal in an affected facility subject to paragraph (b)(2) of this section, in J (MMBtu); and

H<sub>c</sub> K<sub>a</sub> H<sub>b</sub> = Heat input from the combustion of oil, in J (MMBtu).

(f) Reduction in the potential SO<sub>2</sub> 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<sub>2</sub> emission rate; and

(2) Emissions from the pretreated fuel (without either combustion or post-combustion SO<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> emissions 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<sub>2</sub> emission limits under §60.42c shall be determined using a 30-day average. The first operating day

included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affected 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<sub>2</sub> emission limits under §60.42c is based on the average percent reduction and the average SO<sub>2</sub> emission rates for 30 consecutive steam generating unit operating days. A separate performance test is completed at the end of each steam generating unit operating day, and a new 30-day average percent reduction and SO<sub>2</sub> emission rate are calculated to show compliance with the standard.

(d) If only coal, only oil, or a mixture of coal and oil is combusted in an affected facility, the procedures in Method 19 of appendix A of this part are used to determine the hourly SO<sub>2</sub> emission rate ( $E_{ho}$ ) and the 30-day average SO<sub>2</sub> emission 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<sub>2</sub> emission rate, ng/J (lb/MMBtu);

$E_w$  = SO<sub>2</sub> concentration 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<sub>2</sub> emission limits under §60.42c pursuant to paragraphs (d) or (e) of this section, and shall determine compliance with the percent reduction requirements using the following procedures:

(1) If only coal is combusted, the percent of potential SO<sub>2</sub> emission rate is computed using the following formula:



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

Where:

$\%P_s$  = Potential SO<sub>2</sub> emission rate, in percent;

$\%R_g$  = SO<sub>2</sub> removal efficiency of the control device as determined by Method 19 of appendix A of this part, in percent; and

$\%R_f$  = SO<sub>2</sub> removal 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  $E_{a,o}$  from paragraph (e)(1) of this section and an adjusted average SO<sub>2</sub> inlet rate ( $E_{ai,o}$ ) using the following formula:

$$\%R_{g,o} = 100 \left( 1 - \frac{E_{a,o}}{E_{ai,o}} \right)$$

Where:

$\%R_{g,o}$  = Adjusted  $\%R_g$ , in percent;

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

$E_{ai,o}$  = Adjusted average SO<sub>2</sub> inlet rate, ng/J (lb/MMBtu).

(ii) To compute  $E_{ai,o}$ , an adjusted hourly SO<sub>2</sub> inlet rate ( $E_{hi,o}$ ) is used. The  $E_{hi,o}$  is computed using the following formula:

$$E_{hi,o} = \frac{E_{hi} - E_w (1 - X_1)}{X_1}$$

Where:

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

$E_{hi}$  = Hourly SO<sub>2</sub> inlet rate, ng/J (lb/MMBtu);

$E_w$  = SO<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> emissions data in calculating % P<sub>s</sub> and E<sub>ho</sub> 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<sub>s</sub> or E<sub>ho</sub> 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  $160 \pm 14$  °C ( $320 \pm 25$  °F).

(6) For determination of PM emissions, an oxygen (O<sub>2</sub>) or carbon dioxide (CO<sub>2</sub>) 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<sub>2</sub> or CO<sub>2</sub> measurements and PM measurements obtained under this section, (ii) The dry basis F factor, and

(iii) The dry basis emission rate calculation procedure contained in Method 19 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<sub>2</sub>(or CO<sub>2</sub>) 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<sub>2</sub>(or CO<sub>2</sub>), 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<sub>2</sub>emission limits under §60.42c shall install, calibrate, maintain, and operate a CEMS for measuring SO<sub>2</sub>concentrations and either O<sub>2</sub>or CO<sub>2</sub>concentrations at the outlet of the SO<sub>2</sub>control device (or the outlet of the steam generating unit if no SO<sub>2</sub>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<sub>2</sub>concentrations and either O<sub>2</sub>or CO<sub>2</sub>concentrations at both the inlet and outlet of the SO<sub>2</sub>control device.

(b) The 1-hour average SO<sub>2</sub>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<sub>2</sub>emission rate must be based on at least 30 minutes of operation, and shall be

**CERTIFICATE OF SERVICE**

I, Pam Owen, hereby certify that a copy of this permit has been mailed by first class mail to  
Bibler Brothers Lumber Company, P.O. Box 490, Russellville, AR, 72811-0490, on this  
27<sup>th</sup> day of March, 2009.

Pam Owen  
Pam Owen, AAIL, Air Division

