ADEQ

ARKANSAS
Department of Environmental Quality

NOV 14 2011

Kelly Olivier, EHS Coordinator
Anthony Forest Products Company
P.O. Box 724
Strong, AR 71765

Dear Mr. Olivier:

The enclosed Permit No. 1681-AOP-R11 is your authority to construct, operate, and maintain the equipment and/or control apparatus as set forth in your application initially received on 5/31/2011.

After considering the facts and requirements of A.C.A. §8-4-101 et seq., and implementing regulations, I have determined that Permit No. 1681-AOP-R11 for the construction, operation and maintenance of an air pollution control system for Anthony Forest Products Company to be issued and effective on the date specified in the permit, unless a Commission review has been properly requested under Arkansas Department of Pollution Control & Ecology Commission's Administrative Procedures, Regulation 8, within thirty (30) days after service of this decision.

The applicant or permittee and any other person submitting public comments on the record may request an adjudicatory hearing and Commission review of the final permitting decisions as provided under Chapter Six of Regulation No. 8, Administrative Procedures, Arkansas Pollution Control and Ecology Commission. Such a request shall be in the form and manner required by Regulation 8.603, including filing a written Request for Hearing with the APC&E Commission Secretary at 101 E. Capitol Ave., Suite 205, Little Rock, Arkansas 72201. If you have any questions about filing the request, please call the Commission at 501-682-7890.

Sincerely,

Mike Bates
Chief, Air Division

RESPONSE TO COMMENTS

ANTHONY FOREST PRODUCTS COMPANY
PERMIT #1681-AOP-R11
AFIN: 70-00473

On September 4, 2011 and September 8, 2011, the Director of the Arkansas Department of Environmental Quality gave notice of a draft permitting decision for the above referenced facility. During the comment period, written comments on the draft permitting decision were submitted by the facility. The Department's response to these issues follows.

Note: The following page numbers and condition numbers refer to the draft permit. These references may have changed in the final permit based on changes made during the comment period.

Comment #1:

Section II: Introduction, Summary of Permit Activity, 4th and 6th bullets: We request the statements be modified as follows to eliminate confusion on the naming of sources:

- "Install a new dual path continuous kiln (DPK#1); proposed as SN-23 with multiple vents and abort stack proposed as SN-25."
- "Retrofit existing Dry Kiln #3 (SN-14(Batch)) to a dual path kiln (DPK#2) as SN-14 with multiple vents and abort stack proposed as SN-24."

Response to Comment #1:

The statements were modified in the permit.

Comment #2:

Emission Summary, Emission Summary Table, Operating Scenario I (Initial): The source number for Dry Kiln #3 is shown as 14 DK; this should be 14(Batch).

Response to Comment #2:

The change was included in the permit.

Comment #3:

Emission Summary, Emission Summary Table, Operating Scenario II (Interim): There are several emission limits that are not indicated as they should be. We request that following updates be made to the table to match the permit application and emission calculations:

Operating Scenario II (Interim)				
EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
Total Allowable Emissions		NO_X		**65.7**
HAPs		Chromium	**0.000637**	**0.00279**
		Manganese		**0.49842**
12 and 13**	Wood-Fired Boiler #1 (29.56 MMBTU/hr) and Wood-Fired Boiler #2 (29.56 MMBTU/hr) (Combined)	Manganese		**0.321**
23	Dual Path Kiln #1	CO	**15.0**	
		NO_X		**28.1**
		Chromium VI	**8.75E-05**	**3.833E-04**

Response to Comment #3:

As requested the emission limits were corrected.

Comment #4:

Emission Summary, Emission Summary Table, Operating Scenario III (Final): There are several emission limits that are not indicated as they should be. We request that following updates be made to the table to match the permit application and emission calculations. Note – the acrolein emission rate for SN-14 was a typographical error within our air permit application. A revised HAP Emission Rate Table (ERT) is submitted with this letter for your files. This revised HAP ERT reflects 5.05 E-02 tpy acrolein instead of 5.05 E-01 tpy from SN-14 (C, D, E, and F). This added with the previously submitted 6.74 E-02 tpy from SN-14 (A and B) equates to a total of 0.337 tpy for SN-14.

Operating Scenario III (Final)				
EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
Total Allowable Emissions		CO	**43.6**	
		NO_X		**62.3**
HAPs		Chlorine	**0.0435**	
14	Dual Path Kiln #2	NO_X		**33.7**
		Acrolein		**0.337**
23	Dual Path Kiln #1	CO	**15.0**	
		NO_X		**28.1**
		Chlorine*	**0.01975**	
		Chromium VI	**8.75E-05**	**3.833E-04**

Response to Comment #4:

As requested the emission limits were corrected.

Comment #5:

Section IV: Specific Condition #7. This table should be revised to match the permit application emissions as follows:

Operating Scenario	SN	Description	Pollutant	lb/hr	ton/yr
II	14 **and 24**				
	23	Dual Path Kiln #1	CO	**15.0**	
	23	Dual Path Kiln #1	NO_X		**28.1**
III	14	Dual Path Kiln #2	NO_X		**33.7**
	23	Dual Path Kiln #1	CO	**15.0**	
	23	Dual Path Kiln #1	NO_X		**28.1**

Response to Comment #5:

As requested the emission limits were corrected.

Comment #6:

Section IV: Specific Condition #8. We request that following updates be made to the table to match the permit application and emission calculations. Note – the acrolein emission rate for SN-14 was a typographical error within our air permit application. A revised HAP Emission Rate Table (ERT) is submitted with this letter for your files. This revised HERT reflects 5.05 E-02 tpy acrolein instead of 5.05 E-01 tpy from SN-14 (C, D, E, and F). This added with the previously submitted 6.74 E-02 tpy from SN-14 (A and B) equates to a total of 0.337 tpy for SN-14.

Operating Scenario	SN	Description	Pollutant	lb/hr	ton/yr
I	14 **and 24**	Dual Path Kiln #2			
	23 **and 25**	Dual Path Kiln #1			
II	14 **and 24**	Dual Path Kiln #2			
	23	Dual Path Kiln #1	Chlorine	**0.01975**	
	23	Dual Path Kiln #1	Chromium VI	**8.75E-05**	**3.833E-04**
III	14	Dual Path Kiln #2	Acrolein		**0.337**
	23	Dual Path Kiln #1	Chlorine	**0.01975**	
	23	Dual Path Kiln #1	Chromium VI	**8.75E-05**	**3.833E-04**

Response to Comment #6:

As requested the emission limits were corrected.

Comment #7:

Section IV: Specific Condition #12. It is requested that the ADEQ reconsider the weekly observation requirements for opacity from SN-14 and SN-23. As lumber drying kilns, these units produce a great deal of water vapor. The requirement for EPA Reference Method 9 is that opacity observations be made at the point of greatest opacity in the portion of the plume where condensed water vapor is not present. Opacity observations were not required within permit R10 for the batch kilns and are not applicable for batch or continuous kilns. This is not a productive use of the facility's resources, and it is requested that the condition be modified as follows:

"The permittee shall conduct weekly observations of the opacity from SN-24 and SN-25 during startup operation and keep a record of these observations. The facility shall maintain personnel trained in EPA Reference Method 9. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall take immediate action to identify and correct the cause of the visible emissions. After corrective action has been taken, another observation of the opacity from the affected source shall be conducted in order to confirm that excess visible emissions are no longer present. The permittee shall maintain records of all corrective actions taken following the observance of visible emissions. Records of all visible emissions observations and any corrective action taken shall be kept onsite and made available to the Department personnel upon request. If the source is not operating, a note shall be made in the records stating such. [Regulation 19 §19.705and 40 CFR Part 52, Subpart E]"

Response to Comment #7:

Method 9 provides guidance when condensed water vapor is present in plumes. A qualified Reference Method 9 Visible Emission observer should be able to differentiate between condensate vapor and particulate. Additionally, similar facility in Arkansas has opacity limits for their kilns. Therefore, opacity observations requirements for SN-14 and SN-23 will remain in the permit.

Comment #8:

Section IV: Specific Condition #15. This table should be revised to match the permit application emissions as follows:

SN	Diesel fuel usage limit as starter fluid	Sawdust throughput limit for gasifier/burner **during startup**	Operating Hour Limits for each Abort Stack

Response to Comment #8:

The table was revised as requested.

Comment #9:

Section IV: Specific Condition # 17. It is requested that the language of this condition be modified to reflect that this recordkeeping is required **during startup**. These conditions are reflective of startup

mode of operation and it is believed it was the permit writer's intention that these records be maintained when in startup mode, as the Statement of Basis indicates. We suggest an addition such as "facility shall maintain daily records **when in startup mode** which demonstrate compliance with the sawdust throughput limits for gasifier/burner and diesel fuel usage limit..."

Response to Comment #9:

As requested Specific Condition #17 was revised.

Comment #10:

Section IV: Specific Condition #22. It is requested that the ADEQ update the Throughput Limit header as follows: "Throughput Limit **Rough Logs Processed"**

Response to Comment #10:

The header was revised.

Comment #11:

Section IV: Specific Condition #26. This table should be revised to match the permit application emissions as follows:

Operating Scenario	SN	Pollutant	lb/hr	ton/yr
I	16	Lead	**7.66E-04**	**3.35E-03**
II	16	Lead	**7.66E-04**	**3.35E-03**

Response to Comment #11:

Operating Scenario I (SN-16): The emission limits for lead were corrected.
Operating Scenario II (SN-16): There is no lead limit for SN-16 in the table because SN-16 is "Not operating"

Comment #12:

Section IV: Specific Condition #27. This table should be revised to match the permit application emissions as follows:

Operating Scenario	SN	Pollutant	lb/hr	ton/yr
II	12 and 13 combined	Manganese	**0.0732**	

Response to Comment #12:

The table was revised as requested.

Comment #13:

Section IV: Specific Condition #29. This table should be revised to match the permit application emissions as follows:

Operating Scenario	SN	Description	Daily Limit (lb Steam/day)	Annual Limit (MM lb/12 month)
II	12 and 13 combined	Boiler #1 **or #2**		

Response to Comment #13:

The table was revised as requested.

Comment #14:

Section IV: Specific Condition #41. We request the statements be modified as follows:
"The permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by compliance with Specific Condition #**43**. [Regulation No. 19 §19.501 *et seq*. and 40 CFR Part 52, Subpart E]."

Response to Comment #14:

The cross-reference number was corrected.

Comment #15

Section IV: Specific Condition #42. We request the statements be modified as follows:
"The permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by compliance with Specific Condition # **43**.
[Regulation No. 18 §18.801 and A.C.A §8-4-203 as referenced by §8-4-304 and §8-4-311]."

Response to Comment #15:

The cross-reference number was corrected.

Comment #16:

Section VI: Plantwide Conditions, PWC #15. We request this condition be deleted. The facility is a **PSD Minor Source** under permit R10, and this modification is less than the 250 tpy major source review threshold. Thus, this modification **is not subject** to PSD review, and no PSD applicability should be cited within permit R11. The facility acknowledges that after the completion of the DPK

project, they will be a PSD major source, and we will expect and accept such language in future permitting actions.

Response to Comment #16:

Per 40 CFR 52.21(r)(6) applies for existing units at major stationary sources. Since this facility is not currently a major stationary source Plantwide Condition #15 was deleted from the permit.

Statement of Basis:

Comment #17:

Reviewer's Notes, Summary of modifications, 4th bullet, page 2 of 18: We request the statement be modified as follows:

"Install a new dual path continuous kiln (DPK#1); proposed as SN-23 with multiple vents and abort stack proposed as SN-25."

Response to Comment #17:

As request the statement was modified.

Comment #18:

Reviewer's Notes, Summary of modifications, 6th bullet, page 2 of 18: We request the statement be modified as follows:

"Retrofit existing Dry Kiln #3 (SN-14(Batch)) to a dual path kiln (DPK#2) as SN-14 with multiple vents and abort stack proposed as SN-24."

Response to Comment #18:

As request the statement was modified.

Comment #19:

Recordkeeping Requirements, Operating Scenario II, page 16 of 18: Please update Source Number (SN) designation as follows:

"23 (DP Kiln#1)"

Response to Comment #19:

As request source number was updated.

Comment #20:

Recordkeeping Requirements, Operating Scenario III, page 16 of 18: Please update Source Number (SN) designation as follows:

"23 (DP Kiln#1)
14 (DP Kiln#2)"

Response to Comment #20:

As request the above source numbers were updated.

Comment #21:

Recordkeeping Requirements, Operating Scenario III, page 17 of 18: Please update Frequency of recordkeeping requirement for SN 24 and 25, Diesel Fuel Usage as follows:

"Daily, when in startup"

Response to Comment #21:

The record keeping requirement was updated.

Comment #22:

Opacity, page 17 of 18: Update the Source Number designation as follows:

"02 and 14 **(Batch)**
23 (DP Kiln#1)
14 (DP Kiln#2)"

Response to Comment #22:

Comment #23:

Opacity, page 17 of 18: We request removal of opacity observation requirements for the lumber kilns as explained in permit comment #7 concerning SC-12 from the permit section above.

Response to Comment #23:

See Response to Comment #7

ADEQ
OPERATING
AIR PERMIT

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

Permit No. : 1681-AOP-R11

IS ISSUED TO:

Anthony Forest Products Company
1236 Urbana Road
El Dorado, AR 71730
Union County
AFIN: 70-00473

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:

November 3, 2008 AND November 2, 2013

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

Signed:

Mike Bates
Chief, Air Division

NOV 14 2011
Date

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List of Acronyms and Abbreviations

A.C.A.	Arkansas Code Annotated
AFIN	ADEQ Facility Identification Number
CFR	Code of Federal Regulations
CO	Carbon Monoxide
HAP	Hazardous Air Pollutant
lb/hr	Pound Per Hour
MVAC	Motor Vehicle Air Conditioner
No.	Number
NO_X	Nitrogen Oxide
PM	Particulate Matter
PM_{10}	Particulate Matter Smaller Than Ten Microns
SNAP	Significant New Alternatives Program (SNAP)
SO_2	Sulfur Dioxide
SSM	Startup, Shutdown, and Malfunction Plan
tpy	Tons Per Year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound
DPK	Dual Path Kiln

SECTION I: FACILITY INFORMATION

PERMITTEE:	Anthony Forest Products Company
AFIN:	70-00473
PERMIT NUMBER:	1681-AOP-R11
FACILITY ADDRESS:	1236 Urbana Road El Dorado, AR 71730
MAILING ADDRESS:	P.O. Box 724 Strong, AR 71765
COUNTY:	Union County
CONTACT NAME:	Kelly Olivier
CONTACT POSITION:	EHS Coordinator
TELEPHONE NUMBER:	870-962-3206
REVIEWING ENGINEER:	Parviz Mokhtari
UTM North South (Y):	Zone 15: 3669126.84 m
UTM East West (X):	Zone 15: 551893.98 m

SECTION II: INTRODUCTION

Summary of Permit Activity

Anthony Forest Products Company (AFIN: 70-00473) operates a sawmill and ancillary operations in Urbana, Arkansas. The purpose of this modification application is to receive authorization for construction and operation of the facility through a variety of modifications.

- Modify the sawmill to have three headrigs instead of two for optimized cutting of logs into rough lumber. This change results in an increase in volume through the sawmill. The edger and trimmer will be replaced with more efficient equipment.
- Replace the two existing planer machines in the planer mill with one new high speed planer. The planer mill will have the ability to process significantly more lumber, but with an improved dust handling system to meet National Fire Protection Association (NFPA) combustible dust standards, the particulate matter emissions are not proposed to increase for this area.
- Add a new trimmer and drop/sorter system that will also optimize planer operation. The planer mill will have the ability to process significantly more lumber, but with an improved dust handling system to meet National Fire Protection Association (NFPA) combustible dust standards, the particulate matter emissions are not proposed to increase for this area.
- Install a new dual path continuous kiln (DPK#1); proposed as SN-23 with multiple vents and abort stack proposed as SN-25.
- For clarification, the source number for the existing Dry Kiln #3 has changed from SN-14 to SN-14(Batch).
- Retrofit existing Dry Kiln #3 (SN-14(Batch)) to a dual-path kiln (DPK#2) as SN-14 with multiple vents and abort stack proposed as SN-24.
- Decommission the existing Dry Kiln #2 (SN-02).
- Decommission the existing wood fired boilers (SN-12, SN-13, and SN-16) at different the phases of completion of the project.
- Add a new sawdust storage silo as part of the kiln project to fuel the biomass gasifiers on the DPKs as an insignificant activity.

The total permitted annual emission rate limit changes associated with this modification include: -39.2 tons per year (tpy) PM, -38.8 tpy PM_{10}, -0.3 tpy SO_2, 78.2 tpy VOC , -50.9 tpy CO, -50.1 tpy NO_X, 0.0016 tpy Lead, 1.74 tpy Acetaldehyde, 0.22 tpy Acrolein, 0.046 tpy Acetone, 0.0054 tpy Arsenic, -0.7762 tpy Benzene, 0.00077 tpy Chromium VI, 0.1906 tpy Chlorine, 1.0571 tpy Formaldehyde, -0.832 tpy Hydrogen Chloride, -0.49 tpy Manganese, -0.324 tpy Methanol, 0.842 tpy Phenol, and -0.4414 tpy Styrene.

Operating Scenario Summary

The table below summarizes the three operating scenarios (I, II, and III) for the modification activities involved in this permitting action.

Operating Scenario				
Source Number	**Description**	**Operating Scenario I (Initial)***	**Operating Scenario II (Interim)**	**Operating Scenario III (Final)**
SN-02	Dry Kiln #2 (Holding capacity at 45.5% of the holding capacity of Dry Kiln #3 from R10)	Operating	Operating (Will operate at a lower throughput limit than Scenario I)	Decommissioned (Not Operating)
06	Sawmill	Operating	Operating	Operating
12	Wood-Fired Boiler #1 (29.56 MMBTU/hr)	Operating	Operate only one boiler at a time to heat SN-02	Decommissioned (Not operating)
13	Wood-Fired Boiler #2 (29.56 MMBTU/hr)	Operating		Decommissioned (Not operating)
14(Batch)	Dry Kiln #3	Operating	Being converted (Not operating; converting from batch to DPK #2)	Converted to DPK#2 (Not operating as batch kiln)
16	Wood-Fired Boiler #3 (29.75 MMBTU/hr)	Operating	Decommissioned (Not operating)	Decommissioned (Not operating)
20	Log Yard Road	Operating	Operating	Operating
21	Planer Mill	Operating	Operating	Operating
23 and 25	DPK #1	Under construction (Not operating)	Commissioned and Operating	Operating
14 and 24	DPK #2	N/A	Under construction (Not operating)	Commissioned and Operating
* The same permitting requirement in the permit #1681-AOP-R10				

Process Description

Anthony operates a sawmill and ancillary operations in Urbana, Arkansas. The physical address of the facility is 1236 Urbana Road, El Dorado, AR 71730. The facility falls under Standard Industrial Classification code (SIC) 2421, Sawmills and Planing Mills, General, and North American Industry Classification System code (NAICS) 321113, Sawmills.

Raw materials (pine logs) are delivered to the facility by contractor log trucks. These logs are routed directly to sawmill log decks, dry runs, or to wet-log storage. Water is sprayed onto the logs in the wet log storage area to prevent stain and insect damage.

Logs are taken by truck to the Sawmill (SN-06) where they are debarked. After entering the Sawmill Building, the mill will use three headrigs instead of just the current two headrigs to saw the logs into cants or rough lumber and edge and trim. Trimmings and edgings are routed to a chipper. Chips are pneumatically conveyed to shaker screens where oversized chips and fines are removed. The blower, which conveys the materials to the shaker screens, has an associated cyclone, which vents inside the sawmill building. The chips are belt conveyed to a chip bin and eventually loaded into tractor trailers to be shipped off-site. Oversized chips are routed back through the chipper. Bark is collected and eventually loaded into tractor trailers to be shipped off-site. An additional bark storage area is proposed to be added with this permitting activity; emissions will be estimated with the other storage piles as Insignificant Activities. Sawdust is collected from all the sources within the Sawmill Building and blown to the proposed Fuel Storage Silo required as part of the continuous, direct fired kiln project to fuel the biomass gasifiers or stored for shipping off-site. The new sawdust storage silo is included in the application as an Insignificant Activity; it will primarily be filled from the Sawmill Building collections, but can be filled by outside purchased sawdust. Emissions from the Sawmill Building and debarking are estimated as SN-06.

From the Sawmill, the green lumber is stacked and stored. The lumber is then dried in kilns. The facility will use two dual path kilns (DPK). The DPKs will allow for continuous drying operation as stacks of green wood will move through the kilns on two parallel tracks. The bundles of lumber on the two tracks travel concurrently to each other to increase heat transfer efficiency. The existing Dry Kiln #2 (SN-02) will be decommissioned upon successful startup of the two DPKs. DPK #1 will be constructed as soon as authorized; this will be an area source and has a proposed source designation of SN-23. The existing Dry Kiln #3 (SN-14(Batch)) will be converted to DPK#2; this area source is proposed to remain as SN14. The continuously operating kilns will have a design drying capacity of 9.2 thousand board feet per hour (mbf/hr) for SN-23 and 11.5 mbf/hr for SN-14. The emissions generated from the drying of green lumber are released through the entrance and exit doors at the ends of the kilns and through stacks above those doors. Approximately 40% of the kiln emissions are estimated to release through the entrance and exit doors at near ground level (A and B). The stacks above the doors release approximately 60% of the kiln emissions with an equal split among those four stacks (C, D, E, and F). The new DPKs will utilize heat from biomass gasifiers. Green sawdust collected from the sawmill or purchased from outside sources will be contained within the Fuel Storage Silo and fed to the biomass gasifiers on each DPK. The fuel will be gasified in these devices to produce a combustible gas stream. The fuel gas stream will be burned in a combustion/air mixing chamber.

The gas will be conveyed to a blend box to be mixed with ambient air and recirculated kiln air. The blend box is used to obtain the desired temperature and moisture content of the air stream. The hot gas stream will be blown into the drying chamber, located at the center of each DPK. A sloped grate two-stage combustion chamber is on each DPK. An air circulation and blend system is necessary to heat the unit to the proper temperature during the drying cycle. The DPKs have internal heat distribution networks and computerized air circulation systems and burner controls to optimize the drying process and fuel usage. The emissions from the biomass gasifiers are included within the DPK emissions (SN-23 and SN-14). Startup of the Gasifier/Burners on the Dual Path Kilns will only be necessary to commence operation upon installation and after the kilns have been taken down for routine maintenance or in the event of a malfunction causing a shutdown. Routine maintenance is expected quarterly for each DPK. The burners will be started with small pieces of solid wood (scraps and sticks) from the facility and a small amount of diesel fuel. This diesel fuel is manually poured directly on top of the wood pieces when they are stacked on the burner grate prior to lighting. The amount of diesel fuel used is expected to be approximately 3 or 4 gallons per startup. The emissions from the DPKs include the burning of biomass as the heat source for direct fired/gasifier heated kilns. These emissions are minimal; the diesel fuel usage is bubbled for both DPKs and estimated to not exceed 240 gallons per year. There is an abort stack on the Gasifier/Burners which will be used during startup. It is opened upon startup and remains open until a consistently burning fuel bed (biomass) is obtained, this is expected to take up to 24 hours for each startup.

The boiler ash (Biochar) generated by the DPKs drops into a water filled pit and then will be transferred to a storage pile. The disposition of Biochar will be handled in accordance with applicable environmental requirements. The potential air emissions from the storage pile are estimated within the Insignificant Activities portion of the emission calculations.

The existing wood-fueled boilers (designated as SN-12, SN-13, and SN-16) are no longer needed and will be decommissioned in stages throughout this facility modification.

Dried lumber is stored in protected areas before planing. Within the Planermill Building, dried lumber is processed through one single, more efficient high-speed planer, instead of the two previous planers, as well as a trimmer, and a ripsaw or Batton Machine. The lumber is then graded, packaged, and placed in storage for loading and shipping off-site. The Planermill Building will be upgraded with a new dust handling system capable of meeting National Fire Protection Association combustible dust standards. It is expected that this area's particulate matter control will be better than currently permitted through the existing cyclone collecting shavings and sawdust venting through a baghouse (SN-21), but we are not currently asking for an emission reduction. Shavings and sawdust from the cyclone and hammer hog are dropped into a woodwaste storage bin (insignificant activity) where it is then loaded onto a truck and shipped off-site.

Regulations

The following table contains the regulations applicable to this permit.

Regulations
Arkansas Air Pollution Control Code, Regulation 18, effective June 18, 2010
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective July 18, 2009
Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective January 25, 2009
40 CFR Part 60, Subpart Dc – *Standards of Performance for Small Industrial – Commercial – Institutional Steam Generating Units*
40 CFR Part 63, Subpart DDDD – *National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products.**

* The facility is subject to the subpart. Other than initial notification, there are no applicable requirements of the subpart.

Emission Summary

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

Operating Scenario I (Initial)				
EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
Total Allowable Emissions		PM	38.8	168.6
		PM_{10}	16.4	71.1
		SO_2	1.5	6.6
		VOC	70.6	244.4
		CO	45.0	197.1
		NO_X	25.6	112.3
		Lead	0.00229	0.01
HAPs (Total Allowable Non-Criteria Pollutant Emissions included in VOC and PM totals unless noted otherwise)		Acetaldehyde	0.77	2.64
		Acrolein	0.73	2.21
		Benzene	0.6	1.8
		Cadmium	0.002017	0.00884
		Chromium	0.001861	0.00815
		Formaldehyde	1	2.9
		Hydrogen Chloride[a]	1.26	5.46
		Methanol	4.1	13.9
		Manganese	0.1947	0.88
		Mercury	0.000128	0.000562
		Nickel	0.00445	0.01945
		Styrene	0.30	0.90
02	Dry Kiln #2	VOC	31.3[b]	236.3[c]
		Acetaldehyde	0.35[b]	2.64[c]
		Acrolein	0.06[b]	0.41[c]
		Methanol	1.9[b]	13.90[c]
		Formaldehyde	0.2[b]	1.1[c]
06	Sawmill	PM	13.9	60.8
		PM_{10}	0.4	1.3
12	Wood-Fired Boiler #1 (29.56 MMBTU/hr)	PM	5.2	22.4
		PM_{10}	4.3	18.7
		SO_2	0.5	2.2
		VOC	0.6	2.7
		CO	15	65.7
		NO_X	8.5	37.3
		Acrolein	0.2	0.6

Operating Scenario I (Initial)				
EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		Benzene	0.2	0.6
		Cadmium	6.71E-04	2.94E-03
		Chromium	6.19E-04	2.71E-03
		Formaldehyde	0.2	0.6
		Hydrogen Chloride	0.42	1.82
		Lead	7.61E-04	3.33E-03
		Manganese	0.0732	0.32
		Mercury	4.25E-05	1.87E-04
		Nickel	1.48E-03	6.47E-03
		Styrene	0.1	0.3
13	Wood-Fired Boiler #2 (29.56 MMBTU/hr)	PM	5.2	22.4
		PM_{10}	4.3	18.7
		SO_2	0.5	2.2
		VOC	0.6	2.7
		CO	15	65.7
		NO_X	8.5	37.3
		Acrolein	0.2	0.6
		Benzene	0.2	0.6
		Cadmium	6.71E-04	2.94E-03
		Chromium	6.19E-04	2.71E-03
		Formaldehyde	0.2	0.6
		Hydrogen Chloride	0.42	1.82
		Lead	7.61E-04	3.33E-03
		Manganese	6.77E-02	0.32
		Mercury	4.25E-05	1.87E-04
		Nickel	1.48E-03	6.47E-03
		Styrene	0.1	0.3
14(Batch)	Dry Kiln #3	VOC	37.5[b]	236.3[c]
		Acetaldehyde	0.42[b]	2.64[c]
		Acrolein	0.07[b]	0.41[c]
		Methanol	2.20[b]	13.90[c]
		Formaldehyde	0.20[b]	1.10[c]
16	Wood-Fired Boiler #3 (29.75 MMBTU/hr)	PM	5.2	22.6
		PM_{10}	4.3	18.8
		SO_2	0.5	2.2
		VOC	0.6	2.7
		CO	15	65.7
		NO_X	8.6	37.7
		Acrolein	0.2	0.6
		Benzene	0.2	0.6

Operating Scenario I (Initial)				
EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		Cadmium	6.75E-04	2.96E-03
		Chromium	6.23E-04	2.73E-03
		Formaldehyde	0.2	0.6
		Hydrogen Chloride	0.42	1.82
		Lead	7.66E-04	3.35E-03
		Manganese	5.38E-02	0.24
		Mercury	4.28E-05	1.88E-04
		Nickel	1.49E-03	6.51E-03
		Styrene	0.1	0.3
20	Log Yard Road	PM	5.6	24.2
		PM_{10}	1.6	7.0
21	Planer Mill with Cyclone and Baghouse	PM	3.7	16.2
		PM_{10}	1.5	6.6

a. Not included in VOC total.
b. Maximum average hourly emission rate based on maximum kiln cycle capacity.
c. Total emissions for Dry Kilns #2 and #3.

Operating Scenario II (Interim)				
EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
Total Allowable Emissions		PM	34.7	137.6
		PM_{10}	12.4	42.1
		SO_2	1.6	5.1
		VOC	60.7	253.5
		CO	35.2	132.2
		NO_X	17.2	65.7
		Lead	0.00196	0.0086
HAPs (Total Allowable Non-Criteria Pollutant Emissions included in VOC and PM totals unless noted otherwise)		Acetaldehyde	0.7516	3.146
		Acrolein	0.2615	0.983
		Acetone	0.0048	0.021
		Arsenic	0.00074	0.00244
		Benzene	0.266	1.01
		Cadmium	0.00067	0.00294
		Chlorine*	0.0198	0.0866
		Chromium VI	0.0000875	0.000383
		Chromium	0.000637	0.00279
		Formaldehyde	0.7114	2.8396
		Hydrogen Chloride*	0.8952	3.9
		Manganese	0.1272	0.4842
		Methanol	2.921	12.326
		Mercury	0.0000426	0.000186
		Nickel	0.00148	0.00646
		Phenol	0.092	0.374
		Styrene	0.14752	0.5086
02	Dry Kiln #2	VOC	24.5	107.4
		Acetaldehyde	0.273	1.2
		Acrolein	0.042	0.19
		Methanol	1.435	6.29
		Formaldehyde	0.112	0.51

Operating Scenario II (Interim)				
EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
06	Sawmill	PM	13.9	60.8
		PM_{10}	0.4	1.3
12 and 13**	Wood-Fired Boiler #1 (29.56 MMBTU/hr) and Wood-Fired Boiler #2 (29.56 MMBTU/hr) (Combined)	PM	5.2	22.4
		PM_{10}	4.3	18.7
		SO_2	0.5	2.2
		VOC	0.6	2.7
		CO	15.0	65.7
		NO_X	8.5	37.3
		Acrolein	0.118	0.518
		Benzene	0.124	0.544
		Cadmium	6.71E-04	2.94E-03
		Chromium	6.19E-04	2.71E-03
		Formaldehyde	0.13	0.57
		Hydrogen Chloride	0.42	1.82
		Lead	7.61E-04	3.33E-03
		Manganese	0.0732	0.321
		Mercury	4.26E-05	1.86E-04
		Nickel	1.48E-03	6.46E-03
		Styrene	0.1	0.3
14(Batch)	Dry Kiln #3	Not Operating (Converting Dry Kiln #3 to DP Kiln#2)		
23	Dual Path Kiln #1	PM	3.4	13.5
		PM_{10}	2.0	8.1
		SO_2	0.8	2.8
		VOC	35.4	143.3
		CO	15.0	65.7
		NO_X	6.6	28.1
		Lead	0.0012	0.0053
		Acetaldehyde	0.4786	1.946
		Acrolein	0.06636	0.2694
		Benzene	0.1052	0.46
		Formaldehyde	0.4308	1.754
		Manganese	0.04	0.1754
		Methanol	1.486	6.036
		Phenol	0.092	0.374
		Styrene	0.04752	0.2086
		Chlorine	0.0198	0.0866
		Acetone	0.004752	0.02086
		Arsenic	0.00055	0.002412
		Chromium VI	0.0000875	0.000383

Operating Scenario II (Interim)				
EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		Hydrogen Chloride	0.4752	2.08
16	Wood-Fired Boiler #3 (29.75 MMBTU/hr)	Removed from Service		
20	Log Yard Road	PM	5.6	24.2
		PM_{10}	1.6	7.0
21	Planer Mill with Cyclone and Baghouse	PM	3.7	16.2
		PM_{10}	1.5	6.6
25	Abort Stack for DPK#1	PM	2.9	0.5
		PM_{10}	2.6	0.4
		SO_2	0.3	0.1
		VOC	0.2	0.1
		CO	5.3	0.8
		NO_X	2.1	0.3
		Acrolein	3.51E-02	5.05E-03
		Formaldehyde	3.86E-02	5.55E-03
		Benzene	3.68E-02	5.30E-03
		Acetaldehyde	7.98E-06	1.15E-06
		HCl	1.67E-01	2.40E-02
		Manganese	1.40E-02	2.02E-03
		Arsenic	1.93E-04	2.78E-05

* Not included in VOC total.

** Operating only one boiler (SN-12 or SN-13) at a time to heat SN-02. Since only one boiler can operate at any time, the emissions are combined.

Operating Scenario III (Final)				
EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
Total Allowable Emissions		PM	64.2	129.4
		PM_{10}	14.7	32.3
		SO_2	2.6	6.3
		VOC	80.4	322.6
		CO	43.6	146.2
		NO_X	18.8	62.3
		Lead	0.0026	0.0116
HAPs (Total Allowable Non-Criteria Pollutant Emissions included in VOC and PM totals unless noted otherwise)		Acetaldehyde	1.0774	4.38
		Acetone	0.0105	0.0459
		Acrolein	0.2198	0.6165
		Arsenic	0.0016	0.0054
		Benzene	0.3048	1.0238
		Chlorine	0.0435	0.1906
		Formaldehyde	1.0472	3.957
		Hydrogen Chloride	1.3792	4.628
		Chromium VI	0.000193	0.000843
		Manganese	0.116	0.3896
		Methanol	3.34	13.576
		Phenol	0.2072	0.8418
		Styrene	0.10452	0.4586
02	Dry Kiln #2	Not operating		
06	Sawmill	PM	37.5	58.5
		PM_{10}	0.8	1.3
12	Wood-Fired Boiler #1 (29.56 MMBTU/hr)	Not operating		
13	Wood-Fired Boiler #2 (29.56 MMBTU/hr)	Not operating		
14(Batch)	Dry Kiln #3	Dry Kiln #3 Converted to DP Kiln#2		
14	Dual Path Kiln #2	PM	4.8	16.9
		PM_{10}	2.6	10.1
		SO_2	1.2	3.3
		VOC	44.6	179.1
		CO	18	78.9
		NO_X	8	33.7

Operating Scenario III (Final)				
EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		Lead	0.0014	0.0063
		Acetaldehyde	0.5988	2.434
		Acrolein	0.0832	0.337
		Benzene	0.126	0.5532
		Formaldehyde	0.5392	2.192
		Manganese	0.048	0.2102
		Methanol	1.854	7.54
		Phenol	0.1152	0.4678
		Styrene	0.057	0.25
		Chlorine	0.02372	0.104
		Acetone	0.0057	0.025
		Arsenic	0.00066	0.00289
		Chromium VI	0.00011	0.00046
		Hydrogen Chloride	0.57	2.5
23	Dual Path Kiln #1	PM	3.4	13.5
		PM_{10}	2.0	8.1
		SO_2	0.8	2.8
		VOC	35.4	143.3
		CO	15.0	65.7
		NO_X	6.6	28.1
		Lead	0.0012	0.0053
		Acetaldehyde	0.4786	1.946
		Acrolein	0.06636	0.2694
		Benzene	0.1052	0.46
		Formaldehyde	0.4308	1.754
		Manganese	0.04	0.1754
		Methanol	1.486	6.036
		Phenol	0.092	0.374
		Styrene	0.04752	0.2086
		Chlorine*	0.01975	0.0866
		Acetone	0.004752	0.02086
		Arsenic	0.00055	0.00241
		Chromium VI	8.75E-05	3.833E-04
		Hydrogen Chloride*	0.4752	2.08
24	Abort Stack for DPK#2	PM	2.9	0.5
		PM_{10}	2.6	0.4
		SO_2	0.3	0.1
		VOC	0.2	0.1
		CO	5.3	0.8

Operating Scenario III (Final)				
EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		NO_X	2.1	0.3
		Acrolein	3.51E-02	5.05E-03
		Formaldehyde	3.86E-02	5.55E-03
		Benzene	3.68E-02	5.30E-03
		Acetaldehyde	7.98E-06	1.15E-06
		Hydrogen Chloride	1.67E-01	2.40E-02
		Manganese	1.40E-02	2.02E-03
		Arsenic	1.93E-04	2.78E-05
25	Abort Stack for DPK#1	PM	2.9	0.5
		PM_{10}	2.6	0.4
		SO_2	0.3	0.1
		VOC	0.2	0.1
		CO	5.3	0.8
		NO_X	2.1	0.3
		Acrolein	3.51E-02	5.05E-03
		Formaldehyde	3.86E-02	5.55E-03
		Benzene	3.68E-02	5.30E-03
		Acetaldehyde	7.98E-06	1.15E-06
		Hydrogen Chloride	1.67E-01	2.40E-02
		Manganese	1.40E-02	2.02E-03
		Arsenic	1.93E-04	2.78E-05
16	Wood-Fired Boiler #3 (29.75 MMBTU/hr)	Not operating		
20	Log Yard Road	PM	9.0	33.9
		PM_{10}	2.6	9.7
21	Planer Mill with Cyclone and Baghouse	PM	3.7	5.6
		PM_{10}	1.5	2.3

*Not included in VOC total.

SECTION III: PERMIT HISTORY

The initial permit #1681-A was issued on March 3, 1996. A Title V permit application was submitted for the Urbana sawmill on July 15, 1996, which included the following proposed changes to the existing SIP permit:

1. An increase in annual production at the facility;
2. Installation of two wood-fired boilers.
3. Installation of a third dry kiln, a cyclone, and other equipment.

The original Title V permit, #1681-AOP-R0, was issued on September 12, 1997. It included some provisions in the specific conditions dealing with visible emissions from the boilers that reflected new EPA enforcement guidelines. These conditions were not included in the original Draft permit that had been submitted to Anthony Forest Products, and the company challenged these changes because they had been denied an opportunity to respond.

A revised version was prepared after discussion with the applicant, and issued as 1681-AOP-R1 on January 13, 1998.

Permit #1681-AOP-R2 was issued on August 6, 1999. This permit changed the required hourly steam readings in the wood-fired boilers from hourly readings to a maximum 24 hour rate of 489,600 pounds per day.

Permit #1681-AOP-R3 was issued on September 18, 2001. The Lumber Dry Kiln #1 (SN-01) has been removed from service as a result of a fire that destroyed the kiln and combustion equipment in April 2000. The permit minor modification also allowed increased production capacity for the Planer Mill (SN-03, 04, 07, and 15) and the two remaining Dry Kilns (SN-02 and 14). VOC annual emissions from Dry Kilns #2 and #3 have increased by 19.25 tpy, with decreases in other criteria pollutants based on revised estimates. There were no new emission sources.

Permit #1681-AOP-R4 was issued on June 14, 2002. Anthony requested to add a 29.8 MMBtu/hr wood-fired boiler (SN-16), a lumber drying kiln (SN-17), and to increase the permitted production capacity to 650,000 tons per year for the planer mill and the lumber kilns to 135,000,000 board feet per year to account for the increased production from the installation of a new kiln. Anthony also requested Planer Cyclone #3 (SN-15) to be removed because the cyclone was never installed. The source descriptions for the Planer Cyclone #1 and the Planer Mill emissions were revised. The emissions from the sawmill were declared as an insignificant activity in the previous permits; however, these emissions from the sawmill did not classify as an insignificant activity and were included in this revision as a permitted emission source. Emissions generated from the bark and saw dust storage piles (SN-18) were also included in the permit as a permitted emission source.

Permit #1681-AOP-R5 was issued on December 16, 2003. This was the first Title V Renewal for the facility. The facility also requested to install a completely enclosed air lock system to route shavings and sawdust from the Planer Mill (SN-07) to an existing fuel storage bin on an as needed basis. PM emissions did not change due to the installation of the air lock system, and the

total waste from the Planer Mill did not increase. PM and VOC emissions increased by 48.2 tpy and 39.7 tpy, respectively. PM_{10} and Heavy Metals emissions decreased by 23.5 tpy and 1.5 tpy, respectively. Changes in emissions were due to revised methods of calculation and updated emission factors.

Permit #1681-AOP-R6 was issued on March 23, 2007 to incorporate the applicable requirements of 40 CFR Part 63, Subpart DDDDD – *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters* and to revise the particulate matter emission limits in order to account for emission control provided by the building enclosure. The VOC and HAP emission limits were also revised in order to correct a rounding error in the previous estimates. Dry Kiln #4 (SN-17) was removed. The two remaining dry kilns consumed the production capacity of Dry Kiln #4. Permitted PM and HAPs decreased by 25.1 tpy and 5.91 tpy, respectively. Permitted PM_{10} and VOC increased by 2.4 tpy and 2.7 tpy, respectively.

Permit #1681-AOP-R7 was issued on July 31, 2007 which revised the applicable requirements of 40 CFR Part 63, Subpart DDDDD – *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters*. No physical changes or changes to method of operation were requested.

Permit #1681-AOP-R8 was issued on November 3, 2008. Previously applicable requirements of 40 CFR Part 63, Subpart DDDDD – *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters* were removed as the subpart was vacated. Emission calculations for PM_{10} for several sources were revised based on updated emission factors and estimate methodology. As a result of these changes the permitted PM_{10} emission from planer cyclones (SN-03 and SN-04) and the sawmill (SN-06) were reduced, and the permitted emissions from the bark (SN-18A), sawdust (SN-18B), and ash (SN-19) storage pile and the planer mill woodwaste bin (SN-07) were reclassified as insignificant activities (A-13). Emissions from the log yard road (SN-20) were identified and quantified for the first time. Anthony also requested to modify the PM and PM_{10} emission limits by increasing the limits for all three boilers because Boiler #3 (SN-16) failed the required stack test. Overall, permitted PM and PM_{10} emission limits decreased by 0.9 tpy and 58.9 tpy, respectively.

Permit #1681-AOP-R9 was issued on December 11, 2009 to use water instead of a chemical dust suppressant to control haul road dust emissions. Permitted PM and PM_{10} limits increased 9.7 tpy and 2.8 tpy, respectively.

Permit #1681-AOP-R10 was issued August 31, 2010. Anthony replaced two existing planer cyclones (SN-03 and SN-04) with a higher capacity cyclone in series with a baghouse (SN-21). Permitted PM and PM_{10} limits decreased by 29.8 tpy and 11.9 tpy, respectively.

SECTION IV: SPECIFIC CONDITIONS

SN-02 (Dry Kiln #2) and SN-14(Batch) (Dry Kiln #3)

Source Description

Dry kilns #2 and #3 are batch kilns for dehydrating lumber. The kilns are permitted to produce 135 MMBF/yr of dried lumber. They operate exclusively on the steam from the three wood-fired boilers. Each kiln has multiple vents.

Specific Conditions

1. The permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by compliance with Specific Condition #3 and Plantwide Condition #7. [Regulation No. 19 §19.501 *et seq.* and 40 CFR Part 52, Subpart E]

Operating Scenario	SN	Description	Pollutant	lb/hr	tpy
I	02	Dry Kiln #2	VOC	31.3[a]	236.3[b]
	14(Batch)	Dry Kiln #3	VOC	37.5[a]	
II	02	Dry Kiln #2	VOC	24.5	107.4
	14(Batch)	Dry Kiln #3	Not Operating (Will be converted to DPK#2)		
III	02	Dry Kiln #2	Not Operating		
	14(Batch)	Dry Kiln #3	Not Operating (Dry Kiln #3 converted to DPK#2)		

a. Maximum average hourly emission rate based on maximum kiln cycle capacity.
b. Total VOC emissions for Dry Kilns #2 and #3 (Operating Scenario I).

2. The permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by compliance with Specific Condition #3 and Plantwide Condition #7. [Regulation No. 18 §18.801 and A.C.A §8-4-203 as referenced by §8-4-304 and §8-4-311]

Operating Scenario	SN		Pollutant	lb/hr	tpy
I	02	Dry Kiln #2	Acetaldehyde	0.35[a]	2.64[b]
			Acrolein	0.06[a]	0.41[b]
			Methanol	1.90[a]	13.90[b]
			Formaldehyde	0.20[a]	1.10[b]
	14(Batch)	Dry Kiln #3	Acetaldehyde	0.42[a]	
			Acrolein	0.07[a]	
			Methanol	2.20[a]	
			Formaldehyde	0.20[a]	

Operating Scenario	SN		Pollutant	lb/hr	tpy
II	02	Dry Kiln #2	Acetaldehyde Acrolein Methanol Formaldehyde	0.273 0.042 1.435 0.112	1.2 0.19 6.29 0.51
	14(Batch)	Dry Kiln #3	Not Operating (Dry Kiln #3 will be converted to DP Kiln #2)		
III	02	Dry Kiln #2	Not Operating		
	14(Batch)	Dry Kiln #3	Not Operating (Dry Kiln #3 converted to DPK#2)		

a. Maximum average hourly emission rate based on maximum kiln cycle capacity.
b. Total VOC emissions for Dry Kilns #2 and #3(Operating Scenario I).

3. The facility shall not exceed the throughput limits listed in the following table. [Regulation No. 19 §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

Operating Scenario	SN		Throughput Limit Dried Lumber Produced
I	02	Dry Kiln #2	135.0 MMBF per rolling 12 month period
	14(Batch)	Dry Kiln #3	
II	02	Dry Kiln #2	61.32 MMBF per rolling 12 month period
	14(Batch)	Dry Kiln #3	Not Operating

4. The facility shall maintain monthly records which demonstrate compliance with the limits set in Specific Condition #3 which may be used by the Department for enforcement purposes. These records shall be updated by the fifteenth day of the month following the month to which the records pertain. These records shall be kept on site, and shall be made available to Department personnel upon request. The twelve month rolling totals and each individual month's kiln production data shall be submitted to the Department in accordance with General Provision #7. [Regulation No. 19 §19.705 and 40 CFR Part 52, Subpart E]

5. The facility shall not exceed the throughput limits listed in the following table. [Regulation No. 19 §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

Operating Scenario	SN	Description	Throughput Limit Dried Lumber Produced
II	02	Dry Kiln #2	Batch Size per Cycle Time* ≤ 7,000 BF per hour

* Size of the batch (BF/batch) divided by the drying time (hours/batch)

6. The facility shall maintain daily records which demonstrate compliance with the limits set in Specific Condition #5 which may be used by the Department for enforcement purposes. These records shall be updated daily. These records shall be kept on site, and shall be made available to Department personnel upon request. [Regulation No. 19 §19.705 and 40 CFR Part 52, Subpart E]

SN-14 (Dual Path Kiln #2)
SN-23 (Dual Path Kiln #1)
SN-25 (DPK#1 Abort Stack)
SN-24 (DPK#2 Abort Stack)

Source Description

The new Dual Path Kilns will utilize heat from biomass gasifiers. Green sawdust will be gasified in these devices to produce a combustible gas stream. DPK #1 will have a 25 MMBtu/hr sawdust burner; DPK #2 will have a 30 MMBtu/hr sawdust burner. Each kiln has multiple vents. Startup of the Gasifier/Burners on the Dual Path Kilns will only be necessary to commence operation upon installation and after the kilns have been taken down for routine maintenance. The burners will be started with small pieces of solid wood (scraps and sticks) from the facility and a small amount of diesel fuel. There is an abort stack on each Gasifier/Burners which will be used during start up and remains open until a consistently burning fuel bed (biomass) is obtained; this is expected to take up to 24 hours for each startup.

Specific Conditions

7. The permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by compliance with Specific Condition #9 and Plantwide Condition #7. [Regulation No. 19 §19.501 *et seq.* and 40 CFR Part 52, Subpart E]

Operating Scenario	SN	Description	Pollutant	lb/hr	ton/yr
I	14 and 24	Dual Path Kiln #2	Not converted to a DPK yet		
	23 and 25	Dual Path Kiln #1	Not Operating (Under Construction)		
II	14 and 24	Dual Path Kiln #2	Not Operating (Under Construction)		
	23	Dual Path Kiln #1	PM_{10}	2.0	8.1
			SO_2	0.8	2.8
			VOC	35.4	143.3
			CO	15.0	65.7
			NO_X	6.6	28.1
			Lead	0.0012	0.0053
	25	Abort Stack for DPK#1	PM_{10}	2.6	0.4
			SO_2	0.3	0.1
			VOC	0.2	0.1
			CO	5.3	0.8
			NO_X	2.1	0.3
III	14	Dual Path Kiln #2	PM_{10}	2.6	10.1
			SO_2	1.2	3.3
			VOC	44.6	179.1
			CO	18.0	78.9
			NO_X	8.0	33.7

Operating Scenario	SN	Description	Pollutant	lb/hr	ton/yr
			Lead	0.0014	0.0063
	23	Dual Path Kiln #1	PM_{10}	2.0	8.1
			SO_2	0.8	2.8
			VOC	35.4	143.3
			CO	15.0	65.7
			NO_X	6.6	28.1
			Lead	0.0012	0.0053
	24	Abort Stack for DPK#2	PM_{10}	2.6	0.4
			SO_2	0.3	0.1
			VOC	0.2	0.1
			CO	5.3	0.8
			NO_X	2.1	0.3
	25	Abort Stack for DPK#1	PM_{10}	2.6	0.4
			SO_2	0.3	0.1
			VOC	0.2	0.1
			CO	5.3	0.8
			NO_X	2.1	0.3

8. The permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by compliance with Specific Condition #9 and Plantwide Condition #7. [Regulation No. 18 §18.801 and A.C.A §8-4-203 as referenced by §8-4-304 and §8-4-311]

Operating Scenario	SN	Description	Pollutant	lb/hr	ton/yr
I	14 and 24	Dual Path Kiln #2	Not converted to a DPK yet		
	23 and 25	Dual Path Kiln #1	Not Operating (Under Construction)		
II	14 and 24	Dual Path Kiln #2	Not Operating (Under Construction)		
	23	Dual Path Kiln #1	PM	3.4	13.5
			Acetaldehyde	0.4786	1.946
			Acrolein	0.06636	0.2694
			Benzene	0.1052	0.46
			Formaldehyde	0.4308	1.754
			Manganese	0.04	0.1754
			Methanol	1.486	6.036
			Phenol	0.092	0.374
			Styrene	0.04752	0.2086
			Chlorine	0.01975	0.0866
			Acetone	0.004752	0.02086
			Arsenic	0.00055	0.00241
			Chromium VI	0.0000875	0.000383
			Hydrogen Chloride	0.4752	2.08

Operating Scenario	SN	Description	Pollutant	lb/hr	ton/yr
	25	Abort Stack for DP Kiln#1	PM	2.9	0.5
			Acrolein	3.51E-02	5.05E-03
			Formaldehyde	3.86E-02	5.55E-03
			Benzene	3.68E-02	5.30E-03
			Acetaldehyde	7.98E-06	1.15E-06
			Hydrogen Chloride	1.67E-01	2.40E-02
			Manganese	1.40E-02	2.02E-03
			Arsenic	1.93E-04	2.78E-05
III	14	Dual Path Kiln #2	PM	4.8	16.9
			Acetaldehyde	0.5988	2.434
			Acrolein	0.0832	0.337
			Benzene	0.126	0.5532
			Formaldehyde	0.5392	2.192
			Manganese	0.048	0.2102
			Methanol	1.854	7.54
			Phenol	0.1152	0.4678
			Styrene	0.057	0.25
			Chlorine	0.02372	0.104
			Acetone	0.0057	0.025
			Arsenic	0.00066	0.00289
			Chromium VI	0.00011	0.00046
			Hydrogen Chloride	0.57	2.5
	23	Dual Path Kiln #1	PM	3.4	13.5
			Acetaldehyde	0.4786	1.946
			Acrolein	0.06636	0.2694
			Benzene	0.1052	0.46
			Formaldehyde	0.4308	1.754
			Manganese	0.04	0.1754
			Methanol	1.486	6.036
			Phenol	0.092	0.374
			Styrene	0.04752	0.2086
			Chlorine	0.01975	0.0866
			Acetone	0.004752	0.02086
			Arsenic	0.00055	0.00241
			Chromium VI	0.0000875	0.000383
			Hydrogen Chloride	0.4752	2.08
	24	Abort Stack for DP Kiln#2	PM	2.9	0.5
			Acrolein	3.51E-02	5.05E-03
			Formaldehyde	3.86E-02	5.55E-03
			Benzene	3.68E-02	5.30E-03
			Acetaldehyde	7.98E-06	1.15E-06
			Hydrogen Chloride	1.67E-01	2.40E-02

Operating Scenario	SN	Description	Pollutant	lb/hr	ton/yr
			Manganese	1.40E-02	2.02E-03
			Arsenic	1.93E-04	2.78E-05
	25	Abort Stack for DP Kiln#1	PM	2.9	0.5
			Acrolein	3.51E-02	5.05E-03
			Formaldehyde	3.86E-02	5.55E-03
			Benzene	3.68E-02	5.30E-03
			Acetaldehyde	7.98E-06	1.15E-06
			Hydrogen Chloride	1.67E-01	2.40E-02
			Manganese	1.40E-02	2.02E-03
			Arsenic	1.93E-04	2.78E-05

9. The facility shall not exceed the throughput limits listed in the following table. [Regulation No. 19 §19.705, §19.405(B), A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

Operating Scenario	SN	Throughput Limit Dried Lumber Produced
I	SN-14 and SN-24	Dry Batch Kiln not converted to a DPK yet
	SN-23 and SN-25	Not Operating (Under Construction)
II	SN-14 and SN-24	Not Operating (Under Construction)
	SN-23 and SN-25	74.8 MMBF per rolling 12 month period
III	SN-14 and SN-24	93.5 MMBF per rolling 12 month period
	SN-23 and SN-25	74.8 MMBF per rolling 12 month period

10. The facility shall maintain monthly records which demonstrate compliance with the limits set in Specific Condition #9 which may be used by the Department for enforcement purposes. These records shall be updated by the fifteenth day of the month following the month to which the records pertain. These records shall be kept on site, and shall be made available to Department personnel upon request. The twelve month rolling totals and each individual month's kiln production data shall be submitted to the Department in accordance with General Provision #7. [Regulation No. 19 §19.705 and 40 CFR Part 52, Subpart E]

11. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A. [Regulation No. 19 §19.501 and 40 CFR Part 52, Subpart E]

SN	Opacity Limit	Regulatory Citation
23	20%	Regulation No. 19 §19.503
14	20%	Regulation No. 19 §19.503
24	20%	Regulation No. 19 §19.503
25	20%	Regulation No. 19 §19.503

12. The permittee shall conduct weekly observations of the opacity from SN-14 and SN-23 when operating and SN-24 and SN-25 during startup operation and keep a record of these observations. The facility shall maintain personnel trained in EPA Reference Method 9. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall take immediate action to identify and correct the cause of the visible emissions. After corrective action has been taken, another observation of the opacity from the affected source shall be conducted in order to confirm that excess visible emissions are no longer present. The permittee shall maintain records of all corrective actions taken following the observance of visible emissions. Records of all visible emissions observations and any corrective action taken shall be kept onsite and made available to the Department personnel upon request. If the source is not operating, a note shall be made in the records stating such. [Regulation 19 §19.705and 40 CFR Part 52, Subpart E]

13. The permittee shall conduct performance test at SN-23 (DPK#1) and SN-14 (DPK #2) to demonstrate compliance with the emissions limits set in the Specific Conditions #7 and #8 for the pollutants listed in the table below. The tests shall be conducted with the frequency listed in the table below. The test may be performed based on the test method listed in the following table or an approved EPA test method. The permittee is required to test only one kiln at a time for PM_{10}, CO, and NO_X. In order to allow both kilns to be tested for PM_{10}, CO, and NO_X, the permittee shall test the untested kiln during the next testing period. The test for CO and NO_X shall be conducted simultaneously. All tests shall be conducted in accordance with Plantwide Condition #3. Test results shall be maintained onsite, made available to the Department personnel upon request, and shall be submitted to the Department in accordance with Plantwide Condition #3. [Regulation 19 §19.702 and 40 CFR Part 52, Subpart E]

Pollutant	Test Method	Frequency
PM_{10}	5	Test only one kiln every five years (alternating schedule)
CO	10	Test only one kiln every five years (alternating schedule)
NO_X	7E	Test only one kiln every five years (alternating schedule)
VOC	25A	One Time Each Kiln
Formaldehyde	316	One Time Each Kiln

14. The testing required in Specific Condition #13 shall be conducted with the source operating at least at 90% of its permitted capacity as listed in the following table. Emission testing results shall be extrapolated to correlate with 100% of the permitted capacity to demonstrate compliance. Failure to test within this range shall limit the permittee to operating within 10% above the tested rate. If testing is conducted below 90% of the permitted capacity, records shall be maintained at all times to demonstrate that the source does not exceed operation at 10% above the tested rate. The permittee shall track and document the fuel feed rates and lumber throughput over the duration of the test. [Regulation 19 §19.702 and 40 CFR Part 52, Subpart E]

SN	Permitted Capacity of gasifier/burner	Permitted Capacity of DP Kiln
SN-23 (DPK#1)	5705 lb of sawdust per hour	9,200 BF of lumber per Hour
SN-14 (DPK#2)	6846 lb of sawdust per hour	11,500 BF of Lumber per Hour

15. The permittee shall not exceed the limits specified in the following table. [Regulation 19 §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

SN	Diesel fuel usage limit as starter fluid	Sawdust throughput limit for gasifier/burner during startup	Operating Hour Limits for each Abort Stack
24	240 gallons per year for both DPK#1 and DPK#2 combined	2000 lb of sawdust per hour	288 hours per rolling 12 month period
25		2000 lb of sawdust per hour	288 hours per rolling 12 month period

16. The facility shall maintain monthly records which demonstrate compliance with the operating hour limits set in Specific Condition #15 which may be used by the Department for enforcement purposes. These records shall be updated by the fifteenth day of the month following the month to which the records pertain. These records shall be kept on site, and shall be made available to Department personnel upon request. The twelve month rolling totals and each individual month's data shall be submitted to the Department in accordance with General Provision #7. [Regulation No. 19 §19.705 and 40 CFR Part 52, Subpart E]

17. The facility shall maintain daily records when in startup mode which demonstrate compliance with the sawdust throughput limits for gasifier/burner and diesel fuel usage limit set in Specific Condition #15 which may be used by the Department for enforcement purposes. These records shall be updated daily. These records shall be kept on site, and shall be made available to Department personnel upon request. [Regulation No. 19 §19.705 and 40 CFR Part 52, Subpart E]

18. 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 from 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]

SN-06

Sawmill

Source Description

Logs are taken by truck to the Sawmill (SN-06) where they are debarked. Within the Sawmill Building, the mill will use three headrigs to saw the logs into cants or rough lumber and edge and trim. Trimmings and edgings are routed to a chipper. Chips are pneumatically conveyed to shaker screens where oversized chips and fines are removed. The blower, which conveys the materials to the shaker screens, has an associated cyclone, which vents inside the sawmill building. The chips are belt conveyed to a chip bin and eventually loaded into tractor trailers to be shipped off-site. Oversized chips are routed back through the chipper. Bark is collected and eventually loaded into tractor trailers to be shipped off-site. Sawdust is collected from all the sources within the Sawmill Building and stored for shipping off-site or blown to the proposed Fuel Storage Silo required as part of the continuous, direct fired kiln project to fuel the biomass gasifiers. Emissions from the Sawmill Building are estimated at SN-06.

Specific Conditions

20. The permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by compliance with Specific Condition #22 and Plantwide Condition #7. [Regulation No. 19 §19.501 *et seq.* and 40 CFR Part 52, Subpart E]

Operating Scenario	Source Number	Description	Pollutant	lb/hr	tpy
I and II	06	Sawmill	PM_{10}	0.4	1.3
III	06	Sawmill	PM_{10}	0.8	1.3

21. The permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by compliance with Specific Condition #22 and Plantwide Condition #7. [Regulation No. 18 §18.801 and A.C.A §8-4-203 as referenced by §8-4-304 and §8-4-311]

Operating Scenario	Source Number	Description	Pollutant	lb/hr	tpy
I and II	06	Sawmill	PM	13.9	60.8
III	06	Sawmill	PM	37.5	58.5

22. The facility shall not exceed the throughput limits listed in the following table. [Regulation No. 19 §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

Operating Scenario	SN	Throughput Limit Rough Logs Processed
I and II	06	650,000 tons logs per rolling 12 month period
III	06	600,000 tons logs per rolling 12 month period

23. The facility shall maintain records which demonstrate compliance with the limit set in Specific Condition #22 which may be used by the Department for enforcement purposes. These records shall be updated by the fifteenth day of the month following the month to which the records pertain. These records shall be kept onsite, and shall be made available to the Department personnel upon request. An annual total and each individual month's sawmill production data shall be submitted to the Department in accordance with General Provision #7. [Regulation No. 19 §19.705 and 40 CFR Part 52, Subpart E]

24. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A. [Regulation No. 19 §19.501 and 40 CFR Part 52, Subpart E]

SN	Opacity Limit	Regulatory Citation
06	20%	Regulation No. 19 §19.503

25. The permittee shall conduct weekly observations of the opacity from SN-06 and keep a record of these observations. The facility shall maintain personnel trained in EPA Reference Method 9. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall take immediate action to identify and correct the cause of the visible emissions. After corrective action has been taken, another observation of the opacity from the affected source shall be conducted in order to confirm that excess visible emissions are no longer present. The permittee shall maintain records of all corrective actions taken following the observance of visible emissions. Records of all visible emissions observations and any corrective action taken shall be kept onsite and made available to the Department personnel upon request. If the source is not operating, a note shall be made in the records stating such. [Regulation 19 §19.705and 40 CFR Part 52, Subpart E]

SN-12, SN-13, and SN-16

Wood Fired Boilers #1, #2, and #3

Source Description

The wood-fired boilers supply steam to the kilns, and burn southern pine sawdust, bark, and other wood residue, including shavings. The products of combustion are exhausted through three boiler stacks (SN-12, SN-13, and SN-16). Each boiler is equipped with a cyclone to control particulate emissions.

The three boilers, supplied by Wellons, Inc., are affected facilities as defined in Paragraph 60.40c of NSPS Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units). The two older boilers have a maximum design input capacity of 29.56 MMBtu/hr each, and the newest boiler has a design input capacity of 29.75 MMBtu/hr. The boilers are below the 30 MMBtu/hr threshold limit for the particulate standard contained in Paragraph 60.7 of the NSPS regulations. Based on the maximum throughput rate of 20,400 lb/hr of 422 °F steam at 300 psig, and feed water at 220°F for Boiler #1 and Boiler #2 actual heat output has been calculated at 20.8 MMBtu/hr. Based on the maximum throughput rate of 20,700 lb/hr of 366 °F steam at 150 psig, and feed water at 220 °F for Boiler #3, actual heat output has been calculated at 20.9 MMBtu/hr.

Specific Conditions

26. The permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by compliance with Specific Condition #29 and Plantwide Condition #7. [Regulation No. 19 §19.501 *et seq.* and 40 CFR Part 52, Subpart E]

Operating Scenario	Source Number	Pollutant	lb/hr	tpy
I	12	PM_{10}	4.3	18.7
		SO_2	0.5	2.2
		VOC	0.6	2.7
		CO	15.0	65.7
		NO_X	8.5	37.3
		Lead	7.61E-04	3.33E-03
	13	PM_{10}	4.3	18.7
		SO_2	0.5	2.2
		VOC	0.6	2.7
		CO	15.0	65.7
		NO_X	8.5	37.3
		Lead	7.61E-04	3.33E-03
	16	PM_{10}	4.3	18.8
		SO_2	0.5	2.2
		VOC	0.6	2.7

Operating Scenario	Source Number	Pollutant	lb/hr	tpy
		CO	15.0	65.7
		NO_X	8.6	37.7
		Lead	7.66E-04	3.35E-03
II	12 and 13 Combined*	PM_{10}	4.3	18.7
		SO_2	0.5	2.2
		VOC	0.6	2.7
		CO	15.0	65.7
		NO_X	8.5	37.3
		Lead	7.61E-04	3.33E-03
	16	Not Operating		
III	12	Not Operating		
	13	Not Operating		
	16	Not Operating		

* Operating only one boiler (SN-12 or SN-13) at a time to heat SN-02. Since only one boiler can operate at any time, the emissions are combined.

27. The permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by compliance with Specific Condition #29 and Plantwide Condition #7. [Regulation No. 18 §18.801 and A.C.A §8-4-203 as referenced by §8-4-304 and §8-4-311]

Operating Scenario	Source Number	Pollutant	lb/hr	tpy
I	12	PM	5.2	22.4
		Acrolein	0.2	0.6
		Benzene	0.2	0.6
		Cadmium	6.71E-04	2.94E-03
		Chromium	6.19E-04	2.71E-03
		Formaldehyde	0.13	0.6
		Hydrogen Chloride	0.42	1.82
		Manganese	7.32E-02	0.32
		Mercury	4.25E-05	1.87E-04
		Nickel	1.48E-03	6.47E-03
		Styrene	0.1	0.3
	13	PM	5.2	22.4
		Acrolein	0.2	0.6
		Benzene	0.2	0.6
		Cadmium	6.71E-04	2.94E-03
		Chromium	6.19E-04	2.71E-03
		Formaldehyde	0.13	0.6
		Hydrogen Chloride	0.42	1.82
		Manganese	6.77E-02	0.32
		Mercury	4.25E-05	1.87E-04

Operating Scenario	Source Number	Pollutant	lb/hr	tpy
		Nickel	1.48E-03	6.47E-03
		Styrene	0.1	0.3
	16	PM	5.2	22.6
		Acrolein	0.2	0.6
		Benzene	0.2	0.6
		Cadmium	0.000675	0.00296
		Chromium	0.000623	0.00273
		Formaldehyde	0.2	0.6
		Hydrogen Chloride	0.42	1.82
		Manganese	0.0538	0.24
		Mercury	0.0000428	0.000188
		Nickel	0.00149	0.00651
		Styrene	0.1	0.3
II	12 and 13 Combined*	PM	5.2	22.4
		Acrolein	0.2	0.6
		Benzene	0.2	0.6
		Cadmium	6.71E-04	2.94E-03
		Chromium	6.19E-04	2.71E-03
		Formaldehyde	0.13	0.6
		Hydrogen Chloride	0.42	1.82
		Manganese	0.0732	0.32
		Mercury	4.25E-05	1.87E-04
		Nickel	1.48E-03	6.47E-03
		Styrene	0.1	0.3
	16	Not Operating		
III	12	Not Operating		
	13	Not Operating		
	16	Not Operating		

* Operating only one boiler (SN-12 or SN-13) at a time to heat SN-02. Since only one boiler can operate at any time, the emissions are combined.

28. The permittee shall operate only one boiler (SN-12 or SN-13) at a time during Operating Scenario II. The permittee shall maintain monthly records to demonstrate compliance with this specific condition. [Regulation No. 19 §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

29. The amount of steam produced in each wood-fired boiler shall be limited according to the following table. Compliance with this condition shall be demonstrated through compliance with Specific Condition #30. [Regulation No. 19 §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

Operating Scenario	Source Number	Description	Daily Limit (lb Steam/day)	Annual Limit (MM lb/12 month)
I	12	Boiler #1	489,600	178.7
	13	Boiler #2	489,600	178.7
	16	Boiler #3	489,600	178.7
II	12 and 13 combined	Boiler #1 or Boiler #2	489,600	178.7

30. The facility shall maintain monthly records which demonstrate compliance with the limits set in Specific Condition #29 which may be used by the Department for enforcement purposes. These records shall be updated by the fifteenth day of the month following the month to which the records pertain. These records shall be kept on site, and shall be made available to Department personnel upon request. An annual total and each individual month's steam production data shall be submitted to the Department in accordance with General Provision #7. [Regulation No. 19 §19.705 and 40 CFR Part 52, Subpart E]

31. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A. [Regulation No. 19 §19.501 and 40 CFR Part 52, Subpart E]

SN	Opacity Limit	Regulatory Citation
12, 13, and 16	20%	Regulation No. 19 §19.503

32. The permittee shall conduct weekly observations of the opacity from SN-12, SN-13 and SN-16 when operating and keep a record of these observations. The facility shall maintain personnel trained in EPA Reference Method 9. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall take immediate action to identify and correct the cause of the visible emissions. After corrective action has been taken, another observation of the opacity from the affected source shall be conducted in order to confirm that excess visible emissions are no longer present. The permittee shall maintain records of all corrective actions taken following the observance of visible emissions. Records of all visible emissions observations and any corrective action taken shall be kept onsite and made available to the Department personnel upon request. If the source is not operating, a note shall be made in the records stating such. [Regulation 19 §19.705and 40 CFR Part 52, Subpart E]

33. The permittee shall test source SN-16 for PM_{10} while the source is operating at or above 90% of rated capacity using EPA Reference Methods 201A with 202. These tests shall be conducted within one hundred twenty (120) days of issuance of Permit No. 1681-AOP-R8. If the facility passes the PM_{10} tests, the tests shall then be repeated once every five years. Failure of any test will require the permittee to repeat the testing every other year. 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. [Regulation No. 19 §19.702 and 40 CFR Part 52, Subpart E]

SN-20

Log Yard Road

Source Description

Logs are delivered to the mill at the log yard located north of the main mill site. An unpaved road circles the log yard and is approximately 0.6 mi long. Emissions of particulate matter result from log truck traffic on this road.

Specific Conditions

34. The permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by compliance with Specific Condition #36. [Regulation No. 19 §19.501 *et seq.* and 40 CFR Part 52, Subpart E]

	Source Number	Pollutant	lb/hr	tpy
I and II	20	PM_{10}	1.6	7.0
III	20	PM_{10}	2.6	9.7

35. The permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by compliance with Specific Condition #36. [Regulation No. 18 §18.801 and A.C.A §8-4-203 as referenced by §8-4-304 and §8-4-311]

	Source Number	Pollutant	lb/hr	tpy
I and II	20	PM	5.6	24.2
III	20	PM	9.0	33.9

36. The facility shall not exceed the throughput limits listed in the following table. [Regulation No. 19 §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

Operating Scenario	SN	Throughput Limit Rough Logs
I and II	20	650,000 tons logs per rolling 12 month period
III	20	660,000 tons logs per rolling 12 month period

37. The facility shall maintain records which demonstrate compliance with the limit set in Specific Condition #36 which may be used by the Department for enforcement purposes. These records shall be updated by the fifteenth day of the month following the month to which the records pertain. These records shall be kept on site, and shall be made available to the Department personnel upon request. An annual total and each individual month's sawmill production data shall be submitted to the Department in accordance with General Provision #7. [Regulation No. 19 §19.705 and 40 CFR Part 52, Subpart E]

38. The permittee shall not operate in a manner such that emissions from the log yard roads (SN-20) would cause a nuisance off-site or allow visible emissions from extending beyond the property boundary. Under normal conditions, off-site opacity less than or equal to 5% shall not be considered a nuisance provided that there are no complaints received by the Department regarding dust from the facility. [§18.501 and A.C.A. §8 4-203 as referenced by §8-4-304 and §8-4-311]

39. The permittee shall water the roads as necessary to control emissions from extending beyond the property boundary. The permittee shall water the roads once per month or more frequently as determined by weekly observations. The permittee shall maintain records of observations and dates when water is applied. The permittee shall update these records following each observation and application. These records shall be kept onsite and be made available to the Department personnel upon request. [§18.1004 and A.C.A. §8 4-203 as referenced by §8-4-304 and §8-4-311]

40. Dust suppression activities should be conducted in a manner and at a rate of application that will not cause runoff from the area being applied. Best Management Practices (40 CFR §122.44(k)) should be used around streams and waterbodies to prevent the dust suppression agent from entering Waters of the State. Except for potable water, no agent shall be applied within 100 feet of wetlands, lakes, ponds, springs, streams, or sinkholes. Failure to meet this condition may require the permittee to obtain a National Pollutant Discharge Elimination System (NPDES) permit in accordance with 40 CFR §122.1(b). [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-21

Planer Mill

Source Description

Dried lumber is stored in protected areas before planing. Within the Planermill Building, dried lumber is processed through a planer, a hammer hog, a trimmer, and a ripsaw or Batton Machine. This equipment vents through a baghouse to a cyclone which collects material (primarily shavings and sawdust). The outlet of the cyclone vents to a second baghouse and then to the atmosphere (SN-21). Shavings and sawdust from the baghouse/cyclones are dropped into a woodwaste storage bin (insignificant activity) where it is then loaded onto a truck and shipped off-site.

Specific Conditions

41. The permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by compliance with Specific Condition #43. [Regulation No. 19 §19.501 *et seq.* and 40 CFR Part 52, Subpart E]

Operating Scenario	Source Number	Pollutant	lb/hr	tpy
I and II	21	PM_{10}	1.5	6.6
III	21	PM_{10}	1.5	2.3

42. The permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by compliance with Specific Condition #43. [Regulation No. 18 §18.801 and A.C.A §8-4-203 as referenced by §8-4-304 and §8-4-311]

Operating Scenario	Source Number	Pollutant	lb/hr	tpy
I and II	21	PM	3.7	16.2
III	21	PM	3.7	5.6

43. The facility shall not exceed the throughput limits listed in the following table. [Regulation No. 19 §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

Operating Scenario	SN	Throughput Limit Dried Lumber
I and II	21	135.0 MMBF per rolling 12 month period
III	21	170.0 MMBF per rolling 12 month period

44. The facility shall maintain records which demonstrate compliance with the limit set in Specific Condition # 43which may be used by the Department for enforcement purposes. These records shall be updated by the fifteenth day of the month following the month to

which the records pertain. These records shall be kept on site, and shall be made available to Department personnel upon request. An annual total and each individual month's sawmill production data shall be submitted to the Department in accordance with General Provision #7. [Regulation No. 19 §19.705 and 40 CFR Part 52, Subpart E]

45. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A. [Regulation No. 19 §19.501 and 40 CFR Part 52, Subpart E]

SN	Opacity Limit	Regulatory Citation
21	5%	Regulation No. 19 §19.503

46. The permittee shall conduct monthly observations of the opacity from SN-21 and keep a record of these observations. The facility shall maintain personnel trained in EPA Reference Method 9. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall take immediate action to identify and correct the cause of the visible emissions. After corrective action has been taken, another observation of the opacity from the affected source shall be conducted in order to confirm that excess visible emissions are no longer present. The permittee shall maintain records of all corrective actions taken following the observance of visible emissions. Records of all visible emissions observations and any corrective action taken shall be kept onsite and made available to the Department personnel upon request. If the source is not operating, a note shall be made in the records stating such. [Regulation 19 §19.705and 40 CFR Part 52, Subpart E]

SECTION V: COMPLIANCE PLAN AND SCHEDULE

Anthony Forest Products Company will **co**ntinue to operate in compliance with those identified regulatory provisions. The facility will examine and analyze future regulations that may apply and determine their applicability with any necessary action taken on a timely basis.

SECTION VI: PLANTWIDE CONDITIONS

1. The permittee shall notify the Director in writing within thirty (30) days after commencing construction, completing construction, first placing the equipment and/or facility in operation, and reaching the equipment and/or facility target production rate. [Regulation 19, §19.704, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

2. If the permittee fails to start construction within eighteen months or suspends construction for eighteen months or more, the Director may cancel all or part of this permit. [Regulation 19, §19.410(B) and 40 CFR Part 52, Subpart E]

3. The permittee must test any equipment scheduled for testing, unless otherwise stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) new equipment or newly modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source or (2) operating equipment according to the time frames set forth by the Department or within 180 days of permit issuance if no date is specified. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. The permittee shall submit the compliance test results to the Department within thirty (30) days after completing the testing. [Regulation 19, §19.702 and/or Regulation 18 §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

4. The permittee must provide:

    a. Sampling ports adequate for applicable test methods;
    b. Safe sampling platforms;
    c. Safe access to sampling platforms; and
    d. Utilities for sampling and testing equipment.

    [Regulation 19, §19.702 and/or Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

5. The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee shall maintain the equipment in good condition at all times. [Regulation 19, §19.303 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

6. This permit subsumes and incorporates all previously issued air permits for this facility. [Regulation 26 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

7. The permittee shall operate under only one of the following operating scenarios which are listed in the table below. The permittee shall record changes from one operating scenario to another in accordance with General Provision #17. [40 CFR 70.6(a)(9)(i) and Regulation 26 §26.701(I)(1)]

   A. Operating Scenarios I (Initial)
   B. Operating Scenario II (Interim)
   C. Operating Scenario III (Final)

   Upon conversion to Operating Scenario II and/or III, the facility may submit an Administrative Amendment application to remove sources/emissions from the permit (and reduce the annual fee).

Operating Scenario				
Source Number	**Description**	**Operating Scenario I (Initial)***	**Operating Scenario II (Interim)**	**Operating Scenario III (Final)**
SN-02	Dry Kiln #2 (Holding capacity at 45.5% of the holding capacity of Dry Kiln #3 from R10)	Operating	Operating (Will operate at a lower throughput limit than Scenario I)	Decommissioned (Not Operating)
06	Sawmill	Operating	Operating	Operating
12	Wood-Fired Boiler #1 (29.56 MMBTU/hr)	Operating	Operate only one boiler at a time to heat SN-02	Decommissioned (Not operating)
13	Wood-Fired Boiler #2 (29.56 MMBTU/hr)	Operating		Decommissioned (Not operating)
14(Batch)	Dry Kiln #3	Operating	Being converted (Not operating; converting from batch to DPK #2)	Converted to DPK#2 (Not operating as batch kiln)
16	Wood-Fired Boiler #3 (29.75 MMBTU/hr)	Operating	Decommissioned (Not operating)	Decommissioned (Not operating)
20	Log Yard Road	Operating	Operating	Operating
21	Planer Mill	Operating	Operating	Operating
23 and 25	DPK #1	Under construction (Not operating)	Commissioned and Operating	Operating
14 and 24	DPK #2	N/A	Under construction (Not operating)	Commissioned and Operating
* The same permitting requirement in the permit #1681-AOP-R10				

Title VI Provisions

8. 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.

9. 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.

10. 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.

11. 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.

12. 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.

Permit Shield

13. 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 of this condition. The permit specifically identifies the following as applicable requirements based upon the information submitted by the permittee in an application dated May 12, 2008.

Applicable Regulations

Source No.	Regulation	Description
12, 13, 16	40 CFR 60, Subpart Dc	Standards of Performance for Small Industrial Commercial – Institutional Steam Generating Units
Facility	40 CFR Part 63, Subpart DDDD	National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products

14. The permittee shall completely enclose by fence all areas in the model that were excluded from the ambient air (see Appendix B). The fence shall be installed prior to operating under Operating Scenario #2. [§19.303 of Regulation 19 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SECTION VII: INSIGNIFICANT ACTIVITIES

The following sources are insignificant activities. Any activity that has a state or federal applicable requirement shall be considered a significant activity even if this activity meets the criteria of §26.304 of Regulation 26 or listed in the table below. Insignificant activity determinations rely upon the information submitted by the permittee in an applications dated May 12, 2008 and May 31, 2011.

Description	Category
1000 gallon AST (gasoline)	A-13
500 gallon AST (diesel fuel)	A-3
1000 gallon AST (diesel fuel)	A-3
1000 gallon AST (diesel fuel)	A-3
Bark Storage Piles	A-13
Sawdust Piles	A-13
Boiler Ash Piles	A-13
Planer Mill Woodwaste Storage Bins	A-13
Fuel Storage Silo	A-13

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 Regulation 26 §26.701(B)]

3. The permittee must submit a complete application for permit renewal at least six (6) months before permit expiration. Permit expiration terminates the permittee's right to operate unless the permittee submitted a complete renewal application at least six (6) months before permit expiration. If the permittee submits a complete application, the existing permit will remain in effect until the Department takes final action on the renewal application. The Department will not necessarily notify the permittee when the permit renewal application is due. [Regulation 26 §26.406]

4. Where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, et seq. (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, the permit incorporates both provisions into the permit, and the Director or the Administrator can enforce both provisions. [40 CFR 70.6(a)(1)(ii) and Regulation 26 §26.701(A)(2)]

5. The permittee must maintain the following records of monitoring information as required by this permit.

    a. The date, place as defined in this permit, and time of sampling or measurements;
    b. The date(s) analyses performed;
    c. The company or entity performing the analyses;
    d. The analytical techniques or methods used;
    e. The results of such analyses; and
    f. The operating conditions existing at the time of sampling or measurement.

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

6. The permittee must retain the records of all required monitoring data and support information for at least five (5) years from the date of the monitoring sample,

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

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

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

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

8. The permittee shall report to the Department all deviations from permit requirements, including those attributable to upset conditions as defined in the permit.

    a. For all upset conditions (as defined in Regulation19, § 19.601), the permittee will make an initial report to the Department by the next business day after the discovery of the occurrence. The initial report may be made by telephone and shall include:

        i. The facility name and location;
        ii. The process unit or emission source deviating from the permit limit;
        iii. The permit limit, including the identification of pollutants, from which deviation occurs;
        iv. The date and time the deviation started;
        v. The duration of the deviation;
        vi. The average emissions during the deviation;
        vii. The probable cause of such deviations;
        viii. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future; and
        ix. The name of the person submitting the report.

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

were exceeded and to reduce the length of time the limits were exceeded. The permittee may submit a full report in writing (by facsimile, overnight courier, or other means) by the next business day after discovery of the occurrence, and the report will serve as both the initial report and full report.

b. For all deviations, the permittee shall report such events in semi-annual reporting and annual certifications required in this permit. This includes all upset conditions reported in 8a above. The semi-annual report must include all the information as required by the initial and full reports required in 8a.

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

9. If any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity will not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable. [40 CFR 70.6(a)(5), Regulation 26 §26.701(E), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

10. The permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation 26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. §7401, et seq. and is grounds for enforcement action; for permit termination, revocation and reissuance, for permit modification; or for denial of a permit renewal application. [40 CFR 70.6(a)(6)(i) and Regulation 26 §26.701(F)(1)]

11. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit. [40 CFR 70.6(a)(6)(ii) and Regulation 26 §26.701(F)(2)]

12. The Department may modify, revoke, reopen and reissue the permit or terminate the permit for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [40 CFR 70.6(a)(6)(iii) and Regulation 26 §26.701(F)(3)]

13. This permit does not convey any property rights of any sort, or any exclusive privilege. [40 CFR 70.6(a)(6)(iv) and Regulation 26 §26.701(F)(4)]

14. The permittee must furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee must also furnish to the Director copies of records required by the permit. For information the permittee claims confidentiality, the Department may require the permittee to furnish such records directly to the Director

along with a claim of confidentiality. [40 CFR 70.6(a)(6)(v) and Regulation 26 §26.701(F)(5)]

15. The permittee must pay all permit fees in accordance with the procedures established in Regulation 9. [40 CFR 70.6(a)(7) and Regulation 26 §26.701(G)]

16. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes provided for elsewhere in this permit. [40 CFR 70.6(a)(8) and Regulation 26 §26.701(H)]

17. If the permit allows different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the operational scenario. [40 CFR 70.6(a)(9)(i) and Regulation 26 §26.701(I)(1)]

18. The Administrator and citizens may enforce under the Act all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, unless the Department specifically designates terms and conditions of the permit as being federally unenforceable under the Act or under any of its applicable requirements. [40 CFR 70.6(b) and Regulation 26 §26.702(A) and (B)]

19. Any document (including reports) required by this permit must contain a certification by a responsible official as defined in Regulation 26, §26.2. [40 CFR 70.6(c)(1) and Regulation 26 §26.703(A)]

20. The permittee must allow an authorized representative of the Department, upon presentation of credentials, to perform the following: [40 CFR 70.6(c)(2) and Regulation 26 §26.703(B)]

    a. Enter upon the permittee's premises where the permitted source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
    b. Have access to and copy, at reasonable times, any records required under the conditions of this permit;
    c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
    d. As authorized by the Act, sample or monitor at reasonable times substances or parameters for assuring compliance with this permit or applicable requirements.

21. The permittee shall submit a compliance certification with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The permittee must submit the compliance certification annually within 30 days following the last day of the anniversary month of the initial Title V permit. The permittee must also submit the compliance certification to the Administrator as well as to the Department.

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

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

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

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

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

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

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

[Regulation 18 §18.314(A), Regulation 19 §19.416(A), Regulation 26 §26.1013(A), A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

25. The permittee may request in writing and at least 30 days in advance, temporary emissions and/or testing that would otherwise exceed an emission rate, throughput requirement, or other limit in this permit. No such activities are authorized until the permittee receives written Department approval. Any such emissions shall be included in

the facility's total emissions and reported as such. The Department may grant such a request, at its discretion under the following conditions:

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

[Regulation 18 §18.314(B), Regulation 19 §19.416(B), Regulation 26 §26.1013(B), A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

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

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

[Regulation 18 §18.314(C), Regulation 19 §19.416(C), Regulation 26 §26.1013(C), A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

APPENDIX A

40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial – Commercial – Institutional Steam Generating Units

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 paragraphs (d), (e), (f), and (g) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).

(b) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, §60.48c(a)(4) shall be retained by the Administrator and not transferred to a State.

(c) Steam generating units that meet the applicability requirements in paragraph (a) of this section are not subject to the sulfur dioxide (SO_2) or particulate matter (PM) emission limits, performance testing requirements, or monitoring requirements under this subpart (§§60.42c, 60.43c, 60.44c, 60.45c, 60.46c, or 60.47c) during periods of combustion research, as defined in §60.41c.

(d) Any temporary change to an existing steam generating unit for the purpose of conducting combustion research is not considered a modification under §60.14.

(e) Heat recovery steam generators that are associated with combined cycle gas turbines and meet the applicability requirements of subpart 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 subject 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 subject by this subpart.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009]

§ 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 not meeting the definition of natural gas, 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) or diesel fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D975 (incorporated by reference, see §60.17).

Dry flue gas desulfurization technology means a SO_2control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline reagent and water, whether introduced separately or as a premixed slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline reagents used in dry flue gas desulfurization systems include, but are not limited to, lime and sodium compounds.

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

Emerging technology means any SO_2control system that is not defined as a conventional technology under this section, and for which the owner or operator of the affected facility has received approval from the Administrator to operate as an emerging technology under §60.48c(a)(4).

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

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

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

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

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

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

Natural gas means:

(1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or

(2) Liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see §60.17); or

(3) A mixture of hydrocarbons that maintains a gaseous state at ISO conditions. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 34 and 43 megajoules (MJ) per dry standard cubic meter (910 and 1,150 Btu per dry standard cubic foot).

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_2emissions (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 heats any 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_2control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a liquid material. This definition includes devices where the liquid material is subsequently converted to another form. Alkaline reagents used in wet flue gas desulfurization systems include, but are not limited to, lime, limestone, and sodium compounds.

Wet scrubber system means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of PM or SO_2.

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

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009]

§ 60.42c Standard for sulfur dioxide (SO_2).

(a) Except as provided in paragraphs (b), (c), and (e) of this section, on and after the date on which the performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that combusts only coal shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO_2emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2in 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_2in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO_2emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2in 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_2in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 20 percent (0.20) of the potential SO_2emission rate (80 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2in excess of SO_2in 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_2emissions limit or the 90 percent SO_2reduction 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_2emissions shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2in excess of 50 percent (0.50) of the potential SO_2emission rate (50 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2in 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_2reduction 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_2in 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_2in 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_2in excess of the following:

(1) The percent of potential SO_2emission rate or numerical SO_2emission rate required under paragraph (a) or (b)(2) of this section, as applicable, for any affected facility that

(i) Combusts coal in combination with any other fuel;

(ii) Has a heat input capacity greater than 22 MW (75 MMBtu/hr); and

(iii) Has an annual capacity factor for coal greater than 55 percent (0.55); and

(2) The emission limit determined according to the following formula for any affected facility that combusts coal, oil, or coal and oil with any other fuel:

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

Where:

E_s= SO_2emission limit, expressed in ng/J or lb/MMBtu heat input;

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

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

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

H_a= Heat input from the combustion of coal, except coal combusted in an affected facility subject to paragraph (b)(2) of this section, in Joules (J) [MMBtu];

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

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

(f) Reduction in the potential SO_2emission 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_2emission rate; and

(2) Emissions from the pretreated fuel (without either combustion or post-combustion SO_2control) 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_2emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.

(j) For affected facilities located in noncontinental areas and affected facilities complying with the percent reduction standard, 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.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009]

§ 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 can combust 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. Owners and operators of an affected facility that elect to install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) for measuring PM emissions according to the requirements of this subpart and are subject to a federally enforceable PM limit of 0.030 lb/MMBtu or less are exempt from the opacity standard specified in this paragraph.

(d) The PM and opacity standards under this section apply at all times, except during periods of startup, shutdown, or malfunction.

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

(2) As an alternative to meeting the requirements of paragraph (e)(1) of this section, the owner or operator of an affected facility for which modification commenced after February 28, 2005, may elect to meet the requirements of this paragraph. On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005 shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of both:

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

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

(3) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences

modification after February 28, 2005, and that combusts over 30 percent wood (by heat input) on an annual basis and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 43 ng/J (0.10 lb/MMBtu) heat input.

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

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

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

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

(b) The initial performance test required under §60.8 shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the percent reduction requirements and SO_2emission limits under §60.42c shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affect facility will be operated, but not later than 180 days after the initial startup of the facility. The steam generating unit load during the 30-day period does not have to be the maximum design heat input capacity, but must be representative of future operating conditions.

(c) After the initial performance test required under paragraph (b) of this section and §60.8, compliance with the percent reduction requirements and SO_2emission limits under §60.42c is based on the average percent reduction and the average SO_2emission rates for 30 consecutive steam generating unit operating days. A separate performance test is completed at the end of each steam generating unit operating day, and a new 30-day average percent reduction and SO_2emission rate are calculated to show compliance with the standard.

(d) If only coal, only oil, or a mixture of coal and oil is combusted in an affected facility, the procedures in Method 19 of appendix A of this part are used to determine the hourly SO_2emission rate (E_{ho}) and the 30-day average SO_2emission rate (E_{ao}). The hourly averages used to compute the 30-day averages are obtained from the CEMS. Method 19 of appendix A of this part shall be used to calculate $E_{ao}$when using daily fuel sampling or Method 6B of appendix A of this part.

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

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

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

Where:

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

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

E_w= SO_2concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 9 of appendix A of this part, ng/J (lb/MMBtu). The value $E_w$for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure $E_w$if the owner or operator elects to assume E_w= 0.

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

(2) The owner or operator of an affected facility that qualifies under the provisions of §60.42c(c) or (d) (where percent reduction is not required) does not have to measure the parameters $E_w$or $X_k$if the owner or operator of the affected facility elects to measure emission rates of the coal or oil using the fuel sampling and analysis procedures under Method 19 of appendix A of this part.

(f) Affected facilities subject to the percent reduction requirements under §60.42c(a) or (b) shall determine compliance with the SO_2emission limits under §60.42c pursuant to paragraphs (d) or (e) of this section, and shall determine compliance with the percent reduction requirements using the following procedures:

(1) If only coal is combusted, the percent of potential SO_2emission rate is computed using the following formula:

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

Where:

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

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

$\%R_f$= SO_2removal efficiency of fuel pretreatment as determined by Method 19 of appendix A of this part, in percent.

(2) If coal, oil, or coal and oil are combusted with other fuels, the same procedures required in paragraph (f)(1) of this section are used, except as provided for in the following:

(i) To compute the $\%P_s$, an adjusted $\%R_g$($\%R_g$o) is computed from E_{ao}o from paragraph (e)(1) of this section and an adjusted average SO_2inlet rate (E_{ai}o) using the following formula:

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

Where:

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

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

E_{ai}o = Adjusted average SO_2inlet rate, ng/J (lb/MMBtu).

(ii) To compute $E_{ai}o$, an adjusted hourly SO_2inlet rate ($E_{hi}o$) is used. The $E_{hi}o$ is computed using the following formula:

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

Where:

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

E_{hi}= Hourly SO_2inlet rate, ng/J (lb/MMBtu);

E_w= SO_2concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 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_2standards based on fuel supplier certification, the performance test shall consist of the certification from the fuel supplier, as described in §60.48c(f), as applicable.

(i) The owner or operator of an affected facility seeking to demonstrate compliance with the SO_2standards 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_2emissions data in calculating $\%P_s$and E_{ho}under paragraphs (d), (e), or (f) of this section, as applicable, whether or not the minimum emissions data requirements under §60.46c(f) are achieved. All valid emissions data, including valid data collected during periods of startup, shutdown, and malfunction, shall be used in calculating $\%P_s$or E_{ho}pursuant to paragraphs (d), (e), or (f) of this section, as applicable.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

§ 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 3A or 3B of appendix A–2 of this part shall be used for gas analysis when applying Method 5 or 5B of appendix A–3 of this part or 17 of appendix A–6 of this part.

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

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

(ii) Method 17 of appendix A of this part may be used at affected facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of Sections 8.1 and 11.1 of Method 5B of appendix A of this part may be used in Method 17 of appendix A of this part only if Method 17 of appendix A of this part is used in conjunction with a wet scrubber system. Method 17 of appendix A of this part shall not be used in conjunction with a wet scrubber system if the effluent is saturated or laden with water droplets.

(iii) Method 5B of appendix A of this part may be used in conjunction with a wet scrubber system.

(4) The sampling time for each run shall be at least 120 minutes and the minimum sampling volume shall be 1.7 dry standard cubic meters (dscm) [60 dry standard cubic feet (dscf)] except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.

(5) For Method 5 or 5B of appendix A of this part, the temperature of the sample gas in the probe and filter holder shall be monitored and maintained at 160 ±14 °C (320±25 °F).

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

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

(i) The O_2or CO_2measurements and PM measurements obtained under this section, (ii) The dry basis F factor, and

(iii) The dry basis emission rate calculation procedure contained in Method 19 of appendix A of this part.

(8) Method 9 of appendix A–4 of this part 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 Method 5 or 5B of appendix A–3 of this part or Method 17 of appendix A–6 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 Method 5 or 5B of appendix A–3 of this part or Method 17 of appendix A–6 of this part shall install, calibrate, maintain, and operate a CEMS and shall comply with the requirements specified in paragraphs (c)(1) through (c)(14) 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 (c)(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 (c)(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 (c)(7) of this section are not met.

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

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

(i) For PM, Method 5 or 5B of appendix A–3 of this part or Method 17 of appendix A–6 of this part shall be used; and

(ii) For O2 (or CO_2), Method 3A or 3B of appendix A–2 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.

(14) After July 1, 2011, within 90 days after the date of completing each performance evaluation required by paragraph (c)(11) of this section, the owner or operator of the affected facility must either submit the test data to EPA by successfully entering the data electronically into EPA's WebFIRE data base available at *http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main* or mail a copy to: United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; Mail Code: D243–01; RTP, NC 27711.

(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).

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009; 76 FR 3523, Jan. 20, 2011]

§ 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_2emission limits under §60.42c shall install, calibrate, maintain, and operate a CEMS for measuring SO_2concentrations and either O_2or CO_2concentrations at the outlet of the SO_2control device (or the outlet of the steam generating unit if no SO_2control 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_2concentrations and either O_2or CO_2concentrations at both the inlet and outlet of the SO_2control device.

(b) The 1-hour average SO_2emission 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_2emission rate must be based on at least 30 minutes of operation, and shall be calculated using the data points required under §60.13(h)(2). Hourly SO_2emission rates are not calculated if the affected facility is operated less than 30 minutes in a 1-hour period and are not counted toward determination of a steam generating unit operating day.

(c) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the CEMS.

(1) All CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 of appendix B of this part.

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

(3) For affected facilities subject to the percent reduction requirements under §60.42c, the span value of the SO_2CEMS at the inlet to the SO_2control device shall be 125 percent of the maximum estimated hourly potential SO_2emission rate of the fuel combusted, and the span value of the SO_2CEMS at the outlet from the SO_2control device shall be 50 percent of the maximum estimated hourly potential SO_2emission rate of the fuel combusted.

(4) For affected facilities that are not subject to the percent reduction requirements of §60.42c, the span value of the SO_2CEMS at the outlet from the SO_2control device (or outlet of the steam generating unit if no SO_2control device is used) shall be 125 percent of the maximum estimated hourly potential SO_2emission rate of the fuel combusted.

(d) As an alternative to operating a CEMS at the inlet to the SO_2control device (or outlet of the steam generating unit if no SO_2control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO_2emission rate by sampling the fuel prior to combustion. As an alternative to operating a CEMS at the outlet from the SO_2control device (or outlet of the steam generating unit if no SO_2control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO_2emission rate by using Method 6B of appendix A of this part. Fuel sampling shall be conducted pursuant to either paragraph (d)(1) or (d)(2) of this section. Method 6B of appendix A of this part shall be conducted pursuant to paragraph (d)(3) of this section.

(1) For affected facilities combusting coal or oil, coal or oil samples shall be collected daily in an as-fired condition at the inlet to the steam generating unit and analyzed for sulfur content and heat content according the Method 19 of appendix A of this part. Method 19 of appendix A of this part provides procedures for converting these measurements into the format to be used in calculating the average SO_2input rate.

(2) As an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

(3) Method 6B of appendix A of this part may be used in lieu of CEMS to measure SO_2at the inlet or outlet of the SO_2control system. An initial stratification test is required to verify the adequacy of the Method 6B of appendix A of this part sampling location. The stratification test shall consist of three paired runs of a suitable $SO_2$and CO_2measurement train operated at the candidate location and a second similar train operated according to the procedures in §3.2 and the applicable procedures in section 7 of Performance Specification 2 of appendix B of this part. Method 6B of appendix A of this part, Method 6A of appendix A of this part, or a combination of Methods 6 and 3 of appendix A of this part or Methods 6C and 3A of appendix A of this part are suitable measurement techniques. If Method 6B of appendix A of this part is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both sampling trains are to be operated similarly. For the location to be adequate for Method 6B of appendix A of this part 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent (0.10).

(e) The monitoring requirements of paragraphs (a) and (d) of this section shall not apply to affected facilities subject to §60.42c(h) (1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO_2standards based on fuel supplier certification, as described under §60.48c(f), as applicable.

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

§ 60.47c Emission monitoring for particulate matter.

(a) Except as provided in paragraphs (c), (d), (e), (f), and (g) of this section, the owner or operator of an affected facility combusting coal, oil, or wood that is subject to the opacity standards under §60.43c shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility subject to an opacity standard in §60.43c(c) that is not required to use a COMS due to paragraphs (c), (d), (e), or (f) of this section that elects not to use a COMS shall conduct a performance test using Method 9 of appendix A–4 of this part and the procedures in §60.11 to demonstrate compliance with the applicable limit in §60.43c by April 29, 2011, within 45 days of stopping use of an existing COMS, or 180 days after initial startup of the facility, whichever is later, and shall comply with either paragraphs (a)(1), (a)(2), or (a)(3) of this section. The observation period for Method 9 of appendix A–4 of this part performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation.

(1) Except as provided in paragraph (a)(2) and (a)(3) of this section, the owner or operator shall conduct subsequent Method 9 of appendix A–4 of this part performance tests using the procedures in paragraph (a) of this section according to the applicable schedule in paragraphs (a)(1)(i) through (a)(1)(iv) of this section, as determined by the most recent Method 9 of appendix A–4 of this part performance test results.

(i) If no visible emissions are observed, a subsequent Method 9 of appendix A–4 of this part performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted;

(ii) If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent Method 9 of appendix A–4 of this part performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted;

(iii) If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent Method 9 of appendix A–4 of this part performance test must be completed within 3 calendar months from the date that the most recent performance test was conducted; or

(iv) If the maximum 6-minute average opacity is greater than 10 percent, a subsequent Method 9 of appendix A–4 of this part performance test must be completed within 45 calendar days from the date that the most recent performance test was conducted.

(2) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A–4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A–4 of this part performance tests, elect to perform subsequent monitoring using Method 22 of appendix A–7 of this part according to the procedures specified in paragraphs (a)(2)(i) and (ii) of this section.

(i) The owner or operator shall conduct 10 minute observations (during normal operation) each operating day the affected facility fires fuel for which an opacity standard is applicable using Method 22 of appendix A–7 of this part and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period (*i.e.* , 30 seconds per 10 minute period). If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10 minute observation, immediately conduct a 30 minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period (*i.e.,* 90 seconds per 30 minute period), the owner or operator shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than 5 percent during a 30 minute observation (*i.e.,* 90 seconds) or conduct a new Method 9 of appendix A–4 of this part performance test using the procedures in paragraph (a) of this section within 45 calendar days according to the requirements in §60.45c(a)(8).

(ii) If no visible emissions are observed for 30 operating days during which an opacity standard is applicable, observations can be reduced to once every 7 operating days during which an opacity standard is applicable. If any visible emissions are observed, daily observations shall be resumed.

(3) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A–4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A–4 performance tests, elect to perform subsequent monitoring using a digital opacity compliance system according to a site-specific monitoring plan approved by the Administrator. The observations shall be similar, but not necessarily identical, to the requirements in paragraph (a)(2) of this section. For reference purposes in preparing the monitoring plan, see OAQPS "Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems." This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Policy Group (D243–02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods.

(b) All COMS shall be operated in accordance with the applicable procedures under Performance Specification 1 of appendix B of this part. The span value of the opacity COMS shall be between 60 and 80 percent.

(c) Owners and operators of an affected facilities that burn only distillate oil that contains no more than 0.5 weight percent sulfur and/or liquid or gaseous fuels with potential sulfur dioxide emission rates of 26 ng/J (0.060 lb/MMBtu) heat input or less and that do not use a post-combustion technology to reduce SO2 or PM emissions and that are subject to an opacity standard in §60.43c(c) are not required to operate a COMS if they follow the applicable procedures in §60.48c(f).

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

(e) Owners and operators of an affected facility that is subject to an opacity standard in §60.43c(c) and that does not use post-combustion technology (except a wet scrubber) for reducing PM, SO_2, or carbon monoxide (CO) emissions, burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur, and is operated such that emissions of CO discharged to the atmosphere from the affected facility are maintained at levels less than or equal to 0.15 lb/MMBtu on a boiler operating day average basis is not required to operate a COMS. Owners and operators of affected facilities electing to comply with this paragraph must demonstrate compliance according to the procedures specified in paragraphs (e)(1) through (4) of this section; or

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

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

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

(iii) At a minimum, valid 1-hour CO emissions averages must be obtained for at least 90 percent of the operating hours on a 30-day rolling average basis. The 1-hour averages are calculated using the data points required in §60.13(h)(2).

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

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

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

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

(f) Owners and operators of an affected facility that is subject to an opacity standard in §60.43c(c) and that uses a bag leak detection system to monitor the performance of a fabric filter (baghouse) according to the most recent requirements in section §60.48Da of this part is not required to operate a COMS.

(g) Owners and operators of an affected facility that is subject to an opacity standard in §60.43c(c) and that burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur and operates according to a written site-specific monitoring plan approved by the permitting authority is not required to operate a COMS. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009; 76 FR 3523, Jan. 20, 2011]

§ 60.48c Reporting and recordkeeping requirements.

(a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by §60.7 of this part. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

(2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under §60.42c, or §60.43c.

(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

(4) Notification if an emerging technology will be used for controlling SO_2emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of §60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.

(b) The owner or operator of each affected facility subject to the SO_2emission limits of §60.42c, or the PM or opacity limits of §60.43c, shall submit to the Administrator the performance test data from the initial and any subsequent performance tests and, if applicable, the performance evaluation of the CEMS and/or COMS using the applicable performance specifications in appendix B of this part.

(c) In addition to the applicable requirements in §60.7, the owner or operator of an affected facility subject to the opacity limits in §60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in paragraphs (c)(1) through (3) of this section, as applicable to the visible emissions monitoring method used.

(1) For each performance test conducted using Method 9 of appendix A–4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (c)(1)(i) through (iii) of this section.

(i) Dates and time intervals of all opacity observation periods;

(ii) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

(iii) Copies of all visible emission observer opacity field data sheets;

(2) For each performance test conducted using Method 22 of appendix A–4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (c)(2)(i) through (iv) of this section.

(i) Dates and time intervals of all visible emissions observation periods;

(ii) Name and affiliation for each visible emission observer participating in the performance test;

(iii) Copies of all visible emission observer opacity field data sheets; and

(iv) Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the owner or operator to demonstrate compliance with the applicable monitoring requirements.

(3) For each digital opacity compliance system, the owner or operator shall maintain records and submit reports according to the requirements specified in the site-specific monitoring plan approved by the Administrator

(d) The owner or operator of each affected facility subject to the SO_2emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.42c shall submit reports to the Administrator.

(e) The owner or operator of each affected facility subject to the SO_2emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.42c shall keep records and submit reports as required under paragraph (d) of this section, including the following information, as applicable.

(1) Calendar dates covered in the reporting period.

(2) Each 30-day average SO_2emission rate (ng/J or lb/MMBtu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.

(3) Each 30-day average percent of potential SO_2emission rate calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of the corrective actions taken.

(4) Identification of any steam generating unit operating days for which SO_2or diluent (O_2or CO_2) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.

(5) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.

(6) Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

(7) Identification of whether averages have been obtained based on CEMS rather than manual sampling methods.

(8) If a CEMS is used, identification of any times when the pollutant concentration exceeded the full span of the CEMS.

(9) If a CEMS is used, description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specifications 2 or 3 of appendix B of this part.

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

(11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1), (2), (3), or (4) of this section, as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

(f) Fuel supplier certification shall include the following information:

(1) For distillate oil:

(i) The name of the oil supplier;

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

(iii) The sulfur content or maximum sulfur content of the oil.

(2) For residual oil:

(i) The name of the oil supplier;

(ii) The location of the oil when the sample was drawn for analysis to determine the sulfur content of the oil, specifically including whether the oil was sampled as delivered to the affected facility, or whether the sample was drawn from oil in storage at the oil supplier's or oil refiner's facility, or other location;

(iii) The sulfur content of the oil from which the shipment came (or of the shipment itself); and

(iv) The method used to determine the sulfur content of the oil.

(3) For coal:

(i) The name of the coal supplier;

(ii) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether the sample was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected);

(iii) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and

(iv) The methods used to determine the properties of the coal.

(4) For other fuels:

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

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

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

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

(2) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in §60.48c(f) to demonstrate compliance with the SO_2standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

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

(h) The owner or operator of each affected facility subject to a federally enforceable requirement limiting the annual capacity factor for any fuel or mixture of fuels under §60.42c or §60.43c shall calculate the annual capacity factor individually for each fuel combusted. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of the calendar month.

(i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

(j) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

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APPENDIX B
Facility Fence Line Diagram


Anthony Forest Products
Boundary Fence
551000 551050 551100 551150 551200 551250 551300 551350 551400 551450 551500 551550 551600 551650 551700 551750 551800 551850 551900 551950 552000 552050 552100 552150 552200 552250 552300
UTM East [m]

CERTIFICATE OF SERVICE

I, Cynthia Hook, hereby certify that a copy of this permit has been mailed by first class mail to Anthony Forest Products Company, P.O. Box 724, Strong, AR, 71765, on this 14th day of November, 2011.

Cynthia Hook, ASIII, Air Division