

Fact Sheet



For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-02300023-2006**
Plant Identification Number: **023-00023**
Permittee: **Allegheny Wood Products, Inc.**
Facility Name: **Allegheny Wood Products, Inc., Plant #4**
Mailing Address: **P.O. Box 867, Petersburg, WV 26847**

Physical Location: Petersburg, Grant County, West Virginia
UTM Coordinates: 660.41 km Easting • 4316.88 km Northing • Zone 17
Directions: From the intersection of US Route 220 and State Route 28 in Petersburg, follow US Route 220 South to Airport Road. Turn right onto Airport Road and follow for approximately one mile to the Grant County Industrial Park. Turn right into the industrial park and Plant #4 is on the right

Facility Description

Allegheny Wood Products, Inc. Plant #4 is a lumber/wood products facility covered by Standard Industrial Classification (SIC) 2421. The station has the potential to operate twenty-four (24) hours per day, seven (7) days per week and fifty-two (52) weeks per year. The facility operates a dry kiln facility, a sawing and planing facility, and processes scrap wood to be used as fuel for the two boilers. There are thirteen (13) drying kilns at the facility that operate with steam heat generated from the boilers and which have no emissions associated with their operation.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Criteria Pollutants	Potential Emissions	2004 Actual Emissions
Carbon Monoxide (CO)	172.83	91
Nitrogen Oxides (NO _x)	10.38	6.59

Particulate Matter (PM ₁₀)	23.42	10
Sulfur Dioxide (SO ₂)	2.10	0.02
Volatile Organic Compounds (VOC)	7.88	2.59

PM₁₀ is a component of TSP.

Title V Program Applicability Basis

This facility has the potential to emit 155.3 tons per year of CO. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant, Allegheny Wood Products, Inc. is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	Control of Particulate Matter Emissions From Indirect Heat Exchangers
	45CSR6	Open burning prohibited.
	45CSR7	To Prevent And Control Particulate Matter Air Pollution From Manufacturing Processes And Associated Operations
	45CSR10	Control of Sulfur Dioxide Emissions from Indirect Heat Exchangers
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Permits for Construction, Modification, Relocation and Operation of Stationary Sources
	45CSR16	Standards of Performance for New Stationary Sources Pursuant to 40CFR Part 60
	45CSR30	Operating permit requirement.
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	40 C.F.R. Part 60, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR15, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (if any)
R13-1869A	July 7, 1999	Supersedes and replaces the original permit R13-1869 issued November 16, 1995

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

1. 45CSR2 - *To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers.*

- The Opacity limit for stacks "E011" and "E012" is 10% based on a six minute block average for each stack.
- Since the design heat inputs for boiler #1 and boiler #2 are 5.99 mmBtu/hr and 11.5 mmBtu/hr respectively, and 45CSR§2-8.4.c. and 45CSR§2A-3.1.b. exempt fuel burning units with a design heat input of less than 100 mmBtu/hr from periodic visible emissions testing and/or the use of continuous opacity monitors (COMS), no requirements for visible emissions testing or the use of COMS are included in the permit.

- The rated design heat input (DHI) for boiler #1 is 5.99 mmBtu/hr and for boiler #2 is 11.5 mmBtu/hr. Since boiler #1's design heat input is under 10 mmBtu/hr, it is exempt from the weight mass standard and the testing, monitoring recordkeeping and reporting requirements of this rule pursuant to 45CSR§2-11.

Boiler #2 is defined as a type "c" fuel burning unit and as such would have a particulate weight emission limit of 3.65 lb/hr in accordance with 45CSR§2-4.1.c. However, boiler #2 will be held to a more stringent PM emission limit of 3.41 lb/hr established in permit R13-1869A. Therefore the Rule 2 limit is streamlined with the more stringent limit of 3.41 lb/hr.

- Compliance will be demonstrated as described in #4 below.

2. 45CSR7- *To Prevent And Control Particulate Matter Air Pollution From Manufacturing Processes And Associated Operations*

- See #4 below containing requirements from R13-1869A

3. 45CSR10 - *To Prevent and Control Air Pollution from the Emission of Sulfur Oxides.*

- Boiler #1 is under 10 mmBtu/hr and is exempt from the SO₂ emission limit established in Rule 10 pursuant to 45CSR§10-10.1. The allowable SO₂ emission limit for the boiler #2 discharging through "E012" is established in 45CSR§10-3.3.f. as the product of 3.2 and the total design heat input. The rated design heat input (DHI) for boiler #2 is 11.5 mmBtu/hr. Using the calculation procedure (3.2 lb/mmBtu x TDHI) outlined in Section 3.3.f. of 45CSR10, the allowable SO₂ emission limit for boiler #2 is established as (3.2 lb/mmBtu x 11.5 mmBtu/hr) which equals 35.68 lb/hr. However, boiler #2 will be held to a more stringent SO₂ emission limit of 0.33 lb/hr established in permit R13-1869A. Therefore the Rule 10 limit is streamlined with the more stringent limit of 0.33 lb/hr.

- Compliance will be demonstrated as described in #4 below.

4. 45CSR13 – Permit No. R13-1869A – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation*

– The following specific requirements are established for boiler #2:

- a. The boiler shall use only wood waste as fuel and shall not consume wood waste in excess of 3120 lb/hr or 13,665 tons/yr.
 - Compliance will be demonstrated through maintaining a certified daily and monthly record and a yearly rolling total of the quantity of wood waste burned by the boiler.
- b. Emissions shall not exceed the following:

Pollutant	Emission Limits	
	(lb/hr)	(ton/yr)
CO	35.46	155.3
PM	3.41	14.9
NO _x	1.69	7.4
SO ₂	0.33	1.45
VOC	1.8	7.88

- Calculations utilizing data from stack tests performed on the boiler along with the actual amount of wood waste burned per hour can be used to demonstrate compliance with the emission limits. Therefore, each month the permittee shall record the amount of wood waste burned in the boiler, the hours of operation of the boiler, and the calculated amount of pounds of wood waste burned per hour. Proof of compliance with the emission limits can be demonstrated if the fuel usage is at or below 1911 pounds of wood waste per hour. Since the potential to emit for PM, NO_x, SO₂, and VOCs are well below the “major” threshold, and there exists a high margin of compliance as determined from previous tests, further testing for these pollutants, unless requested by the Director, will not be required in the permit. However, the potential to emit CO is greater than the 100 tons per year threshold and therefore subsequent testing for CO will be required once every five years. If a lower pounds of wood waste per hour limit is calculated from subsequent stack test data, proof of compliance with the CO emission limit can be demonstrated if the fuel usage is at or below the lower calculated pounds of wood waste per hour limit. Records containing the above information shall be maintained on site for a period of no less than five (5) years
- c. At such times as the Director of WVDAQ may designate, tests shall be conducted to determine compliance with the above limits in accordance with the methods outlined in the permit.
 - The previous stack test was performed on April 4, 2001. The current Title V permit requires a stack test be performed once every five years. Therefore a stack test of wood waste boiler CO emissions (as described above, PM, NO_x, SO₂ and VOC emissions tests will not be required) must be performed no later than April 4, 2006 or within five years of the most recent required stack test performed. The permittee shall conduct subsequent stack tests at least once every five years. Within 14 days of receipt of stack test data, the permittee, using the new stack test data, shall recalculate the amount of wood waste allowed to be burned per hour in the boiler in order to comply with the applicable CO emissions limit. Records containing the above information shall be maintained on site for a period of no less than five (5) years

- A requirement from 45CSR§7-3.1. for visible emissions from any process source operation (emission point E-013) shall not exceed twenty (20) percent opacity is contained in R13-1869A.
 - Compliance with opacity limit will primarily be demonstrated by monthly Method 22-like visible emission checks by an observer trained but not necessarily certified in Method 22 to determine if visible emissions exist. If visible emissions are observed during these checks or at any other time, tests in accordance with tests in accordance with 45CSR§§7A-2.1.a. and 2.1.b. shall be conducted to determine the magnitude of the visible emissions.
 - A requirement from 45CSR§7-3.7. which prohibits visible emissions from any storage structure associated with a manufacturing process is included in R13-1869A.
 - This requirement is not included in the Title V permit because the only storage structure potentially subject to it, is the storage bin which contains the fuel supply and feed to the boilers. Therefore the storage bin is considered part of the boilers regulated by 45CSR2. Pursuant to 45CSR§7-10., since the particulate matter emissions from the storage bin are regulated by 45CSR2, the provisions of 45CSR7 shall not apply.
5. 40 CFR 60 Subpart Dc - *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*
- Boiler #2 has a heat input below 30 mmBtu/hr. Therefore the only applicable requirements from this subpart are the initial notification requirements and the fuel quantity recordkeeping requirements.
 - The initial notification requirements have been met. A certified daily and monthly record and a yearly rolling total of the quantity of fuel combusted in boiler #2 will be maintained on site.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

- | | |
|--------------------------|---|
| 45CSR§§2-4,5,6,8 and 9 | Boiler #1 is under 10 mmBTU/hr and exempt from these sections per 45CSR§2-11. However, failure to attain acceptable air quality in parts of some urban areas may require mandatory control at a later date. |
| 45CSR§§2-8.1.a. and 8.2. | Boiler #1 and boiler #2 each have a design heat input less than 100 mmBtu/hr; therefore the boilers are exempt per 45CSR§2-8.4.c. |
| 45CSR10-3, 6, 7, and 8. | Boiler #1 is under 10 mmBTU/hr and exempt from these sections per 45CSR§10-10.1. However, failure to attain acceptable air quality in parts of some urban areas may require mandatory control at a later date. |
| 45CSR§10-8. | Both boilers combust wood alone and are exempt from this section per 45CSR§10-10.3. |
| 45 CSR§7-3.7. | The only storage structure potentially subject to this section of 45CSR7 is the storage bin which holds the wood waste fuel for the boilers. Therefore the bin is considered to be part of the fuel burning unit and is subject to the requirements of 45CSR2 and exempt from 45CSR7 requirements per 45CSR§7-10. |

45CSR34	This Rule establishes and adopts national emission standards for hazardous air pollutants (NESHAPS) and other regulatory requirements promulgated by the USEPA pursuant to 40 CFR Part 63 and section 112 of the federal Clean Air Act, as amended. There are no current 40 CFR Part 63 Regulations which apply to this facility.
40 C.F.R. 60 Subpart Db	The standby boiler #1 is exempt because it is less than 100 MMBTU/hr. Also, the "commenced construction" date for this boiler is prior to June 19, 1984.
40 C.F.R. 60, Subpart Dc	The main boiler #2 is not subject to the SO ₂ and PM standards because it is under 30mmBtu/hr heat input. It is, however, subject to the fuel recording provision.
40 CFR 63	There are no current 40 CFR Part 63 Regulations which apply to this facility.
40 CFR 64	The facility does not have a pollutant specific emissions unit with a control device to meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: January 31, 2006

Ending Date: March 2, 2006

All written comments should be addressed to the following individual and office:

Frederick Tipane
 Title V Permit Writer
 West Virginia Department of Environmental Protection
 Division of Air Quality
 601 57th Street SE
 Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Frederick Tipane
 West Virginia Department of Environmental Protection
 Division of Air Quality
 601 57th Street SE
 Charleston, WV 25304
 Phone: 304/926-0499 ext. (1215) • Fax: 304/926-0478

Response to Comments (Statement of Basis)

Not applicable.