

Fact Sheet



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

Permit Number: **R30-06700023-2023**
Application Received: **August 15, 2022**
Plant Identification Number: **3-54-067-00023**
Permittee: **Columbia West Virginia Corporation**
Facility Name: **Craigsville Facility**
Mailing Address: **P.O. Box 160, Craigsville, WV 26205**

Physical Location: Craigsville, Nicholas County, West Virginia
UTM Coordinates: 529.91 km Easting • 4,243.76 km Northing • Zone 17
Directions: From Craigsville, take Highway 150 West for approximately one mile.
Turn right onto Callahan Road and into the facility.

Facility Description

The Columbia West Virginia Corporation's Craigsville Facility produces veneer and plywood from poplar veneer. Poplar veneer is dried on-site. Finishing operations include sawing, sanding, and the application of patching and filling compounds and resins.

SIC: 2435, NAICS: 321211

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2021 Actual Emissions
Carbon Monoxide (CO)	99.96	61.30
Nitrogen Oxides (NO _x)	89.01	50.93
Particulate Matter (PM _{2.5})	72.0	44.62
Particulate Matter (PM ₁₀)	98.23	62.94
Total Particulate Matter (TSP)	108.19	71.96
Sulfur Dioxide (SO ₂)	10.46	5.79
Volatile Organic Compounds (VOC)	109.59	96.30

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2021 Actual Emissions
Acetaldehyde	1.39	1.24
Acrolein	0.20	0.13
Benzene	1.70	0.97
Chlorine	0.32	0.18
Dichloromethane	0.12	0.07
Formaldehyde	0.35	0.30
Hydrogen Chloride	0.20	0.12
Manganese	0.73	0.42
Methanol	5.40	4.65
Methyl Isobutyl Ketone	3.85	3.35
Phenol	0.81	0.43
Styrene	0.77	0.44
Toluene	0.37	0.21
Other HAPs with PTE < 0.1 tpy	0.41	0.19
Total HAPs	16.62	12.7

Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

This facility has the potential to emit 109.59 tpy of VOCs. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant, Columbia West Virginia Corporation 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	To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers.
	45CSR6	Control of Air Pollution from Combustion of Refuse.
	45CSR7	To Prevent and Control Particulate Matter Pollution from Manufacturing Processes and Associated Operations.
	45CSR10	To Prevent and Control Air Pollution from the Emission of Sulfur Oxides.
	45CSR11	Prevention of Air Pollution Emergency Episodes.
	45CSR13	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.
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Requirements for Operating Permits.
	45CSR34	Emission Standards for Hazardous Air Pollutants.
	40 C.F.R. Part 61 Subpart M	National Emission Standard for Asbestos.
	40 C.F.R. Part 63 Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.
	40 C.F.R. Part 63 Subpart JJJJJ	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources.
	40 C.F.R. Part 82 Subpart F	Protection of Stratospheric Ozone: Recycling and Emissions Reduction.
State Only:	45CSR4	To Prevent and Control the Discharge of Air Pollutants into the Open Air Which Causes or Contributes to Objectionable Odors.

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the 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, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance
R13-1361I	November 10, 2021

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," which may be downloaded from DAQ's website.

Determinations and Justifications

Columbia West Virginia Corporation's Craigsville Facility is an existing facility that was initially permitted under the NSR Permit R13-1361. With the issuance of R13-1361I, the facility became subject to Title V due to a potential to emit over 100 tpy of volatile organic compounds. This section outlines the applicable requirements that have been included in this initial Title V operating permit.

Section 3.0. – Facility-Wide Requirements

The following conditions were added to Section 3.0.:

Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-1361I Condition
3.1.9.	Operation and Maintenance of Air Pollution Control Equipment.	45CSR13	4.1.8.
3.1.10.	Facility-wide limits for certain criteria air pollutants.	45CSR13	3.1.7.
3.1.11.	Facility-wide limits for hazardous air pollutants.	45CSR13	3.1.8.
3.1.12.	Defines annual or yearly limitations for certain conditions in the permit.	45CSR13	4.1.7.
3.1.13.	Minimize emissions of fugitive particulate matter from manufacturing operations.	45CSR§7-5.1.	N/A
3.1.14.	Maintain particulate matter control on plant premises.	45CSR§7-5.2.	N/A
3.4.1.	Records of monitoring information.	45CSR13	4.4.1.
3.4.4.	Record of Maintenance of Air Pollution Control Equipment.	45CSR13	4.4.2.
3.4.5.	Record of Malfunctions of Air Pollution Control Equipment.	45CSR13	4.4.3.

Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-1361I Condition
3.4.6.	Recordkeeping of Fugitive Dust Control Measures.	45CSR§30-5.1.c.	N/A
3.4.7.	Non-applicability determinations.	45CSR§30-5.6.	N/A

Section 4.0. – Waste Wood-Fired Boiler [Emission Point ID: 1E]

The waste wood-fired boiler (Emission Unit ID: 1S) has a design heat input of 98.7 mmBTU/hr. The boiler was initially constructed in 1980 and relocated to the Craigsville Facility in 1992. The boiler uses hogged fuel consisting of wood bark, trimmings, and sawdust from the initial processing of the logs and the final processing of the wood veneer. The boiler produces steam for various manufacturing processes. Particulate matter emissions from the boiler are controlled by a multiclone.

The boiler is subject to requirements under the following regulations:

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

The waste wood-fired boiler meets the definitions of an indirect heat exchanger and a Type ‘c’ Fuel Burning Unit and, therefore, is subject to the particulate matter emission limit of 45CSR§§2-4.1. and -4.1.c. Based on the design heat input of 98.7 mmBTU/hr, a maximum allowable particulate matter emission rate of 16.5 lbs/hr is obtained from linear interpolation of the relevant values in Table 45-2 of 45CSR2. For streamlining purposes, compliance with this limit is shown through compliance with the limit established in Condition 4.1.1.d.

Per 45CSR§2-3.1., the boiler is also subject to a visible emission limit of 10% opacity. This requirement has been carried over from Condition 4.1.1.f. of R13-1361I. Compliance with the visible emission limit is shown through opacity readings of the boiler stack taken in accordance with 40 C.F.R. Part 60 Appendix A, Method 9 (Title V permit Condition 4.2.1.).

Pursuant to 45CSR§2-8.4.c., the permittee is exempt from the periodic testing requirements of subsection 8.1.a. and the monitoring requirements of section 8.2. However, testing may still be required per 45CSR§§2-8.1.b. and -8.1.c. Monitoring requirements for the visible emission limit and testing requirements for the PM emission limit were established in R13-1361D and have been carried through to R13-1361I and this operating permit.

The permittee is also subject to the prohibition of adding sulfur oxides to the exit gas stream of the boiler in 45CSR§2-4.4.; to the control of fugitive particulate matter emissions requirement in 45CSR§2-5.1.; to the recordkeeping requirements of the quantity and quality of fuel in 45CSR§2-8.3.c. and 45CSR§§2A-7.1.a. and 7.1.a.3.; to the requirement to operate the fuel burning unit and associated air pollution control equipment in accordance with good air pollution control practice for minimizing emissions in 45CSR§2-9.2.; and to the malfunction reporting requirements of 45CSR§2-9.3.

2. **45CSR10** – *To Prevent and Control Air Pollution from the Emission of Sulfur Oxides*

The waste wood-fired boiler meets the definitions of an indirect heat exchanger and a Type ‘c’ Fuel Burning Unit found in 45CSR§§10-2.9. and -2.8., respectively. Therefore, the boiler is subject to the sulfur dioxide (SO₂) emission limits of 45CSR10. Per 45CSR§10-3.3.f., the maximum allowable SO₂ emission rate for the boiler is the product of 3.2 and the design heat input (98.7 mmBTU/hr). Therefore, the SO₂ emission limit is 316 lbs/hr. A significantly more stringent limit of 2.47 lbs/hr was established in R13-1361D and has been carried forward to R13-1361I. For the purposes of streamlining, compliance with the SO₂ emission limit will be shown through compliance with the limit established in Condition 4.1.1.d.

As the boiler only combusts waste wood, 45CSR§10-10.3 exempts the permittee from the testing, monitoring, and recordkeeping requirements of Section 8 of 45CSR10.

3. **45CSR13** – *Permits for Construction, Modification, Relocation, and Operation of Stationary Sources of Air Pollutants*
4. **45CSR34** – *Emission Standards for Hazardous Air Pollutants.*
5. **40 C.F.R. Part 63 Subpart JJJJJJ** – *National Emission Standards for Industrial, Commercial, and Institutional Boilers Area Sources*

The waste wood-fired boiler is an industrial, biomass-fired boiler (as defined in 40 C.F.R. §63.11237) located at an area source of hazardous air pollutants. Therefore, the boiler is subject to the requirements of Subpart JJJJJJ of the NESHAP. Under this subpart, the boiler is an existing source as construction commenced before the applicability date (June 04, 2010). Initial Notification of the waste wood-fired boiler was received by the DAQ on August 05, 2011. Per Table 2 to Subpart JJJJJJ of Part 63, the boiler is subject to the provisions requiring biennial performance tune-ups (Item 6 of table) and a one-time energy assessment (Item 16 of table).

A Notification of Compliance Status report was received by the DAQ on July 18, 2012 following the completion of the initial tune-up, as was required by 40 C.F.R. §63.11214(b). The permittee is also required to conduct subsequent biennial tune-ups in accordance with §§63.11223(a) and (b). The applicable requirements for the tune-ups have been included as Condition 4.1.6. of the operating permit. To demonstrate continuous compliance with these requirements, the permittee is also subject to the applicable recordkeeping and reporting requirements of §§63.11225(b), (c), and (d).

As the boiler has a heat input greater than 10 mmBTU/hr, the permittee was also required to conduct a one-time energy assessment in accordance with Item 16 of Table 2 to Subpart JJJJJJ. The permittee reported that the energy assessment was completed in August of 2013. Therefore, the permittee is only subject to the relevant recordkeeping requirements of 40 C.F.R. §63.11225(c) for the energy assessment.

The table below provides a description of each condition added to Section 4.0. of the Title V Permit:

Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-1361I Condition
4.1.1.	Operating requirements and emission limits for the waste wood-fired boiler.	45CSR13	4.1.1.
4.1.2.	Prohibits the addition of sulfur oxides to the boiler’s exit gas stream without approval from the Director.	45CSR§2-4.4.	N/A
4.1.3.	Sources of fugitive particulate matter must be equipped with a control system.	45CSR§2-5.1.	N/A
4.1.4.	45CSR2 requirement to operate and maintain the boiler using good air pollution control practices.	45CSR§2-9.2.	N/A
4.1.5.	Subpart JJJJJJ general requirement to minimize emissions.	45CSR34 40 C.F.R. §63.11205(a)	N/A

Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-1361I Condition
4.1.6.	Requirements for biennial performance tune-ups.	45CSR34 40 C.F.R. §§63.11201(b), 63.11223(a) and (b), and Item 6 of Table 2 to Subpart JJJJJ of Part 63	N/A
4.2.1.	Visible emissions monitoring.	45CSR13 45CSR§2-3.2.	4.2.3.
4.3.1.	Biennial performance testing requirements for boiler and multiclone.	45CSR13	4.3.1.
4.4.1.	Records of Monitoring Requirements.	45CSR13	4.2.1.
4.4.2.	Recordkeeping for boiler efficiency and heat input.	45CSR13	4.4.5.
4.4.3.	The recordkeeping requirement of Condition 4.5.3. of R13-1361I has been included in the operating permit. The status report for the implementation of the monitoring plan was received by the DAQ on December 28, 2009.	45CSR13	4.5.3.
4.4.4.	Records of the boiler's operating schedule and of the quality and quantity of fuel burned must be maintained.	45CSR§2-8.3.c. 45CSR§2A-7.1.a.3.	N/A
4.4.5.	Subpart JJJJJ Recordkeeping Requirements for Notifications, Work Practice Standards, and Periods of Malfunction.	45CSR34 40 C.F.R. §§63.11225(c), (c)(1), (c)(2), (c)(4), and (c)(5)	N/A
4.4.6.	Retention of Records from Subpart JJJJJ.	45CSR34 40 C.F.R. §63.11225(d)	N/A
4.5.1.	Reporting requirement for exceedances of the visible emissions requirement when conducting Method 9 monitoring according to Condition 4.2.1. of this permit.	45CSR13	4.5.1.
4.5.2.	Reporting requirement for performance test results.	45CSR13	4.5.2.
4.5.3.	Reporting requirements for malfunctions that cause an exceedance of the emission limits of 45CSR§2-4.1. or the opacity limits of 45CSR§2-3.2.	45CSR§2-9.3.	N/A
4.5.4.	Compliance Certification report for Subpart JJJJJ.	45CSR34 40 C.F.R. §§63.11225(b), (b)(1) through (b)(3)	N/A

Section 5.0. – Plywood Manufacturing Operations [Emission Point IDs: 3Ea through 3Ef, 4Ea through 4Ef, 5E, E10, E11, and Fugitive]

The plywood manufacturing operations include the drying, pressing, and finishing operations.

Dryer 1 and Dryer 2 (Emission Points: 3Ea through 3Ef and 4Ea through 4Ef) are indirectly heated by steam produced by the waste wood-fired boiler. The dryers are used to remove moisture from the wood veneer. Emissions from the two dryers primarily consist of particulate matter and VOCs (including some HAPs) which are controlled by limiting the feed rate of wood veneer sent through each dryer. After drying operations, the wood is either stored for shipment or sent to the plywood manufacturing area of the facility.

Resin is applied to veneer panels, and the panels are stacked to 5 or 7 ply thickness. The piles are then pressed together in the plywood press (Emission Point: 5E), which is indirectly heated with steam from the waste wood-fired boiler. Emissions from the plywood press primarily consists of particulate matter and VOCs (including some HAPs) which are controlled by limiting the plywood production rate and limiting the HAP content and the VOC content of the resin used in the plywood production.

Following the pressing operations, veneer finishing operations including the sawing (P-SAW), sanding (P-SAND), and patching operations (8S) are conducted on the panels as needed. Trimmings and particulate matter emissions generated by the sawing operation are controlled by Baghouse 1 (BH1) and particulate matter emissions generated by the sanding operations are controlled by Baghouse 2 (BH2). VOC emissions from the putty line are limited and monitored by the calculation of the actual VOC emissions.

The plywood manufacturing operations are subject to requirements under the following regulations:

1. **45CSR7** – *To Prevent and Control Particulate Matter Air Pollution from Manufacturing Processes and Associated Operations.*

The plywood manufacturing operations are subject to the particulate matter emission limit established via 45CSR§7-4.1. The operations are classified as Type ‘a’ source operations.

- a. The dryers, collectively, have a maximum hourly veneer drying rate of 37.5 MSF- 3/8” or 32,812 pounds of veneer per hour. Using Table 45-7A, the dryers have a maximum allowable particulate matter emission rate of 23.7 pounds per hour. Compliance with this emission limit is shown through compliance with the PM-limit of Condition 5.1.1.a.
- b. The plywood press has a maximum hourly throughput of 16.64 MSF-3/8” or 14,560 pounds per hour. Using Table 45-7A, the press has a maximum allowable particulate matter emission rate of 12.7 pounds per hour. Compliance with this emission limit is shown through compliance with the PM-limit of Condition 5.1.3.a.
- c. The potential particulate matter emissions before the baghouse control devices were based on the amount of wood veneer removed during each of these activities. Assuming this removal weight as the process weight rate for the operations, the maximum process weight rate of the sawing and sanding operations is collectively 5,569 pounds per hour. Using Table 45-7A, the sawing and sanding operations have a maximum allowable particulate matter emission rate of 5.6 pounds per hour. Compliance with this emission limit is shown by compliance with the PM-limit of Condition 5.1.4.b.

The plywood manufacturing operations are also subject to the visible emission limits of 45CSR§§7-3.1. and -3.2. Compliance must be demonstrated for the drying vents and the baghouse vents.

- a. The use of Method 22 observations was previously determined to be unfeasible for Dryer 1 and Dryer 2 considering that the dryers remove moisture from the veneer, creating a moisture plume that exits through the exhaust vents. Thus, compliance with the visible emissions from the dryer vents is demonstrated by monitoring the stacks with quarterly observations taken in accordance with 40 C.F.R. Part 60 Appendix A, Method 9. Following four consecutive quarters with no exceedances from the limits, the frequency of subsequent observations may be taken once every year. The same visible emissions monitoring requirements have also been applied to the baghouses.

- b. The plywood press is a volume source that is located in the manufacturing building which acts as a partial enclosure. Emissions from the press are not directly vented outside, but the building does have a large opening in the roof. Under these conditions, it was previously determined that it would be difficult to make a visible emissions observation. Additionally, the potential particulate matter emissions from the plywood press (1.43 lbs/hr without the use of a control device) is much less than the limit established through 45CSR§7-4.1., and the enclosure should prevent a significant amount of these emissions from being emitted into the atmosphere. Therefore, no visible emission monitoring is currently required to demonstrate compliance with the visible emission limit of the plywood press.

The permittee is also subject to the facility-wide fugitive dust control requirements of 45CSR§§7-5.1. and 5.2. These requirements have been included in the operating permit as Conditions 3.1.13. and 3.1.14, and compliance is demonstrated through the recordkeeping requirements of Condition 3.4.6.

2. **45CSR13** – *Permits for Construction, Modification, Relocation, and Operation of Stationary Sources of Air Pollutants.*

The table below provides a description of each condition added to Section 5.0. of the Title V Permit:

Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-1361I Condition
5.1.1.	Operating and emission standards for the veneer dryers.	45CSR13	4.1.2.
5.1.2.	Emission limits for VOCs and HAPs from the log steaming vat.	45CSR13	4.1.5.
5.1.3.	Operating and emission standards for the plywood press.	45CSR13	4.1.3.
5.1.4.	Operating and emission standards for the veneer finishing operations.	45CSR13	4.1.4.
5.1.5.	Exception for the opacity limit of 45CSR§7-3.1.	45CSR§7-3.2.	N/A
5.1.6.	45CSR7 requirement for air flow through stack.	45CSR§7-4.12.	N/A
5.2.1.	Monitoring and recordkeeping requirements for the usage of adhesives and filling compounds in patching operations.	45CSR13	4.2.2.
5.2.2.	Visible emissions monitoring for all vent stacks of the veneer dryers.	45CSR13	4.2.4.
5.2.3.	Visible emissions monitoring for each baghouse vent that control particulate matter emissions from the sawing and sanding operations.	45CSR13	4.2.5.
5.4.1.	Recordkeeping for start-up/shutdown and production rates of the veneer dryers.	45CSR13	4.2.1.
5.4.2.	Records of VOC and HAP content of materials consumed in the manufacturing process.	45CSR13	4.4.4.

Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-136II Condition
5.5.1.	Reporting requirement for exceedances of the visible emissions requirements when conducting Method 9 monitoring according to Conditions 5.2.2. and 5.2.3. of this permit.	45CSR13	4.5.1.

Section 6.0. – Waste Oil Burner [Emission Point ID: 2E]

A 0.315 mmBTU/hr waste oil burner is also operated at the facility. The furnace burns the oil used in various lubrication applications at the facility for the purposes of providing heat to the log yard maintenance shop and to remove the waste oil from the facility.

40 C.F.R. Part 63 Subpart JJJJJJ – *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* does not apply to the waste oil burner. Per 40 C.F.R. §63.11193, Subpart JJJJJJ is only applicable to boilers as defined in 40 C.F.R. §63.11237 that are located at an area source of HAPs. As the waste oil burner does not use “controlled flame combustion in which water is heated to recover thermal energy in the form of steam and/or hot water”, Subpart JJJJJJ of the NESHAP is not applicable.

The burner is subject to requirements under the following regulations:

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

45CSR2 establishes particulate matter emission standards and requirements for fuel burning units. Per 45CSR§2-2.10., a fuel burning unit includes any furnace used in the process of burning fuel or other combustible material for the primary purpose of producing heat or power by indirect heat transfer. Therefore, the waste oil burner is subject to the particulate matter emission standards of this rule. Under this rule, the waste oil burner is subject to a ten percent opacity limit which has been included in the operating permit as Condition 6.1.2.

As the waste oil burner has a design heat input less than 10 mmBTU/hr, the permittee is exempt from the emission standards of Section 4, the fugitive emissions control standards of Section 5; the registration standards of Section 6; the testing, monitoring, recordkeeping, and reporting requirements of Section 8; and the start-up, shutdown, and malfunction requirements of Section 9 of this rule per 45CSR§2-11.1. A requirement has been added as Condition 6.2.2. to require the permittee to demonstrate compliance with the opacity limit by conducting emission observations in accordance with Method 9 of 40 C.F.R. Part 60 Appendix A, as designated by the Director.

2. **45CSR10** – *To Prevent and Control Air Pollution from the Emission of Sulfur Oxides*

45CSR10 establishes sulfur oxides emission standards and requirements for fuel burning units. Per 45CSR§10-2.8., a fuel burning unit includes any furnace used in the process of burning fuel or other combustible material for the primary purpose of producing heat or power by indirect heat transfer. Therefore, the waste oil burner is subject to the emission standards of this rule.

However, per 45CSR§10-10.1., fuel burning units with a design heat input less than 10 mmBTU/hr are exempt from Section 3 and Sections 6 through 8 of this rule. Furthermore, Section 4 is inapplicable because the waste oil burner is not part of a manufacturing process, and Section 5 is inapplicable because the waste oil burner does not combust a refinery or other process gas stream that contains hydrogen sulfide. For these reasons, although the waste oil burner is subject to 45CSR10, there are currently no applicable requirements from this rule.

3. **45CSR13** – *Permits for Construction, Modification, Relocation, and Operation of Stationary Sources of Air Pollutants*

The table below provides a description of each condition added to Section 6.0. of the Title V Permit:

Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-1361I Condition
6.1.1.	Yearly limitation of the amount of waste oil combusted by the burner.	45CSR13	4.1.6.
6.1.2.	Opacity limit.	45CSR§2-3.1.	N/A
6.1.3.	40 C.F.R. Part 60 Appendix A, Method 9 is used to demonstrate compliance with the 45CSR2 opacity limit.	45CSR§2-3.2.	N/A
6.2.1.	Monitoring and Recordkeeping of the Waste Oil Consumed.	45CSR13	4.2.2.
6.2.2.	Visible emissions monitoring required at the discretion of the Director.	45CSR§30-5.1.c.	N/A
6.4.1.	Recordkeeping of Times of Start-up and Shutdown for the Waste Oil Burner.	45CSR13	4.2.1.

Section 7.0. – Fire-Water Pump Engine [Emission Point ID: FWP1]

The facility owns and operates a fire-water pump engine (Emission Unit ID: FWP1). The engine is a compression ignition (CI) internal combustion engine (ICE) that combusts diesel fuel and has a maximum rating of 245 HP. The fire pump engine is only used for emergency, maintenance, and testing purposes.

40 C.F.R. Part 60 Subpart IIII – *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* does not apply to the fire pump engine. Per 40 C.F.R. §§60.4200(a)(2) and (a)(2)(ii), Subpart IIII applies to the owners and operators of a stationary CI ICE for which construction commenced after July 11, 2005 and which were manufactured after July 1, 2006. As the fire pump engine was constructed and installed at the facility before this date of applicability (constructed and installed in 1991), Subpart IIII of the NSPS is not applicable.

The engine is subject to requirements under the following regulations:

1. **40 C.F.R. Part 63 Subpart ZZZZ** – *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*

Subpart ZZZZ of the NESHAP applies to the owner or operator of a stationary RICE that is located at major or area sources of HAP emissions. Per 40 C.F.R. §63.6590(a)(1)(iii), the fire-water pump engine is an existing source. In order to be considered an emergency engine under this subpart, the requirements of §63.6640(f) must be met. The fire pump engine is subject to regular inspection and maintenance requirements, operational limits, and to monitoring requirements for a non-resettable hour meter.

2. **45CSR34** – *Emission Standards for Hazardous Air Pollutants*

The table below provides a description of each condition added to Section 7.0. of the Title V Permit:

Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-1361I Condition
7.1.1.	Applicable requirements for existing emergency stationary CI RICE located at an area source of HAP emissions.	45CSR34 40 C.F.R. §63.6603(a) and Item 4 of Table 2d to Subpart ZZZZ of Part 63	N/A
7.1.2.	Operation and maintenance requirement.	45CSR34 40 C.F.R. §§63.6625(e) and (e)(3), 63.6640(a), and Item 9 to Table 6 to Subpart ZZZZ of Part 63	N/A
7.1.3.	Optional oil analysis program.	45CSR34 40 C.F.R. §63.6625(i)	N/A
7.1.4.	Minimize the engine's startup time.	45CSR34 40 C.F.R. §63.6625(h)	N/A
7.1.5.	Operation requirements for FWP1 to be considered an emergency engine under Subpart ZZZZ.	45CSR34 40 C.F.R. §63.6640(f)	N/A
7.1.6.	General Requirements from Subpart ZZZZ.	45CSR34 40 C.F.R. §63.6605	N/A
7.1.7.	Conditional fuel requirement if the engine is operated for the purposes of 40 C.F.R. §63.6640(f)(4)(ii).	45CSR34 40 C.F.R. §63.6604(b)	N/A
7.2.1.	Installation of a non-resettable hour meter.	45CSR34 40 C.F.R. §63.6625(f)	N/A
7.4.1.	Maintain records of maintenance.	45CSR34 40 C.F.R. §63.6655(e)	N/A
7.4.2.	Recordkeeping for hours of operation of the engine.	45CSR34 40 C.F.R. §§63.6655(f) and (f)(2)	N/A
7.4.3.	Recordkeeping requirements.	45CSR34 40 C.F.R. §63.6660	N/A
7.5.1.	Conditional reporting requirement if the engine is operated according to 40 C.F.R. §63.6640(f)(4)(ii).	45CSR34 40 C.F.R. §§63.6650(a) and (h) and Item 4 of Table 7 to Subpart ZZZZ of Part 63	N/A

Non-Applicability Determinations

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

1. **45CSR17** – *To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage, and Other Sources of Fugitive Particulate Matter* – The waste wood-fired boiler (1S) and waste oil burner are subject to the fugitive particulate matter emission requirements of 45CSR2. The dryers (Dryer 1 and Dryer 2), plywood press (P-VOC), plywood sawing operations (P-SAW), and plywood sanding operations (P-

SAND) are subject to the fugitive particulate matter emission requirements of 45CSR7. Thus, these operations are exempt from the provisions of this rule via 45CSR§17-6.1.

2. **45CSR21** – *Regulation to Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds* – The facility is located in Nicholas County and, therefore, is not located in a county to which this rule applies.
3. **40 C.F.R. Part 60 Subpart Dc** – *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* – The waste wood-fired boiler was constructed in 1980, relocated to the facility in 1992, and has neither been modified nor reconstructed as defined in 40 C.F.R. §§60.14 and 60.15, respectively. Subpart Dc is not applicable to this boiler as construction began before the date of applicability, June 09, 1989.
4. **40 C.F.R. Part 63 Subpart JJ** – *National Emission Standards for Wood Furniture Manufacturing Operations* – The facility is not a major source of HAPs. Thus, Subpart JJ is not applicable to the facility.
5. **40 C.F.R. Part 63 Subpart DDDD** – *National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products* – The facility is not a major source of HAPs. Thus, Subpart DDDD is not applicable to the facility.
6. **40 C.F.R. Part 63 Subpart QQQQ** – *National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products* – The facility is not a major source of HAPs. Thus, Subpart QQQQ is not applicable to the facility.
7. **40 C.F.R. Part 63 Subpart DDDDD** – *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters* – The facility is not a major source of HAPs. Thus, Subpart DDDDD is not applicable to the facility.
8. **40 C.F.R. Part 64** – *Compliance Assurance Monitoring (CAM)*:
 1. CAM is applicable to the Waste Wood-Fired Boiler which meets each of the applicability requirements in 40 C.F.R. §64.2(a):
 - a. The boiler is subject to particulate matter (PM) emission and opacity limits of 45CSR2 as well as the 45CSR13 permit;
 - b. PM emissions from the boiler are controlled by a multiclone; and
 - c. The pre-control device emissions of the boiler exceed 100 tpy of PM₁₀, the threshold for a source to be classified as a major source under Title V.
 - i. The post control device emissions of PM₁₀ from the boiler are 67.45 tpy, and the multiclone operates with a control efficiency of 80%. Thus, pre-control PM₁₀ emissions from the boiler are:

$$\frac{67.45 \text{ tpy}}{(1 - 0.8)} = 337.3 \text{ tpy}$$

2. CAM is also applicable to the sawing and sanding operations (P-SAW and P-SAND) which both meet each of the applicability requirements in 40 C.F.R. §64.2(a):
 - a. The sawing and sanding operations are subject to particulate matter emission and opacity limits of 45CSR7 as well as particulate matter limits through the 45CSR13 permit;
 - b. PM emissions from P-SAW are controlled by the baghouse BH1 and from P-SAND are controlled by the baghouse BH2; and

- c. The pre-control device emissions of each operation exceed 100 tpy of PM₁₀, the threshold for a source to be classified as a major source under Title V.
- i. The post control device emissions of PM₁₀ from P-SAW are 6.96 tpy, and BH1 operates with a control efficiency of 99.96%. Thus, pre-control PM₁₀ emissions from P-SAW are:

$$\frac{6.96 \text{ tpy}}{(1 - 0.9996)} = 17,400 \text{ tpy}$$

- ii. The post control device emissions of PM₁₀ from P-SAND are 2.79 tpy, and BH2 operates with a control efficiency of 99.96%. Thus, pre-control PM₁₀ emissions from P-SAND are:

$$\frac{2.79 \text{ tpy}}{(1 - 0.9996)} = 6,975 \text{ tpy}$$

However, as post-control emissions of PM₁₀ from each unit are less than 100 tpy, the Waste Wood-Fired Boiler, P-SAW, and P-SAND are considered “other pollutant-specific emissions units” per 40 C.F.R. §64.5(b). Therefore, the submission of a CAM plan for each unit is deferred until the renewal application for this Title V operating permit.

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: June 08, 2023

Ending Date: July 10, 2023

Point of Contact

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

Sarah Barron
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
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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.

Response to Comments (Statement of Basis)

None.