Commonwealth of Kentucky Energy and Environment Cabinet Department for Environmental Protection Division for Air Quality 300 Sower Boulevard, 2nd Floor Frankfort, Kentucky 40601 (502) 564-3999

Draft

AIR QUALITY PERMIT Issued under 401 KAR 52:020

Permittee Name: The Freeman Corporation

P.O. Box 96, Winchester, KY 40392-0096 **Mailing Address:**

Source Name: The Freeman Corporation

Mailing Address: P.O. Box 96, Winchester, KY 40392-0096

Source Location: 415 Magnolia Street, Winchester, KY

Permit ID: V-24-030

Agency Interest #: 811

Activity ID: APE29190001, APE20220001, APE20230001

Review Type: Title V, Operating **Source ID:** 21-049-00004

Frankfort Regional Office **Regional Office:**

300 Sower Boulevard, 1st Floor

Frankfort, KY 40601

(502) 564-3358

County: Clark

Application

Complete Date:

November 9, 2024

Issuance Date: Expiration Date:

For Michael J. Kennedy, P.E.

Director

Division for Air Quality

Version 4/1/2022

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Permit	Permit Type	Activity #	Complete Date	Issuance Date	Summary of Action
V-24-030	Renewal	APE20190001	9/25/2019		Renewal Permit with Two Off permit Changes included

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SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Energy and Environment Cabinet (Cabinet) hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit was issued under the provisions of Kentucky Revised Statutes (KRS) Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Units 011, 012, and 015 Wood-Fired Indirect Heat Exchangers (Boilers)

Emission Unit 011 Wood-Fired Boiler # 1

Description:

Model: Wickes Model 62755

Construction Commenced: 2/28/91

Heat Input Capacity: 12.0 MMBtu/hour

Primary Fuel: 1.85 ton/hour Wood Waste

Controls: Multicyclone/Fly Ash Reinjection

Emission Unit 012 Wood-Fired Boiler #2

Description:

Model: Wickes Model 61004

Construction Commenced: 5/29/91

Heat Input Capacity: 10.0 MMBtu/hour

Primary Fuel: 1.54 ton/hour Wood Waste

Controls: Multicyclone/Fly Ash Reinjection

Emission Unit 015 Wood-Fired Boiler #3

Description:

Model: Hurst Model UFW-600

Construction Commenced: 8/31/96

Heat Input Capacity: 28.7 MMBtu/hour

Primary Fuel: 4.42 tons/hour Wood Waste
Controls: Multicyclone/Fly Ash Reinjection

APPLICABLE REGULATIONS:

401 KAR 59:015, *New indirect heat exchangers*

401 KAR 60:005, Section 2(2)(d) 40 C.F.R. 60.40c through 60.48c (**Subpart Dc**), Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

401 KAR 63:002, Section 2(4)(jjjjj) 40 C.F.R. 63.11193 through 63.11237, Tables 1 through 8 (**Subpart JJJJJJ**), National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

PRECLUDED REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality.* The permittee has taken a source-wide limitation to avoid applicability of 401 KAR 51:017.

1. **Operating Limitations**:

a) The average moisture content of the fuel shall not exceed 43%, on a weekly basis [401 KAR 50:055 Section 2(5)].

Compliance Demonstration Method:

Compliance shall be demonstrated according to **4. Specific Monitoring Requirements** (b).

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b) During a startup period or a shutdown period, the permittee shall comply with the work practice standards established in Table 2 to 40 CFR 63, Subpart JJJJJJ [401 KAR 59:015, Section 7(2)(c)].

- c) The permittee shall conduct a tune-up of the boilers biennially to demonstrate compliance as specified in 40 CFR 63.11223(b)(1) through (7). Each biennial tune-up shall be conducted no more than 25 months after the previous tune-up. [40 CFR 60.11201(b) referencing Item 6. from Table 2. of 40 CFR 63, Subpart JJJJJJ referencing 40 CFR 63.11223(b)]:
 - i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may delay the burner inspection until the next scheduled unit shutdown, but shall inspect each burner at least once every 36 months). [40 CFR 63.11223(b)(1)]
 - ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. [40 CFR 63.11223(b)(2)]
 - iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). [40 CFR 63.11223(b)(3)]
 - iv) Optimize total emissions of carbon monoxide (CO). This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject. [40 CFR 63.11223(b)(4)]
 - v) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 CFR 63.11223(b)(5)]
 - vi) Maintain onsite and submit, if requested by the Administrator, a report containing the information below: [40 CFR 63.11223(b)(6)]
 - A) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler. [40 CFR 63.11223(b)(6)(i)]
 - B) A description of any corrective actions taken as a part of the tune-up of the boiler. [40 CFR 63.11223(b)(6)(ii)]
 - C) The type and amount of fuel used over the 12 months prior to the biennial tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 CFR 63.11223(b)(6)(iii)]
 - vii) If the unit is not operating on the required date for a tune-up, the tune-up shall be conducted within 30 days of startup. [40 CFR 63.11223(b)(7)]
- d) At all times the permittee shall operate and maintain the boilers, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.11205(a)]

2. Emission Limitations:

a) The permittee shall not cause emissions of particulate matter (PM) in excess of the following: [401 KAR 59:015, Section 4(1)(c)]

Emission Unit	Emission Standard (lb/MMBtu)
011	0.46
012	0.42
015	0.37

Compliance Demonstration Method:

Compliance with the 401 KAR 59:015 PM emission limitation shall be demonstrated using emission factors from AP-42; 1.6-1:

b) Emissions from each stack shall not exceed 20% opacity, based on a six-minute average, except that a maximum of 40% opacity, based on a six-minute average, shall be permissible for not more than six consecutive minutes in any consecutive 60 minutes during cleaning the fire-box or blowing soot [401 KAR 59:015, Section 4(2].

Compliance Demonstration Method:

See 4. Specific Monitoring Requirements: (b).

c) Emissions of sulfur dioxide from a controlled device or each stack shall not exceed the following limit [401 KAR 59:015, Section 5(1)(c)]:

Emission Unit 011: 4.61 lb/MMBtu Emission Unit 012: 3.52 lb/MMBtu Emission Unit 015: 2.43 lb/MMBtu

Compliance Demonstration Method:

Compliance with the sulfur dioxide standard shall be based on the AP-42, Section 1.6-2 emission factor of 0.025 lb/MMBtu for bark and wet wood-fired boilers.

d) See Section D - Source Emission Limitations and Testing Requirements, condition 3 for source-wide limits.

3. Testing Requirements:

Within the third (3rd) year of the life of the permit, the permittee shall submit a schedule to conduct a performance test for emissions of particulate matter on each wood-fired boiler before the start of the fourth (4th) year of the life of the permit. See **Section G** - **General Provisions**, Condition 5 for pre-test submittal requirements [401 KAR 50:045, Section 1].

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

- a) The permittee shall monitor the following to calculate the amount of wood combusted (in tons) by each boiler on a weekly basis, assuming a 50% boiler efficiency: [401 KAR 52:020, Section 10]
 - i) the amount of steam produced by each boiler (in MMBtu) must be recorded on a daily basis from the steam meter since the steam meter become the principal mechanism used to estimate the mass of wood fuel burned.
 - ii) the average moisture content of the wood combusted by each boiler (in %) on a weekly basis; and
 - iii) the average heat content of the wood combusted by each boiler (in MMBtu/ton) on a weekly basis. Wood fuel samples must be sent to laboratory on weekly basis for analysis and accurate values for the mass of wood are recorded and kept.
- b) The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack of each operating boiler on a daily basis and maintain a log of the observations. If visible emissions are seen (not including condensed water in the plume), then an inspection shall be initiated and corrective action taken. If visible emissions are present after the corrective action, the process shall be shut down and shall not operate again until repairs have been made that result in no visible emissions from the process during operation. In lieu of shutting the process down, the permittee may determine the opacity using Reference Method 9. If the opacity limit is not exceeded, the process may continue to operate [401 KAR 52:020, Section 10].

5. Specific Recordkeeping Requirements:

- a) The permittee shall maintain records of the following to determine the amount of wood combusted (in tons) on a monthly basis: [401 KAR 52:020, Section 10]
 - i) the amount of steam produced by each boiler (in MMBtu) on a daily basis.
 - ii) the average moisture content of the wood combusted by each boiler (in %) on a weekly basis; and
 - iii) the average heat content of the wood combusted by each boiler (in MMBtu/ton) on a weekly basis.
- b) The permittee shall maintain records of daily qualitative visual opacity monitoring for each stack, as well as the opacity readings taken by Method 9, if taken, and also any repairs or modifications that were made as a result of any opacity readings which exceeded the standard [401 KAR 52:020, Section 10].
- c) The permittee shall maintain the records specified in 40 CFR 63.11225(c). Permittee must keep each record for five years following the date of each recorded action. These records must be in a form suitable and readily available for expeditious review. Each record must be kept on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least two years after the date of each recorded action. Permittee may keep the records off site for the remaining three years [40 CFR 63.11225(d)].

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

d) The actions, including duration of the startup period, of the permittee during startup periods and shutdown periods, shall be documented by signed, contemporaneous logs or other relevant evidence [401 KAR 59:015 Section 7(1)(d)].

6. Specific Reporting Requirements:

- a) See Section F Monitoring, Recordkeeping, and Reporting Requirements, Conditions 5, 6, 7, 8 and 9.
- b) The permittee shall immediately report any week in which the average fuel moisture content of all three boilers exceeds 43%, and corrective actions taken [401 KAR 52:020, Section 10].
- c) The permittee shall include the monthly wood consumption and average monthly actual heat input (MMBtu/hr) of each boiler in the semi-annual report [401 KAR 52:020, Section 10].
- d) The permittee must prepare, by March 1 of each biennial year, and submit to the delegated authority upon request, a report for the previous calendar year containing the information specified in 40 CFR 63.11225(b)(1) through (4). The permittee must submit the report by March 15 if the permittee had any instance described by 40 CFR 63.11225(b)(3). For boilers that are subject only to the energy assessment requirement and/or a requirement to conduct a biennial or 5-year tune-up according to 40 CFR 63.11223(a) and not subject to emission limits or operating limits, you may prepare only a biennial or 5-year compliance report as specified in 40 CFR 63.11225(b)(1) and (2). [40 CFR 63.11225(b)]
- e) If the permittee switched fuels or made a physical change to the boiler and the fuel switch or change resulted in the applicability of a different subcategory within 40 CFR 63, Subpart JJJJJJ, in the boiler becoming subject to 40 CFR 63, Subpart JJJJJJ, or in the boiler switching out of this subpart due to a fuel change that results in the boiler meeting the definition of gas-fired boiler, as defined in 40 CFR 63.11237, or have taken a permit limit that resulted in you becoming subject to this subpart or no longer being subject to 40 CFR 63, Subpart JJJJJJ, you must provide notice of the date upon which you switched fuels, made the physical change, or took a permit limit within 30 days of the change. The notification must identify: [40 CFR 63.11225(g)]
 - i) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels, were physically changed, or took a permit limit, and the date of the notice.
 - ii) The date upon which the fuel switch, physical change, or permit limit occurred.

7. Specific Control Equipment Operating Conditions:

a) Multi-clones and fly ash reinjection shall be operated to maintain compliance with applicable requirements consistent with manufacturer's specifications and standard operating practices [401 KAR 50:055, section 2(5)].

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b) Multi-clones shall be physically inspected once monthly for cracks and holes. A log of these inspections and maintenance of fly ash reinjection system shall be kept on file for review by the Division. The log shall contain the date and time of inspections, name of inspector(s), conditions observed, any problems noted, and corrective actions taken. Repairs shall be made to the multi-clones as necessary [401 KAR 52:020, Section 10].

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Units 21-25a, 25b, 26, 32-34, 59, 60, and 63-65 Board & Veneer Processing

Emission Unit 21 Veneer Mill Hog

Description:

Model: Lamb hog/chipper

Construction Commenced: 4/15/2008.

Maximum Capacity: 1,143 lb/hour sliced veneer waste to boiler.

Emission Unit 22 Slicing Machine #3

Description:

Model: Capital half round 154" #3 slicer

Construction Commenced: 6/30/1986.

Maximum Capacity: 600 Doyle ft/hour

Emission Unit 23 Slicing Machine 4

Description:

Model: Capital slicer 165" #4

Construction Commenced: 4/30/1967.

Maximum Capacity: 600 Doyle ft/hr

Emission Unit 24 Slicing Machine 5

Description:

Model: Capital slicer 165" #5

Construction Commenced: 7/30/1979

Maximum Capacity: 600 Doyle ft/hour

Emission Unit 25a Slicing Machine 1

Description:

Model: Fezer Slicer 192" #1

Construction Commenced: 4/1/2004.

Maximum Capacity: 600 Doyle ft/hour

Emission Unit 25b Slicing Machine 2

Description:

Model: Fezer Half Round FV54 #2

Construction Commenced: 6/23/2000.

Maximum Capacity: 600 Doyle ft/hour

Emission Unit 26 Flitch Ripsaw

Description:

Model: Freeman built rip saw

Construction Commenced: 6/23/2000.

Maximum Capacity: 600 Doyle ft/hour

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 32 Peeling Blocks

Description:

Model: Coe M249 66" lathe

Construction Commenced: 11/31/1991 Maximum Capacity: 4,000 Doyle ft/hr

Emission Unit 33 Rotary Clipping

Description:

Model: Raute Rotary Clipper & Vacuum Stacker

Construction Commenced: 8/27/2007

Maximum Capacity: 3,440 Doyle ft/hour

Emission Unit 34 Rotary Veneer Chipper

Description:

Model: Black Clawson chipper and infeed conveyor system

Construction Commenced: 2/28/1995 Relocated; 8/7/2007.

Maximum Capacity: 2,509 lb/hour of wood waste into boiler fuel

Emission Units 59 Veneer Clipper

Description:

Model: Seybold Clipper Construction Commenced: 7/31/2006.

Maximum Capacity: 4,500 SF/hour

Emission Units 60 Veneer Clipper

Description:

Model: Super Clipper (Capital)

Construction Commenced: 5/3/2010.

Maximum Capacity: 12,000 SF/hour

Emission Unit 63 Paul Saw #01

Description:

Model: Paul Maschinenfabrik, K34G/1500, Veneer trimmer

Construction Commenced: 7/1/2017.

Maximum Capacity: 600 Doyle ft/hr

Emission Unit 64 Paul Saw #2

Description:

Model: Paul Maschinenfabrik, K34G/1500, Veneer trimmer

Construction Commenced: Proposed 2025
Maximum Capacity: 600 Doyle ft/hr

Emission Unit 65 Veneer Sizing Band Saw

Description:

Model: Freeman made
Construction Commenced: Proposed 2025
Maximum Capacity: 600 Doyle ft/hr

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Controls:

Cyclone #1 **(EP 44)** – *for all units listed above*

APPLICABLE REGULATIONS:

401 KAR 59:010. New Process Operations

401 KAR 61:020. Existing Process Operations, applicable only to Emission Unit 23.

NON-APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*. Permittee has opted to take a source-wide limitation to avoid applicability of 401 KAR 51:017.

1. Operating Limitations:

None

2. Emission Limitations:

a) For Emission Units 21, 22, 24, 25a, 25b, 26, 32, 33, 34, 60, 63. 64 and 65: Continuous emissions from into the open air from a control device or stack associated with the affected facility shall not exceed 20% opacity [401 KAR 59:010, Section 3(1)(a)].

Compliance Demonstration Method:

See 4. Specific Monitoring Requirements: (b).

b) For Emission Units 21, 22, 24, 25a, 25b, 26, 32, 33, 34, 60, 63, 64, and 65: Emission of particulate matter from into the open air from a control device or stack of any affected facility operating up to a process rate of 1000 lb/hour shall not exceed 2.34 lb/hour. For processing rates greater than 1000 lb/hour up to 60,000 lb/hour, particulate emissions shall not exceed the emission rate calculated by the following equation: [401 KAR 59:010, Section 3(2)].

$$E = 3.59(P)^{0.62}$$

E = the PM emissions rate (pounds/hour)

P = the process rate (tons/hour)

Compliance Demonstration Method:

Compliance with PM limit shall be demonstrated when cyclone#1 is operating consistent with manufacturer's specifications and standard operating practices, while calculating PM emissions using the formula as follows:

 $PM = (a \times b)/(c) \times (d)$

a = pounds of wood waste per Doyle ft. for each emission unit, from the application

b = sum of logs in Doyle ft. (DF) processed per hour in each emission units

c = 2000 lb per ton

d = 0.5 lb of PM emissions per ton of wood waste input to cyclone#1

c) For **Emission Unit 23:** The permittee shall not cause, suffer, allow or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than forty (40) percent opacity [401 KAR 61:020, Section 3(1)(a)].

Compliance Demonstration Method:

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

See 4. Specific Monitoring Requirements: (b)...

d) For **Emission Unit 23:** Emission of particulate matter through a control device or stack of any affected facility operating up to a process rate of 1000 lb/hour shall not exceed **2.58** lb/hour. For processing rates greater than 1000 lb/hour up to 60,000 lb/hour, particulate emissions shall not exceed the emission rate calculated by the following equation: [401 KAR 61:020, Section 3(2)].

$E = 4.10P^{0.67}$

E = the PM emissions rate (pounds/hour)

P = the process rate (tons/hour)

Compliance Demonstration Method:

Compliance with PM limit shall be demonstrated when Cyclone#1 is operating consistent with manufacturer's specifications and standard operating practices, while calculating PM emissions using the formula as follows:

 $PM = (a \times b)/(c) \times (d)$

 $\mathbf{a} = 0.381$ lb wood waste per Doyle ft.

b = sum of logs in Doyle ft. (DF) processed per hour.

c = 2000 lb per ton

d = 0.5 lb of PM emissions per ton of wood waste input to Cyclone#1

e) See Section D - Source Emission Limitations and Testing Requirements, condition 3 for source-wide limits.

3. Testing Requirements:

Testing shall be conducted at such times as may be requested by the cabinet in accordance with 401 KAR 50:045, Section 1.

4. Specific Monitoring Requirements:

- a) The permittee shall monitor the amount of veneer processed, in Doyle ft., on a monthly basis [401 KAR 52:020, Section 10].
- b) The permittee shall perform a qualitative visual observation of the emissions from the stack of Cyclone 1 on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water in the plume), then the opacity shall be determined by Method 9 as detailed in 40 CFR 60, Appendix A-4. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for any necessary repairs [401 KAR 52:020, Section 10].

5. Specific Recordkeeping Requirements:

a) The permittee shall maintain records of the amount of veneer processed, on a monthly basis [401 KAR 52:020, Section 10].

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b) The permittee shall maintain records of weekly qualitative visual opacity readings for the stack of Cyclone 1, as well as the opacity readings taken by Method 9, if taken, and also any repairs or modifications that were made as a result of any opacity reading which exceeded the standard [401 KAR 52:020, Section 10].

6. Specific Reporting Requirements:

See Section F - Monitoring, Recordkeeping, and Reporting Requirements, Conditions 5, 6, 7, 8 and 9.

7. Specific Control Equipment Operating Conditions:

- a) Cyclone#1 shall be operated to maintain compliance with applicable requirements consistent with manufacturer's specifications and standard operating practices [401 KAR 50:055, section 2(5)].
- b) Records regarding the maintenance of the cyclone#1 shall be maintained [401 KAR 52:020, Section 10].

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Units 14b, 18, 19, and 20 Log Processing Sawdust & Chipped Wood waste

Emission Unit 14b Log flitching Saws

Description:

Model: Cremona SAT Model 5200 with Bandsaw head

attachment, conveyors, and banders

Construction Commenced: 7/31/1990.

Maximum Capacity: 1,428 Doyle ft/hour.

Emission Unit 18 Skinning Line 1

Description:

Model: Air angle grinders with knotter heads

Construction Commenced: 4/30/1967.

Maximum Capacity: 2,400 Doyle ft/hour

Emission Unit 19 Flitch Cutoff Saw

Description:

Model: 48" diam. Freeman built circular saw

Construction Commenced: 3/31/1991.

Maximum Capacity: 2,400 Doyle ft/hour

Emission Unit 20 Planer and Groover

Description:

Model: Freeman manufactured flitch planer and groover

Construction Commenced: 7/16/1991.

Maximum Capacity: 2,304 Doyle ft/hour

Controls: Cyclone #2 (EP 45) - main control device for

EU's 14b, 18, 19 & 20

APPLICABLE REGULATIONS:

401 KAR 59:010. New Process Operations.

401 KAR 61:020. Existing Process Operations, applicable only to Emission Unit 18.

NON-APPLICABLE REGULATIONS:

401 KAR 51:017, Prevention of significant deterioration of air quality. Permittee has opted to take a source-wide limitation to avoid applicability of 401 KAR 51:017.

1. Operating Limitations:

None

2. **Emission Limitations**:

a) For Emission Units 14b, 19, and 20: Continuous emissions into the open air from a control device or stack associated with the affected facility shall not exceed 20% opacity [401 KAR 59:010, Section 3(1)(a)].

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:

See 4. Specific Monitoring Requirements: (b).

b) For Emission Units 14b, 19, and 20: Emission of particulate matter into the open air from a control device or stack of any affected facility operating up to a process rate of 1000 lb/hour shall not exceed 2.34 lb/hour. For processing rates greater than 1000 lb/hour up to 60,000 lb/hour, particulate emissions shall not exceed the emission rate calculated by the following equation: [401 KAR 59:010, Section 3(2)].

$$E = 3.59(P)^{0.62}$$

E =the PM emissions rate (pounds/hour)

P = the process rate (tons/hour)

Compliance Demonstration Method:

Compliance with PM limit shall be demonstrated when cyclone#2 is operating, consistent with manufacturer's specifications and standard operating practices, while calculating PM emissions using the formula as follows:

PM = (a x b) / (c) x (d)

a = pound of wood waste per Doyle ft. (DF), for each emission unit, from the application

b = sum of logs in Doyle ft. (DF) processed per hour in each emission units

c = 2000 lb per ton

d = 0.5 lb of PM emissions per ton of wood waste input to cyclone#2, based on assumption from other State Department of Environment Quality (State of Oregon) also in house measurements as stated in the application

c) For Emission Unit 18: The permittee shall not cause, suffer, allow or permit any continuous emission from into the open air from a control device or stack associated with any affected facility which is equal to or greater than forty (40) percent opacity [401 KAR 61:020, Section 3(1)(a)].

Compliance Demonstration Method:

See 4. Specific Monitoring Requirements: (b).

d) For Emission Unit 18: Emission of particulate matter through a control device or stack of any affected facility operating up to a process rate of 1000 lb/hour shall not exceed **2.58** lb/hour. For processing rates greater than 1000 lb/hour up to 60,000 lb/hour, particulate emissions shall not exceed the emission rate calculated by the following equation: [401 KAR 61:020, Section 3(2)].

$$E = 4.10P^{0.67}$$

E = the PM emissions rate (pounds/hour)

P =the process rate (tons/hour)

Compliance Demonstration Method:

Compliance with PM limit shall be demonstrated when cyclone#2 is operating, consistent with manufacturer's specifications and standard operating practices, while calculating PM emissions using the formula as follows:

$$PM = (a x b) / (c) x (d)$$

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- $\mathbf{a} = 0.178$ pounds of wood waste per Doyle ft.
- **b** = sum of logs in Doyle ft. (DF) processed per hour
- c = 2000 lb per ton
- **d** = 0.5 lb of PM emissions per ton of wood waste input to cyclone#2, Department of Environmental Quality State of Oregon and In house measurements
- e) See Section D Source Emission Limitations and Testing Requirements, condition 3 for source-wide limits.

3. Testing Requirements:

Testing shall be conducted at such times as may be requested by the cabinet in accordance with 401 KAR 50:045, Section 1.

4. Specific Monitoring Requirements:

- a) The permittee shall monitor the amount of logs in (DF) processed, on a monthly basis [401 KAR 52:020, Section 10].
- b) The permittee shall perform a qualitative visual observation of the emissions from the stack of Cyclone 2 on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water in the plume), then the opacity shall be determined by Method 9 as detailed in 40 CFR 60, Appendix A-4 If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for any necessary repairs [401 KAR 52:020, Section 10].

5. Specific Recordkeeping Requirements:

- a) The permittee shall maintain records of the amount of logs in (DF) processed, on a monthly basis [401 KAR 52:020, Section 10].
- b) The permittee shall maintain records of weekly qualitative visual opacity readings for the stack of Cyclone 2, as well as the opacity readings taken by Method 9, if taken, and also any repairs or modifications that were made as a result of any opacity reading which exceeded the standard [401 KAR 52:020, Section 10].

6. Specific Reporting Requirements:

See Section F - Monitoring, Recordkeeping, and Reporting Requirements, Conditions 5, 6, 7, 8 and 9.

7. Specific Control Equipment Operating Conditions:

- a) Cyclone#2 shall be operated to maintain compliance with applicable requirements consistent with manufacturer's specifications and standard operating practices [401 KAR 50:055, section 2(5)].
- b) Records regarding the maintenance of the cyclone#2 shall be maintained [401 KAR 52:020, Section 10].

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Units 47 Rotary Core and Backer Board Chipper/ Fulghm Chipper

Emission Unit 47 Rotary Core Chipper

Description:

Model: Fulghum Chipper

Construction Commenced: 9/15/2006. Maximum Capacity: 2,240 lb/hr

Controls: Cyclone #3 (**EP 46**)

APPLICABLE REGULATIONS:

401 KAR 59:010, New Process Operations.

NON-APPLICABLE REGULATIONS:

401 KAR 51:017. *Prevention of significant deterioration of air quality.* Permittee has opted to take a source-wide limitation to avoid applicability of 401 KAR 51:017.

1. Operating Limitations:

None

2. **Emission Limitations**:

a) Continuous emissions from Emission Units 47 into the open air from a control device or stack associated with the affected facility shall not exceed 20% opacity [401 KAR 59:010, Section 3(1)(a)].

Compliance Demonstration Method:

Compliance with the opacity limit is demonstrated **4. Specific Monitoring Requirements: (b)**.

b) Emission of particulate matter from Emission Unit 47 into the open air from a control device or stack of any affected facility up to a process rate of 1000 lb/hr shall not exceed 2.34 lb/hr. For processing rates greater than 1000 lb/hr up to 60,000 lb/hr, particulate emissions shall not exceed the emission rate calculated by the following equation: [401 KAR 59:010, Section 3(2)].

$$E = 3.59(P)^{0.62}$$

E = the PM emissions rate (lb/hr)

P =the process rate (tons/hr)

Compliance Demonstration Method:

Compliance with PM limit shall be demonstrated when cyclone#3 is operating consistent with manufacturer's specifications and standard operating practices, while calculating PM emissions using the formula as follows:

$$PM = (a x b) / (c) x (d)$$

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- **a** = pounds of waste Cores and Backer Board Chipper per hour
- **b** = sum of logs in Doyle ft (DF) processed per hour in each emission unit
- c = 2000 lb per ton
- d = 0.5 lb of PM emissions per ton of wood waste input to cyclone#3 from application
- c) See Section D Source Emission Limitations and Testing Requirements, condition 3 for source-wide limits.

3. Testing Requirements:

Testing shall be conducted at such times as may be requested by the cabinet in accordance with 401 KAR 50:045, Section 1.

4. Specific Monitoring Requirements:

- a) The permittee shall monitor the number of logs in (DF) processed, on a monthly basis [401 KAR 52:020, Section 10].
- b) The permittee shall perform a qualitative visual observation of the emissions from the stack of Cyclone 3 on a weekly basis and maintain a log of the observations [401 KAR 52:020, Section 10]. If visible emissions from the stack are seen (not including condensed water in the plume), then the opacity shall be determined by Method 9 as detailed in 40 CFR 60, Appendix A-4. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for any necessary repairs. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a) The permittee shall maintain records of the number of logs in (DF) processed, on a monthly basis [401 KAR 52:020, Section 10].
- b) The permittee shall maintain records of weekly qualitative visual opacity readings for the stack of Cyclone 3, as well as the opacity readings taken by Method 9, if taken, and also any repairs or modifications that were made as a result of any opacity reading which exceeded the standard [401 KAR 52:020, Section 10].

6. Specific Reporting Requirements:

See Section F - Monitoring, Recordkeeping, and Reporting Requirements, Conditions 5, 6, 7, 8 and 9.

7. Specific Control Equipment Operating Conditions:

- a) Cyclone#3 shall be operated to maintain compliance with applicable requirements consistent with manufacturer's specifications and standard operating practices [401 KAR 50:055, section 2(5)].
- b) Records regarding the maintenance of the cyclone#3 shall be maintained [401 KAR 52:020, Section 10].

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 07 – Three Veneer Clipping Lines and Chipper

Description:

Model: RFR side clippers, Capital End clipper

Cremona side & End clippers

Infeed tables & Under floor conveyor belt

Capital hog/chipper

Construction Commenced: 7/30/1979.

Maximum capacity: 120,000 ft²/hr of thin veneer

Controls: Cyclone #4 (EP 08)

APPLICABLE REGULATIONS:

401 KAR 59:010. New Process Operations.

PRECLUDED REGULATIONS:

401 KAR 51:017. *Prevention of significant deterioration of air quality.* Permittee has opted to take a source-wide limitation to avoid applicability of 401 KAR 51:017.

1. Operating Limitations:

None

2. Emission Limitations:

a) Continuous emissions into the open air from a control device or stack associated with the affected facility shall not exceed 20% opacity [401 KAR 59:010, Section 3(1)(a)].

Compliance Demonstration Method:

See 4. Specific Monitoring Requirements: (b).

b) Emission of particulate matter from a control device or stack of any affected facility up to a process rate of 1000 lb/hr shall not exceed **2.34** lb/hr. For processing rates greater than 1000 lb/hr up to 60,000 lb/hr, particulate emissions shall not exceed the emission rate calculated by the following equation: [401 KAR 59:010, Section 3(2)].

$$E = 3.59(P)^{0.62}$$

E = the PM emissions rate (lb/hr)

P =the process rate (tons/hr)

Compliance Demonstration Method:

Compliance with PM limit shall be demonstrated when cyclone#4 is operating consistent with manufacturer's specifications and standard operating practices, while calculating PM emissions using the formula as follows:

$$PM = (a \times b) / (c \times d)$$

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- **a** = pounds of waste per square foot (ft²) of thin veneer, from application (In house measurements)
- $\mathbf{b} = \text{sum of logs in } \text{ft}^2 \text{ processed per hour.}$
- c = 2000 lb per ton
- d = 0.50 lb of PM emissions per ton of wood waste input to cyclone #4, from application
- d) See Section D Source Emission Limitations and Testing Requirements, condition 3 for source-wide limits.

3. Testing Requirements:

Testing shall be conducted at such times as may be requested by the cabinet in accordance with 401 KAR 50:045, Section 1.

4. Specific Monitoring Requirements:

- a) The permittee shall monitor the amount of processed logs in (ft^2) in tons on a monthly basis. [401 KAR 52:020, Section 10].
- b) The permittee shall perform a qualitative visual observation of the emissions from the stack of Cyclone #4 on a weekly basis and maintain a log of the observations [401 KAR 52:020, Section 10]. If visible emissions from the stacks are seen (not including condensed water in the plume), then the opacity shall be determined by U.S. EPA Reference Method 9 and if the opacity reading is greater than 20 percent, then initiate an inspection of the equipment for any repairs [401 KAR 52:020, Section 10].

5. Specific Recordkeeping Requirements:

- a) The permittee shall maintain records of the processed logs in (ft^2) on a monthly basis [401 KAR 52:020, Section 10].
- b) The permittee shall maintain records of weekly qualitative visual opacity readings for the stack of Cyclone #4, as well as the opacity readings taken by U.S. EPA Reference Method 9, if taken, and also any repairs or modifications that were made as a result of any opacity reading which exceeded the standard [401 KAR 52:020, Section 10].

6. Specific Reporting Requirements:

See Section F - Monitoring, Recordkeeping, and Reporting Requirements, Conditions 5, 6, 7, 8 and 9.

7. Specific Control Equipment Operating Conditions:

- a) Cyclone#4 shall be operated to maintain compliance with applicable requirements consistent with manufacturer's specifications and standard operating practices [401 KAR 50:055, Section 2(5)].
- b) Records regarding the maintenance of the Cyclone #4 shall be maintained [401 KAR 52:020, Section 10].

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

WOOD-CUTTING EMISSION UNITS WITHOUT CYCLONE CONTROL MISSION UNIT 14A, DEBARKER EMISSION UNIT 48, NICHOLSON CHIPPER EMISSION UNIT 62, BUTT END REDUCER EMISSION UNIT 30, ROTARY CUT-OFF SAW EMISSION UNIT 31, ROTARY DEBARKER/ WILLIAMS HOG

Emission Unit 14a Debarker

Description:

Model: NTF butt-end reducer and Nicholson A-5 debarker

Construction Commenced: 2/26/2006

Maximum Capacity: 4,000 Doyle ft/hr. or 3.72 tons/hour

Emission Unit 48 Rotary Cut-off Ends Chipper

Description:

Model: Nicholson drum Chipper (35'X 24')

Construction Commenced 4/15/2004

Material Input Capacity: 5,240 lb/hr. or 2.62 ton/hr.

Emission Unit 62 Butt End Reducer

Description:

Model: TS butt-end reducer and bark bin

Construction Commenced: 8/1/2019.

Maximum Capacity: 4,000 Doyle ft/hr

Emission Unit 30 Rotary Cut-off Saw

Description:

Model: Freeman built 72" cut off saw

Construction Commenced 6/30/1991

Material Input Capacity: 4,000 Doyle ft/hr or 3.45 ton/hour

Emission Unit 31 Rotary Debarker/ Williams Hog

Description:

Model: Freeman built debarker

Construction Commenced 12/31/2000

Material Input Capacity: 3,080 Doyle ft/hr or 2.65 ton/hour

APPLICABLE REGULATIONS:

401 KAR 59:010, New Process Operations

NON-APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*. The permittee has opted to take a source-wide limitation to avoid applicability of 401 KAR 51:017.

1. Operating Limitations:

None

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations:

- a. Particulate matter emissions shall not exceed [3.59 (P)^{0.62}] lbs/hour, where P is the processing rate in tons/hour of wood input to the machine, based on a three (3)-hour average [401 KAR 59:010, Section 3(2)].
- b. Continuous emissions shall not exceed 20% opacity, based on a six (6)-minute average [401 KAR 59:010, Section 3(1)(a)].

Compliance Demonstration Method:

Compliance will be demonstrated by good operating procedures.

e) See Section D - Source Emission Limitations and Testing Requirements, condition 3 for source-wide limits.

3. <u>Testing Requirements</u>:

Testing shall be conducted at such times as may be requested by the cabinet in accordance with 401 KAR 50:045, Section 1.

4. Specific Monitoring Requirements:

The permittee shall monitor the production rate, in tons, and hours of operation, on a monthly basis [401 KAR 52:020, Section 10].

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the tons produced and hours of operation, on a monthly basis [401 KAR 52:020, Section 10].

6. Specific Reporting Requirements:

See Section F., <u>Monitoring, Recordkeeping, and Reporting Requirements</u>, Conditions 5, 6, 7, 8 and 9.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Units 10 and 42

Emission Unit 10 Haul Roads and Log Yard

Description:

Construction Commenced: 1967 Controls: None

Paved and unpaved haul roads with unpaved log yard traveled over by loaders and log trucks.

Emission Unit 42 Chip Unloading from Storage to Boilers

Description:

Model: Storage container and conveyors

Construction Commenced: 9/1/2022. Maximum Capacity: 4.24 ton/hr

Controls: Fully enclosed with sheet metal containment

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive Emissions

1. **Operating Limitations**:

- a) A person shall not cause, suffer, or allow any material to be handled, processed, transported, or stored; a building or its appurtenances to be constructed, altered, repaired, or demolished, or a road to be used without taking reasonable precaution to prevent particulate matter from becoming airborne. Reasonable precautions shall include, as applicable: [401 KAR 63:010, Section 3(1)]:
 - i) Use, if possible, of water or chemicals for control of dust in the demolition of existing building or structures, construction operations, the grading of roads or the clearing of land [401 KAR 63:010, Section 3(1)(a)];
 - ii) Application and maintenance of asphalt, oil, water or suitable chemicals on roads, materials stockpiles, and other surfaces which can create airborne dusts [401 KAR 63:010, Section 3(1)(b)];
 - iii) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling. Adequate containment methods shall be employed during sandblasting or other similar operations [401 KAR 63:010, Section 3(1)(c)];
 - iv) Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne [401 KAR 63:010, Section 3(1)(c)];
 - v) The maintenance of paved roadways in a clean condition [401 KAR 63:010, Section 3(1)(d)]; or
 - vi) The prompt removal of earth or other material from a paved street which earth or other material has been transported thereto by trucking or earth moving equipment or erosion by water [401 KAR 63:010, Section 3(1)(f)].
- b) If dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any administrative regulation, the secretary may, based on the cause, type, or

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

amount of a fugitive emission, order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air. [401 KAR 63:010, Section 3(3)]

- c) At all times while in motion, open bodied trucks, operating outside company property, transporting materials likely to become airborne shall be covered. [401 KAR 63:010, Section 4(1)]
- d) A person shall not cause, suffer, or allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway. [401 KAR 63:010, Section 4(3)]

2. Emission Limitations:

A person shall not cause, suffer, or allow visible fugitive dust emissions beyond the lot line of the property on which the emissions originate, as determined by Reference Method 22 of Appendix A in 40 C.F.R. Part 60, for [401 KAR 63:010, Section 3(2)]:

- a) More than five (5) minutes of emission time during any sixty (60) minute observation period; or [401 KAR 63:010, Section 3(2)(a)]
- b) More than twenty (20) minutes of emission time during any twenty-four (24) hour period. [401 KAR 63:010, Section 3(2)(b)]

3. Testing Requirements:

Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

- a) The permittee shall monitor the number of vehicle miles traveled for paved and unpaved roadways, including the log yard [401 KAR 52:020, Section 10].
- b) The permittee shall monitor the reasonable precautions taken to prevent particulate matter from becoming airborne on a daily basis. [401 KAR 52:020, Section 10]
- c) If fugitive dust emissions beyond the lot line of the property are observed, the permittee shall conduct U.S. EPA Reference Method 22 (visual determination of fugitive emissions) observations per Appendix A of 40 C.F.R. part 60. In lieu of conducting Method 22, the permittee shall immediately perform a corrective action which results in no visible fugitive dust emissions beyond the lot line of the property. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

a) The permittee shall maintain records of the calculations to determine fugitive emissions from paved and unpaved roads with all data used in the calculations. Emission calculations shall be based on the most current AP-42 emission factors for paved and unpaved roadways for that year [401 KAR 52:020, Section 10].

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b) The permittee shall maintain a log of the reasonable precautions taken to prevent particulate matter from becoming airborne, on a daily basis. Notation of the operating status, down-time, or relevant weather conditions are acceptable for entry to the log [401 KAR 52:020, Section 10].
- c) The permittee shall maintain a log of the following [401 KAR 52:020, Section 10]:
 - i) Qualitative fugitive emissions observations conducted, including the date, time, initials of observer, whether any fugitive dust emissions were observed.
 - ii) Any Method 22 performed, and field records identified in Method 22; and
 - iii) Any corrective action taken and the results.

6. **Specific Reporting Requirements:**

See Section F - Monitoring, Recordkeeping, and Reporting Requirements, Conditions 5, 6, 7, 8 and 9.

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SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. Although these activities are designated as insignificant the permittee must comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to an opacity standard shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspection, evaluation, and any corrective action shall be recorded in a log.

<u>Description</u>	Generally Applicable Regulation
1. EP 16 Log Cooking Vats, Sliced (2,400 Doyle ft/hr)	401 KAR 59:010
2. EP 17 Log Cooking Vats, Rotary (4,000 Doyle ft/hr)	401 KAR 59:010
3. EP 27 Weber Dryer - #4 (30,000 ft ² /hr)	401 KAR 59:010
4. EP 28 Babcock Dryer -#5 (30,000 ft ² /hr)	401 KAR 59:010
5. EP 29a Omeco Dryer - #1 (30,000 ft ² /hr)	401 KAR 59:010
6. EP 29b Fezer Dryer - #3 (30,000 ft ² /hr)	401 KAR 59:010
7. EP 35 Cremona Dryer (23,000 ft ² /hr)	401 KAR 59:010
8. EP 36 Raute Dryer (23,000 ft ² /hr)	401 KAR 59:010
9. EP 38 Watering Logs with Pond water (61,000 gal/hr	n) NA
10. EP 39 Crating Trim Saw (500 board ft/hr)	401 KAR 59:010
11. EP 40 Chip Unloading from trucks	401 KAR 63:010
12. EP 43 Wemhoner press line (12,000 ft ² /hr)	NA
13. EP 50 a-h Rotary & Veneer Mill Roof Vent Fans	NA

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SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

- 1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
- 2. Emission of sulfur dioxide and particulate matter, and opacity, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.
- 3. As a self-imposed restriction to preclude the applicability of 401 KAR 51:017, the sum of all non-fugitive particulate matter emissions from all existing sources prior to the application completion date of October 7, 2001 (Cyclone 4, Cyclone 1, Cyclone 2 and Cyclone 3 emission points 08, 44-45 and 46) shall not exceed 240 tons/year during any consecutive twelve (12) month rolling total.

Compliance Demonstration Method

Permittee shall maintain records of the monthly particulate matter emissions from all non-fugitive existing sources (Cyclone 1, Cyclone 2, Cyclone 3 and Cyclone 4 - emission points 44-45, 46 and 8), and summarize them on a twelve (12)-month rolling average to maintain compliance condition D.3. [V-03-043].

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SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

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SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:

- a. Date, place as defined in this permit, and time of sampling or measurements;
- b. Analyses performance dates;
- c. Company or entity that performed analyses;
- d. Analytical techniques or methods used;
- e. Analyses results; and
- f. Operating conditions during time of sampling or measurement.
- 2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five (5) years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b-IV-2 and 1a-8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 3. In accordance with the requirements of 401 KAR 52:020, Section 3(1)h, the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit:
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

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SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020, Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.

- 7. In accordance with the provisions of 401 KAR 50:055, Section 1, the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
- 8. The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken shall be submitted to the Regional Office listed on the front of this permit. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. Where the underlying applicable requirement does not identify a specific time frame for reporting deviations, prompt reporting, as required by Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, shall be defined as follows:
 - a. For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.
 - b. For emissions of any regulated air pollutant, excluding those listed in F.8.a., that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.
 - c. All deviations from permit requirements, including those previously reported, shall be included in the semiannual report required by F.6.
- 9. Pursuant to 401 KAR 52:020, Title V permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition:
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;

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SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- d. The method used for determining the compliance status for the source, currently and over the reporting period.
- e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
- f. The certification shall be submitted by January 30th of each year. Annual compliance certifications shall be sent to the following addresses:

Division for Air Quality Frankfort Regional Office 300 Sower Boulevard 1st Floor Frankfort, KY 40601 U.S. EPA Region 4 Air Enforcement Branch Atlanta Federal Center 61 Forsyth St. SW Atlanta, GA 30303-8960

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within 30 days of the date the Kentucky Emissions Inventory System (KYEIS) emissions survey is mailed to the permittee.

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SECTION G - GENERAL PROVISIONS

1. General Compliance Requirements

a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020, Section 3(1)(b), and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
 - (2) The Cabinet or the United States Environmental Protection Agency (U. S. EPA) determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
 - (4) New requirements become applicable to a source subject to the Acid Rain Program.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 7 and 8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:020, Section 3(1)(c)].

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SECTION G - GENERAL PROVISIONS (CONTINUED)

f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- i. All emission limitations and standards contained in this permit shall be enforceable as a practical matter. All emission limitations and standards contained in this permit are enforceable by the U.S. EPA and citizens except for those specifically identified in this permit as state-origin requirements. [Section 1a-15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3) b].
- 1. This permit does not convey property rights or exclusive privileges [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3) d.].
- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3) a.].

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SECTION G - GENERAL PROVISIONS (CONTINUED)

p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

- q. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
 - (1) Applicable requirements that are included and specifically identified in this permit; and
 - (2) Non-applicable requirements expressly identified in this permit.

2. Permit Expiration and Reapplication Requirements

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six (6) months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
- b. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020, Section 8(2)].

3. Permit Revisions

- a. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the State Implementation Plan (SIP) or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

4. Construction, Start-Up, and Initial Compliance Demonstration Requirements

No construction authorized by this permit (V-24-030).

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SECTION G - GENERAL PROVISIONS (CONTINUED)

5. <u>Testing Requirements</u>

a. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least thirty (30) days prior to the test.

- b. Pursuant to 401 KAR 50:045, Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.
- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements

- a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.
- b. The permittee shall comply with all applicable requirements and conditions of the Acid Rain Permit and the Phase II permit application (including the Phase II NOx compliance plan and averaging plan, if applicable) incorporated into the Title V permit issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

7. Emergency Provisions

- a. Pursuant to 401 KAR 52:020, Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - (1) An emergency occurred and the permittee can identify the cause of the emergency;
 - (2) The permitted facility was at the time being properly operated;

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SECTION G - GENERAL PROVISIONS (CONTINUED)

(3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and

- (4) Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.1-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- (5) This requirement does not relieve the source of other local, state or federal notification requirements.
- b. Emergency conditions listed in General Condition G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
- c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

8. Ozone Depleting Substances

- a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - (1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - (2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - (3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.155.
 - (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156 and 40 CFR 82.157.
 - (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

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SECTION G - GENERAL PROVISIONS (CONTINUED)

9. Risk Management Provisions

a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to U.S. EPA using the RMP* eSubmit software.

b. If requested, submit additional relevant information to the Division or the U.S. EPA.

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SECTION H - ALTERNATE OPERATING SCENARIOS

N/A

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SECTION I - COMPLIANCE SCHEDULE

N/A