FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
BOB MARTINEZ CENTER
2600 BLAIRSTONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

RICK SCOTT
GOVERNOR

CARLOS LOPEZ-CANTERA
LT. GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

PERMITTEE

West Fraser, Inc.
109 Halsema Road South
Jacksonville, Florida 32220

Authorized Representative:
Mr. Chip Osteen, Manager

Air Permit No. 0310197-012-AC
Expires: 01/01/2018
PSD-FL-430
Whitehouse Lumber Mill
Facility ID No. 0310197
Kiln Conversion Project

PROJECT

This is the final air construction permit, which authorizes to replace the existing batch lumber kilns (EU 001 – EU 003) with two continuous lumber kilns (Kiln Nos. 4 and 5), increase production from 110 to 170 million board feet of lumber/year, and replace the existing fuel storage silo to increase the capacity for storing dry shavings for the kiln burners. The proposed work will be conducted at the existing Whitehouse Lumber Mill, which processes lumber and wood products and is categorized under Standard Industrial Classification No. 2421. The existing mill is located in Duval County at 109 Halsema Road South in Jacksonville, Florida. The UTM coordinates are Zone 17, 461.4 kilometers (km) East, and 3,353.5 km North.

This final permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); and Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida

David L. Read, P.E.
2014.09.09
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for Jeffery F. Koerner, Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit with Appendices) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on the date indicated below to the following persons.

Mr. Chip Osteen, Manager, West Fraser: chip.osteen@westfraser.com
Mr. Julian Roberts, EHS Manager, West Fraser: julian.roberts@westfraser.com
Mr. Brad James, P.E., Trinity: bjames@trinityconsultants.com
Mr. Richard Rachal, Administrator, NED: richard.rachal@dep.state.fl.us
Ms. Kathleen Lusky, EPA Region 4: lusky.kathleen@epa.gov
Ms. Heather Ceron, US EPA Region 4: ceron.heather@epa.gov
Ms. Lynn Scearce, DEP OPC: (lynn.scearce@dep.state.fl.us)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

Lynn Scearce

Lynn Scearce
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FACILITY DESCRIPTION

West Fraser, Inc. operates the Whitehouse Lumber Mill, which is located in Duval County at 109 Halsema Road South in Jacksonville, Florida. Whitehouse Lumber Mill processes south pine logs into chips, bark and graded finished lumber. This facility consists of the following processes: a log yard; sawmill; lumber kilns and boilers; and planer mill.

The facility imports logs and stores them until they are needed. Logs are sent to the debarker where bark from the log is removed and separated from the log. The debarked logs are cut into green dimensional lumber and sent to the sawmill. The sawmill generates scrap wood and sawdust. The scrap wood is passed through a chipper or "hog" to reduce the size of the chips. The wood chips and sawdust are shipped out or sent to storage and used as fuel.

The green lumber is transferred to one of three batch lumber kilns that fire wood or propane to dry southern pine lumber. Kiln No. 1 (EU 001) and Kiln No. 2 (EU 002) have maximum heat input rates of 15 million British thermal units/hour (MMBtu/hour) of wood waste and 2.2 MMBtu/hour of propane. Kiln No. 3 (EU 003) has a maximum heat input rate of 25 MMBtu/hour of wood waste and 2.2 MMBtu/hour of propane.

The planer mill receives dry, rough cut lumber from the lumber kilns. Dry cut lumber is passed through the planer mill to reduce surface roughness of the finished product. The process consists of a trim saw, dry hog, planer, conveying systems, and bins. Two cyclones control emissions from the planer mill and dry hog. The shavings removed by the shavings conveying system during planing are stored in the shavings bin prior to being used as fuel or sold to third party companies.

The existing facility consists of the following emissions units (EU).

EU No.	Emission Unit Description
001	Wood Drying Kiln No. 1 (Middle)
002	Wood Drying Kiln No. 2 (West)
003	Wood Drying Kiln No. 3 (East)
006	Planer Meter Bin
007	Truck Bin/Planer Silo
008	Fuel Storage Silo

PROPOSED PROJECT

West Fraser, Inc. submitted an application for an air construction permit subject to the preconstruction review requirements of the PSD of Air Quality pursuant to Rule 62-212.400, F.A.C. The project will consist of the following modifications to the existing mill:

- Install two 80 feet long continuous dual path kilns (Kiln Nos. 4 and 5) with a production capacity of 15 thousand board feet/hour (MBF/hour), each. The two new kilns will be direct fired with dry shavings burners with heat input capacities of 40 MMBtu/hour each.
- Kiln Nos. 1 and 2 (EU 001 – EU 002) will be shut down and removed from the site as well as the three existing associated wood and propane-fired burners. Kiln No. 4 will be located in their place.
- The existing steam batch lumber drying Kiln No. 3 (EU 003) will no longer be in service as the batch kiln equipment will be removed. The structure (shell) will be modified by extending the heating chamber from 54 feet to 80 feet and will be used to house Kiln No. 5.
- The existing fuel storage silo will be replaced to increase the capacity for storing dry shavings for the kiln burners.
- The total facility potential production will increase from 110 to 170 million board feet of lumber/year.

As a result of the increased annual kiln throughput, there will be an increased throughput for all of the ancillary equipment, including the hogger, chipper, saws, debarkers, cyclones, and truck traffic on mill roads.

The following existing emissions units (EU) will be affected by this project.

EU No.	Description
001	Wood Drying Kiln No. 1 (Middle) – **Removed as a result of this project**
002	Wood Drying Kiln No. 2 (West) – **Removed as a result of this project**
003	Wood Drying Kiln No. 3 (East) – **Modified as a result of this project**

The following new emissions units will be added by this project.

EU No.	Description
009	Wood Drying Kiln No. 4
010	Wood Drying Kiln No. 5
011	Fuel Storage Silo

FACILITY REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The facility will be a major stationary source in accordance with Rule 62-212.400, F.A.C. for the PSD of Air Quality.
- The facility includes units subject to applicable National Emissions Standards for Hazardous Air Pollutants (NESHAP) in Title 40, Part 63 of the Code of Federal Regulations (CFR).

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The Permitting Authority for this project is the Office of Permitting and Compliance in the Division of Air Resource Management of the Department of Environmental Protection (Department). The mailing address for the Office of Permitting and Compliance is 2600 Blairstone Road, MS #5505, Tallahassee, Florida 32399-2400.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Northeast District Office at: 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256-7590.

3. Appendices: The following Appendices are attached as a part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); Appendix C (Common Conditions); Appendix D (Common Testing Requirements); Appendix E (Final BACT Determinations), Appendix F (NESHAP Subpart A), and Appendix G (NESHAP Subpart DDDD).

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications: No emissions unit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Construction and Expiration. The expiration date shown on the first page of this permit provides time to complete the physical construction activities authorized by this permit, complete any necessary compliance testing, and obtain an operation permit. Notwithstanding this expiration date, all specific emissions limitations and operating requirements established by this permit shall remain in effect until the facility or emissions unit is permanently shut down. For good cause, the permittee may request that that a permit be extended. Pursuant to Rule 62-4.080(3), F.A.C., such a request shall be submitted to the Permitting Authority in writing before the permit expires. [Rules 62-4.070(4), 62-4.080 & 62-210.300(1), F.A.C.]

8. Source Obligation:
   a. Authorization to construct shall expire if construction is not commenced within 18 months after receipt of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. This provision does not apply to the time period between construction of the approved phases of a phased construction project except that each phase must commence construction within 18 months of the commencement date established by the Department in the permit.
   b. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
   c. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4)

through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

[Rule 62-212.400(12), F.A.C.]

9. Title V Permit: This permit authorizes specific modifications and/or new construction on the affected emissions units as well as initial operation to determine compliance with conditions of this permit. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after completing the required work and commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to each Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

10. Objectionable Odors Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rules 62-4.070, F.A.C. (Reasonable Assurance) and 62-296.320(2), F.A.C.]

    {Permitting Note: An objectionable odor is defined in Rule 62-210.200(Definitions), F.A.C., as any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance.}

11. General Visible Emissions (VE) Standard:
    a. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent (%) opacity).
    b. Notwithstanding subparagraph 62-296.320(4)(b)1., F.A.C., above, the owner or operator of an emissions unit subject to the general VE standard may request the Department to establish a higher VE standard for that emissions unit. The owner or operator may request that a VE standard be established at that level at which the emissions unit will be able, as indicated by compliance tests, to meet the opacity standard at all times during which the emissions unit is meeting the applicable particulate matter standard. The Department shall establish such a standard, through the permitting process, if it finds that:
        (1) The emissions unit was in compliance with the applicable particulate emission standard while a compliance test was being conducted but failed to comply with the general VE standard during the test;
        (2) The emissions unit and associated air pollution control equipment were operated and maintained in a manner to minimize the opacity emissions during the compliance test; and
        (3) The emissions unit and associated air pollution control equipment were incapable of being adjusted or operated in such a manner as to meet the opacity standard.
        (4) If the presence of uncombined water is the only reason for failure to meet VE standards given in this rule, such failure shall not be a violation of this rule.

    [Rule 62-296.320(4)(b) F.A.C, General VE Standard]

12. Unconfined Emissions of Particulate Matter (PM): No person shall cause, let, permit, suffer or allow the emissions of unconfined PM from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions.
    [Rule 62-296.320(4)(c), F.A.C.]

SHUTDOWN OF EXISTING EMISSION UNITS

13. Shutdown of Existing Emission Units: Upon startup, shakedown and commissioning of the Wood Drying Kilns No. 4 and 5 (EU 009 and 010) and the new fuel storage silo (EU 011) at the Whitehouse Lumber Mill, Wood Drying Kiln Nos. 1 through 3 (EU 001, 002 and 003) and associated wood and propane burners and the existing fuel storage silo (EU 008) shall be permanently shut down. The exact timing of the shutdown of these emission units shall be done in consultation with the Compliance Authority. The Compliance Authority shall be notified 30 days prior to the startup of the new kilns and fuel storage silo. A new construction permit shall be obtained, including a PSD applicability analysis, if the applicant wishes authorization to restart any of these shut down emission units. [Application No. 0310197-012-AC; and, Rule 62-212.400(12), F.A.C.]

A. Planer Meter Bin and Truck Bin/Planer Silo (EU 006 and EU 007)

This section of the permit addresses the following emissions units.

EU No.	Emission Unit Description
006	Planer Meter Bin and Cyclone
007	Truck Bin/Planer Silo and 2-Cyclones

The planer meter bin stores shavings and fugitive dust collected from the planer dried lumber transport. The maximum process rate of the bin is 35 MBF/hour. Emissions of PM from the bin are controlled by a cyclone with a nominal volumetric flow rate of 46,611 cubic feet per minute (cfm).

The truck bin/planer silo stores shavings and fugitive dust collected from the planer dried lumber transport. A diverter valve exists after the planer meter bin that directs the flow to either the truck bin or the planer silo. The two units cannot operate simultaneously. The maximum process rate for the truck bin and planer silo is 35 MBF/hour. The truck bin and planer silo are each equipped with a cyclone with a nominal volumetric flow rate of 2,580 cfm to control emissions of PM.

{Permitting Note: In accordance with Rule 62-212.400(12), F.A.C., other emissions standards and performance restrictions specified in this permit allow the emission units to avoid PSD preconstruction review for particulate matter (PM), PM with a mean diameter of 10 microns or less (PM_{10}), PM with a mean diameter of 2.5 microns or less ($PM_{2.5}$). These emission units are regulated under Rules 62-296.700, F.A.C. (Reasonably Achievable Control Technology (RACT) and 62-296.711, F.A.C. (Materials, Sizing, Screening, Crushing and Grinding Operations); and Jacksonville Environmental Protection Board (JEPB).}

PREVIOUS APPLICABLE REQUIREMENTS

1. Other Permits: The conditions of this permit supplement all previously issued air construction and operation permits for these emissions units. Unless otherwise specified, these conditions are in addition to all other applicable permit conditions and regulations. [Rule 62-4.070, F.A.C.]

PERFORMANCE RESTRICTIONS

2. Restricted Operation: Each emission unit is limited to 6,200 hours/year of operation on a 12-month rolling annual total. [Application No. 0310197-012-AC; and, Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

3. Circumvention. The permittee shall not circumvent the provisions of an applicable emission limitation by increasing the volume of gas in any exhaust or group of exhausts for the purpose of reducing the stack gas concentration. This includes allowing dilution air to enter the system through leaks, open vents, or similar means. [Rule 62-296.700, F.A.C]

TESTING REQUIREMENTS

4. Initial Compliance Tests: Each emission unit shall be tested to demonstrate initial compliance with the emissions of $PM/PM_{10}/PM_{2.5}$ (filterable). Only one cyclone for EU-007 shall be tested since both processes cannot operate simultaneously. The test data shall be used to provide reasonable assurance that the $PM/PM_{10}/PM_{2.5}$ emission factors (see **Specification Condition 9.d** of this subsection) used in the application for the cyclones was a good representation in determining future potential $PM/PM_{10}/PM_{2.5}$ emissions and to ensure PSD is not triggered. The initial tests shall be conducted within 60 days after startup of the new kilns, but not later than 180 days after initial operation of the new kilns. [Rules 62-4.070(3) and 62-297.310(7)(a)1, F.A.C.]

   {Permitting note: If the tests show that $PM/PM_{10}/PM_{2.5}$ emissions factor is higher on the planer meter bin and truck bin/planer silo cyclones, a construction permit will be submitted prior to exceeding the PSD threshold for $PM/PM_{10}/PM_{2.5}$ to revise the hours of operation to escape PSD.}

5. Test Requirements: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. During each required compliance stack test, the permittee shall operate the tested cyclones

between 90% and 100% capacity. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(7)(a)9, F.A.C.]

6. Test Methods: Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5	Method for Determining Particulate Matter Emissions
201A	Method for Determining $PM_{10}/PM_{2.5}$ Emissions

The above methods are described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800 and 62-297.100, F.A.C.; and Appendix A of 40 CFR 60]

RECORDS AND REPORTS

7. Operational Records: To demonstrate compliance with the operational restrictions in **Specific Condition 2** of this subsection, the permittee shall establish and maintain the following records when operating the planer meter bin and truck bin/planer silo:
   a. Within ten calendar days following each month, record the monthly hours of operation; and
   b. Record the calculated 12-month annual total hours of operation to demonstrate compliance with the operational restrictions.

   [Rules 62-4.070(3) and 62-212.400(12), F.A.C. to avoid PSD preconstruction review for $PM/PM_{10}/PM_{2.5}$]

8. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. The required test report shall be filed with the Department, as soon as practical, but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. In addition to the information identified in Rule 62-297.310(8)(c), F.A.C., the test report shall also indicate the volumetric flow rate of the cyclones (scfm) during the test. [Rule 62-297.310(8), F.A.C.]

9. Actual Emissions Reporting: This permit is based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.
   a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year (TPY) on a calendar year basis, for a period of 5 calendar years following the year in which resumption of regular operations after the change occurred. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix C of this permit.
   b. The permittee shall report to the Department within 60 days after the end of each calendar year during the 5-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:
      (1) The name, address and telephone number of the owner or operator of the major stationary source;
      (2) The annual emissions calculations pursuant to the provisions of 62-210.370, F.A.C., which are provided in Appendix C of this permit;

(3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and

(4) Any other information that the owner or operator wishes to include in the report.

c. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.

d. The permittee shall compute and report annual emissions in accordance with Rule 62-210.370(2), F.A.C. as provided by Appendix C of this permit. For this project, the permittee shall use the following methods in reporting the actual annual $PM/PM_{10}/PM_{2.5}$ emissions for the planer meter bin and truck bin/planer silo:

(1) When calculating the actual annual emissions of $PM/PM_{10}/PM_{2.5}$, the permittee shall use the actual hours of operation, the volumetric flow rate of the of the planer meter bin and truck bin/planer silo cyclones and the $PM/PM_{10}/PM_{2.5}$ emission factor established from the test data obtained from the initial test to determine and report the actual annual emissions of $PM/PM_{10}/PM_{2.5}$.

(2) The emissions of $PM/PM_{10}/PM_{2.5}$ from the each cyclone controlling the planer meter bin and truck bin/planer silo shall not exceed 0.015/0.006/0.003 grains per standard cubic feet (gr/scf), 18.6/7.4/3.7 TPY for the planer meter bin cyclone and 1.0/0.4/0.2 TPY for the truck bin/planer silo cyclones.

(3) Unless otherwise approved by the Department, the permittee shall use the same emissions factors for reporting the actual annual emissions of $PM/PM_{10}/PM_{2.5}$ (0.015/0.006/0.003 gr/scf) as used in the application to establish baseline emissions. Baseline emission of $PM/PM_{10}/PM_{2.5}$ were determined to be 14.0/5.6/2.8 TPY for the planer meter bin cyclone and 0.77/0.31/0.16 TPY for the truck bin/planer silo cyclones.

(4) As defined in Rule 62-210.370(2), F.A.C., the permittee shall use a more accurate methodology if it becomes available.

[Application No. 0310197-012-AC; and, Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]

A. Wood Drying Kiln Nos. 4 and 5 (EU 009 and EU 010)

This section of the permit addresses the following emissions units.

EU No.	Emission Unit Description
009	Wood Drying Kiln No. 4
010	Wood Drying Kiln No. 5

Each continuous lumber kiln is approximately 80 feet in length with a production capacity of 15 MBF/hour. The kilns are direct fired with dry shavings burners with heat input capacities of 40 MMBtu/hour each. Each kiln consists of two tracks traveling in opposite directions and three chambers designed to provide and control the environmental conditions of heat, relative humidity, and air circulation necessary for the proper drying of wood. The first chamber is 67 feet in length and is used to preheat the incoming green lumber using the heat coming off the dry lumber while providing added moisture and saturated cooling for the dried lumber. The middle chamber is 80 feet in length where heat in the form of steam will be introduced to dry the lumber. The third chamber is 67 feet in length and is used to condition the dried wood while preheating the incoming green lumber.

{Permitting Note: In accordance with Rule 62-212.400(PSD), F.A.C., the lumber kilns are subject to Best Available Control Technology (BACT) determinations for volatile organic compounds (VOC). The final BACT determinations are presented in Appendix E of this permit. In accordance with Rule 62-212.400(12), F.A.C., other emissions standards and performance restrictions specified in this permit allow the emission units to avoid PSD preconstruction review for $PM/PM_{10}/PM_{2.5}$. The lumber kilns are regulated under NESHAP Subpart DDDD (Plywood and Composite Wood Products) of 40 CFR 63 adopted and incorporated by reference in Rule 62-204.800, F.A.C.; Rule 62-296.410, F.A.C. (Carbonaceous Fuel Burning Equipment); and, JEPB.}

EQUIPMENT

1. Wood Drying Kilns: The permittee is authorized to install and operate two continuous wood drying lumber kilns. The lumber kilns will have the following nominal design specifications:

   - Each kiln has a maximum production capacity of 15 MBF/hour.
   - Each kiln is equipped with a direct-fired burner with a maximum heat input of 40 MMBtu/hour.
   - Each kiln will consist of three chambers and is 214 feet in length, total.
   - Both kiln burners will fire only wood waste.

   [Application No. 0310197-012-AC]

2. Applicable NESHAP Provisions: The lumber kilns are subject to NESHAP Subpart DDDD (Plywood and Composite Wood Products) and Subpart A (General Provisions). However, NESHAP Subpart DDDD does not identify any compliance/operating requirements or work practice standards for the new lumber kilns. NESHAP Subpart A of 40 CFR 63 (General Provisions) requires each kiln to submit an initial notification. [NESHAP Subpart A and Subpart DDDD of 40 CFR 63; and, Rule 62-204.800, F.A.C.]

PERFORMANCE RESTRICTIONS

3. Permitted Capacity: The maximum annual production capacity for both lumber kilns combined shall not exceed 170 MBF/year based on a 12-month annual rolling total. [Application No. 0310197-012-AC; and, Rules 62-4.070 (Reasonable Assurance), 62-210.200(PTE), and 62-212.400(BACT), F.A.C.]

4. Authorized Fuel: Only wood waste (dry shavings) shall be fired in the lumber kiln burners. [Application No. 0310197-012-AC; and, Rule 62-210.200(PTE), F.A.C.]

5. Hours of Operation: Operation of the new lumber kilns are not limited (8,760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

6. Visible Emissions: VE from each lumber kiln shall not exceed 30% opacity, except that VE of 40% opacity are permissible for not more than 2-minutes in any one hour.
[Rule 62-296.410(2)(b), F.A.C.]

7. Particulate Matter: The emissions of PM shall not exceed 0.2 pound per million British thermal units (lb/MMBtu) for carbonaceous fuel (wood waste) for each burner. Actual mass emissions in TPY shall not exceed those given in **Specific Condition 17.d(2)** of this subsection. [Rules 62-296.410(2)(b) and 62-210.200(PTE), F.A.C.]

8. VOC Emissions: Each lumber kiln shall not exceed the process limit of 3.76 pounds per thousand board feet (lb/MBF) and 319.2 TPY of VOC emissions. [Rule 62-212.400(BACT), F.A.C.]

TESTING REQUIREMENTS

9. Initial Compliance Tests: Each lumber kiln shall be tested to demonstrate initial compliance with the opacity. In accordance with the test methods specified in this permit, the permittee may do a VE test on the kilns, which will serve as a surrogate for emissions of PM. The initial tests shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initial operation of the unit. [Rules 62-4.070(3), 62-296.410(2)(b), and 62-297.310(7)(a)1, F.A.C.]

10. Annual Compliance Tests: During each federal fiscal year (October 1st to September 30th), each lumber kiln shall be tested to demonstrate compliance with the emissions standard for opacity. In accordance with the test methods specified in this permit, the permittee may do a VE test on the kilns, which will serve as a surrogate for emissions of PM. [Rules 62-296.410(2)(b) and 62-297.310(7)(a)4, F.A.C.]

11. Test Requirements: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(7)(a)9, F.A.C.]

12. Test Methods: Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above methods are described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800 and 62-297.100, F.A.C.; and Appendix A of 40 CFR 60]

MONITORING REQUIREMENTS

13. Best Operating and Maintenance Practices: At a minimum, the permittee shall monitor and operate the kilns in accordance with the following best operating and maintenance practices (O&M).

    a. Minimize over-drying the lumber;

    b. Maintain consistent moisture content for the processing lumber charge; and

    c. Dry at the minimum temperature.

    The permittee shall develop a written plan identifying the above practices and the operation and maintenance requirements from the kiln manufacturer. The permittee shall submit the O&M plan to the Department 90 calendar days prior to initial startup of the kilns. The O&M plan shall be part of and included with the Title V air operation permit.

    [Rules 62-4.070(Reasonable Assurance), 62-210.200(PTE), and 62-212.400 (BACT), F.A.C]

RECORDS AND REPORTS

14. Initial Notification: An initial notification shall be submitted no later than 120 days after you begin startup of the lumber kilns. [NESHAP Subpart A of 40 CFR 63.9(b); and Rule 62-204.800, F.A.C.]

15. Operational Records: To demonstrate compliance with the operational restrictions in **Specific Condition 3** and the VOC emissions limit in **Specific Condition 8**, the permittee shall establish and maintain the following records when operating the lumber kilns:

    a. Within ten calendar days following each month, record the total monthly amount and 12-month annual total of wood dried in each kiln (board-feet); and

    b. Record the calculated monthly and 12-month annual total emissions of VOC to demonstrate compliance with the process and emissions limits.

    [Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]

16. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. The required test report shall be filed with the Department, as soon as practical, but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. [Rule 62-297.310(8), F.A.C.]

17. Actual Emissions Reporting: This permit is based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.

    a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in TPY on a calendar year basis, for a period of 5 calendar years following the year in which resumption of regular operations after the change occurred. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix C of this permit.

    b. The permittee shall report to the Department within 60 days after the end of each calendar year during the 5-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:

        (1) The name, address and telephone number of the owner or operator of the major stationary source;

        (2) The annual emissions calculations pursuant to the provisions of 62-210.370, F.A.C., which are provided in Appendix C of this permit;

        (3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and

        (4) Any other information that the owner or operator wishes to include in the report.

    c. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.

    d. The permittee shall compute and report annual emissions in accordance with Rule 62-210.370(2), F.A.C. as provided by Appendix C of this permit. For this project, the permittee shall use the following methods in reporting the actual annual $PM/PM_{10}/PM_{2.5}$ emissions for the wood drying kilns:

(1) When calculating the actual annual emissions of $PM/PM_{10}/PM_{2.5}$, the permittee shall use the actual annual amount of wood dried in the kilns and the $PM/PM_{10}/PM_{2.5}$ emission factor (0.14/0.104/0.099 lb/MBF) used in the application to determine and report the actual annual emissions of $PM/PM_{10}/PM_{2.5}$.

(2) The emissions of $PM/PM_{10}/PM_{2.5}$ from the each wood drying kiln shall not exceed 5.87/4.42/4.21 TPY.

(3) As defined in Rule 62-210.370(2), F.A.C., the permittee shall use a more accurate methodology if it becomes available.

{Permitting Note: The facility is currently a minor source with respect to new source review and will become a major source after the completion of the project. PSD applies to the new units and emission reductions for the equipment being removed from the site is not considered for PSD applicability purposes. Therefore, the baseline emissions for $PM/PM_{10}/PM_{2.5}$ were not applicable for these emission units.}

[Application No. 0310197-012-AC; and, Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]

A. Fuel Storage Silo (EU 011)

This section of the permit addresses the following emissions units.

EU No.	Emission Unit Description
011	Fuel Storage Silo

The fuel storage silo is used to store shavings and fugitive dust collected from the planer dried lumber transport to be used as fuel for the lumber kilns. The silo has a maximum hourly process rate of 35 MBF/hour. Emissions of PM will be controlled by a cyclone with a nominal volumetric flow rate of 3,390 scfm, stack height of 28 feet and exit diameter of 1.5 feet.

{Permitting Note: In accordance with Rule 62-212.400(12), F.A.C., other emissions standards and performance restrictions specified in this permit allow the emission units to avoid PSD preconstruction review for $PM/PM_{10}/PM_{2.5}$. The fuel storage silo is regulated under Rules 62-296.700, F.A.C. RACT PM and 62-296.711, F.A.C. (Materials, Sizing, Screening, Crushing and Grinding Operations); and JEPB.}

EQUIPMENT

1. Fuel Storage Silo: The permittee is authorized to install and operate a fuel storage silo to store dried wood shavings to fuel the kiln burners for the continuous lumber kilns. The fuel silo has a maximum hourly process rate of 35 MBF/hour. [Application No. 0310197-012-AC]

2. Cyclone: The permittee shall install a cyclone to reduce emissions of PM from the fuel silo. The general design specifications for the silo consist of a nominal volumetric flow rate of 3,390 scfm. [Application No. 0310197-012-AC]

PERFORMANCE RESTRICTIONS

3. Permitted Capacity: The maximum hourly process rate for the fuel silo shall not exceed 35 MBF/hour. [Rules 62-4.070 (Reasonable Assurance), 62-210.200(PTE), and 62-296.700(RACT), F.A.C.]

4. Restricted Operation: The hours of operation of are not limited (8,760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

5. Circumvention. The permittee shall not circumvent the provisions of an applicable emission limitation by increasing the volume of gas in any exhaust or group of exhausts for the purpose of reducing the stack gas concentration. This includes allowing dilution air to enter the system through leaks, open vents, or similar means. [Rule 62-296.700, F.A.C]

EMISSIONS STANDARDS

6. Visible Emissions: VE from the fuel silo cyclone shall not exceed 5% opacity. [Rule 62-296.410(2)(b), F.A.C.]

7. Particulate Matter: The emissions of PM from the cyclone controlling the fuel storage silo shall not exceed 0.03 gr/dscf. [Rule 62-296.410(2)(b), F.A.C.]

TESTING REQUIREMENTS

8. Initial Compliance Tests: The fuel silo cyclone shall be tested to demonstrate initial compliance with the emission standard for $PM/PM_{10}/PM_{2.5}$ (filterable) and opacity. The test data shall be used to provide reasonable assurance that the $PM/PM_{10}/PM_{2.5}$ emission factors used in the application for the cyclones was a good representation in determining future potential $PM/PM_{10}/PM_{2.5}$ emissions and to ensure PSD is not triggered. If the permittee provides a manufacturers guarantee that the new cyclone will meet the exit grain loading rate of 0.015 gr/scf, the permittee may use the vendor guarantee in lieu of the initial test for $PM/PM_{10}/PM_{2.5}$ emissions. The initial tests shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initial operation of the unit. [Rules 62-4.070(3) and 62-297.310(7)(a)1, F.A.C.]

{Permitting note: If the tests show that $PM/PM_{10}/PM_{2.5}$ emissions factor is higher on the fuel silo cyclone, a construction permit will be submitted prior to exceeding the PSD threshold for $PM/PM_{10}/PM_{2.5}$ to revise the hours of operation to escape PSD.}

9. Annual Compliance Tests: During each federal fiscal year (October 1st to September 30th), the emissions unit shall be tested to demonstrate compliance with the emissions standard for PM and opacity. In accordance with the test methods specified in this permit, the permittee may do a VE test on the cyclone in lieu of the PM test. If it is determined that the visible emission exceeds the 5% opacity on the cyclone a test shall be conducted to show compliance. [Rule 62-297.310(7)(a)4, F.A.C.]

10. Test Requirements: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. During each required compliance stack test, the permittee shall operate the tested cyclones between 90% and 100% capacity. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(7)(a)9, F.A.C.]

11. Test Methods: Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5	Method for Determining Particulate Matter Emissions
9	Visual Determination of the Opacity of Emissions from Stationary Sources
201A	Method for Determining $PM_{10}/PM_{2.5}$ Emissions

The above methods are described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800 and 62-297.100, F.A.C.; and Appendix A of 40 CFR 60]

MONITORING REQUIREMENTS

12. Operations and Maintenance (O&M) Plan: The permittee shall prepare and implement a written O&M plan for the cyclone controlling emissions of PM. The O&M plan must contain the following information as identified in Rule 62-296.700, F.A.C., including but not limited to:

    a. *Air Pollution Control Devises and Collection Systems*. The plan shall include a schedule for the maintenance and inspection of the control device and collection system and a schedule for recording performance parameters of the fuel silo cyclone and auxiliary equipment. The performance parameters shall include such physical, chemical or electrical characteristics as are applicable to the particular emissions unit and which are indicators of the condition, operating rates and efficiencies. Such parameters may include, but shall not be limited to, the following indicators for: pressure drop; gas flow rate; and gas temperatures, inlet and outlet.

    b. *Control Equipment Data*. The plan shall include identification of the fuel silo cyclone including but not limited to the following appropriate design specifications and other descriptive data: manufacturer; model name and number; type of cyclone; design flow rate (liquid and/or gas); efficiency rating at design capacity; pressure drop; liquid to gas ratio; and scrubbing liquor composition.

    c. *Processing or Materials Handling Systems*. Appropriate parameters of processing or materials handling systems provide a measure of the rate of operations. The O&M plan shall include performance parameters which indicate the rate of operation, process weight through-put, the fuel or other energy source, the materials being processed or other physical or chemical characteristics, as applicable. Such parameters may include, but shall not be limited to the following: weight/unit time of raw materials input; process temperature or pressure; fuel or fuel mixture; chemical or physical data on product or raw materials; air to fuel ratio or percent excess oxygen; and electrical power use rate by auxiliary equipment.

The plan shall contain inspection and maintenance schedules including periodic assessments of the condition of manholes, ducting, breaching, hoods, conveyor and elevator housing, loading sheds and other equipment, and a schedule for recording of performance parameter data.

[Rule 62-296.700, F.A.C.]

RECORDS AND REPORTS

13. O&M Records: The permittee shall retain the records of inspections, maintenance and performance data of the fuel storage silo and cyclone for a minimum of two years and shall be made available to the Department upon request. [Rule 62-296.700, F.A.C.]

14. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. The required test report shall be filed with the Department, as soon as practical, but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. In addition to the information identified in Rule 62-297.310(8)(c), F.A.C., the test report shall also indicate the volumetric flow rate of the cyclone (scfm) during the test. [Rule 62-297.310(8), F.A.C.]

15. Actual Emissions Reporting: This permit is based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.

    a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in TPY on a calendar year basis, for a period of 5 calendar years following the year in which resumption of regular operations after the change occurred. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix C of this permit.

    b. The permittee shall report to the Department within 60 days after the end of each calendar year during the 5-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:

        (1) The name, address and telephone number of the owner or operator of the major stationary source;

        (2) The annual emissions calculations pursuant to the provisions of 62-210.370, F.A.C., which are provided in Appendix C of this permit;

        (3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and

        (4) Any other information that the owner or operator wishes to include in the report.

    c. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.

    d. The permittee shall compute and report annual emissions in accordance with Rule 62-210.370(2), F.A.C. as provided by Appendix C of this permit. For this project, the permittee shall use the following methods in reporting the actual annual $PM/PM_{10}/PM_{2.5}$ emissions for the fuel storage silo:

A. Fuel Storage Silo (EU 011)

(1) When calculating the actual annual emissions of $PM/PM_{10}/PM_{2.5}$, the permittee shall use the actual hours of operation, the volumetric flow rate of the of the fuel storage silo cyclone and the $PM/PM_{10}/PM_{2.5}$ emission factor established from the test data obtained from the initial test to determine and report the actual annual emissions of $PM/PM_{10}/PM_{2.5}$.

(2) The emissions of $PM/PM_{10}/PM_{2.5}$ from the each cyclone controlling the fuel storage silo shall not exceed 0.015/0.006/0.003 gr/scf and 1.91/0.76/0.38 TPY.

(3) As defined in Rule 62-210.370(2), F.A.C., the permittee shall use a more accurate methodology if it becomes available.

{Permitting Note: The facility is currently a minor source with respect to new source review and will become a major source after the completion of the project. PSD applies to the new units and emission reductions for the equipment being removed from the site is not considered for PSD applicability purposes. Therefore, the baseline emissions for $PM/PM_{10}/PM_{2.5}$ were not applicable for this emission unit.}

[Application No. 0310197-012-AC; and, Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]