Rex Lumber, Bristol, Florida
Bristol Lumber Mill

Facility ID No. 0770007
Liberty County

Title V Air Operation Permit Revision

Permit No. 0770007-019-AV
(Revision of Title V Air Operation Permit No. 0770007-016-AV)

Permitting and Compliance Authority:

State of Florida
Department of Environmental Protection
Waste Management/Air Resources Program
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November 12, 2014

Title V Air Operation Permit Revision

Permit No. 0770007-019-AV

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November 12, 2014

PERMITTEE:
Rex Lumber, Bristol, Florida
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Permit No. 0770007-019-AV
Bristol Lumber Mill
Facility ID No. 0770007
Title V Air Operation Permit Revision

The purpose of this permit is to revise the Title V air operation permit for the above referenced facility to incorporate the Title V air construction permit No. 0770007-017-AC. The existing Bristol Lumber Mill is located in Liberty County on Highway 12 South in Bristol, Florida. UTM Coordinates: Zone 16, 689.54 km East and 3358.88 km North; and, Latitude: 30° 20’ 50” North and Longitude: 84° 59’ 10” West.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Initial Effective Date: April 7, 2013
Revision Effective Date: November 12, 2014
Renewal Application Due Date: August 25, 2017
Expiration Date: April 7, 2018

/s/
J. Charles Harp
Program Administrator
Waste Management/Air Resources
Northwest District

JCH/ha/m

Section I. Facility Information

This is a revision of Title V air operation permit No. 0770007-016-AV, effective April 7, 2013, to incorporate the terms and conditions of Title V air construction permit No. 0770007-017-AC, issued January 16, 2013.

Changes authorized by air construction permit No. 0770007-017-AC are complete and are a part of this revision permit. Project No. 0770007-017-AC authorizes Rex to convert the existing steam-heated lumber drying Kiln 1 from a batch process to a continuous kiln, increases the maximum production capacity of Kiln 1 from 66 million to 85 million board-feet per year, and increases the total facility kiln throughput from 176 million to 195 million board-feet per year. The project also lengthened Kiln 1 from 84 feet to 204 feet, by the addition of two 60-feet long conditioning chambers at the ends, and added pushers, controls and other associated equipment to Kiln 1. No changes were made to the waste wood fired boilers or to the waste wood handling and storage operations.

Changes authorized by Title V air construction permit No. 0770007-018-AC, issued May 22, 2014, are not complete and are not a part of this revision permit. Project No. 0770007-018-AC authorizes Rex to duct the exhaust gasses from the three existing boilers into the two continuous kilns to recover the waste heat that is currently going out the stacks.

Subsection A. Facility Description

This facility consists of a log debarker, sawmill, wood waste handling and storage system, four steam heated drying kilns, planer mill, and three boilers that provide heat to the kilns. Pine logs are delivered to the facility via logging trucks and stored in the log storage yard. The logs are debarked and conveyed into the sawmill to be cut into various sizes of dimensional lumber. The lumber is automatically sorted by size and collected in corresponding piles that are transferred to kilns for drying. After the lumber is dried, it is transferred to the planer mill where the lumber is sized to specifications. The finished lumber is stored in miscellaneous storage sheds until it is shipped off site. The facility also receives debarked and peeled poles from Apalachee Pole Company (adjacent property owner) to be dried in the facility's drying kilns. Once dried, the poles are transported back to Apalachee Pole Company for further processing. The facility has a maximum production rate of 195 million board-feet per year of lumber including 18 million equivalent board-feet (1,500,000 cubic feet) per year of poles.

Kilns Nos. 1 and 2 are continuous kilns that consists of three chambers, pre-conditioning, drying, and post-conditioning. Green lumber is loaded by forklift onto steel trams sitting on rails and then the trams are pushed into the kilns by pushers on a slow continuous basis. In the initial (in-bound) pre-conditioning chamber, the green lumber is pre-heated by steam generated in the drying chamber. The central drying chamber is heated by steam from the boilers. In the center chamber the water in the green lumber is driven off. This process generates VOC, and HAP (primarily methanol and formaldehyde) from the sap in the green lumber. In the post conditioning chamber, the dried wood is gradually cooled to retard splitting and warping. Due to the open-ended design of the continuous kilns, control equipment cannot be incorporated into or retrofitted so there are no external emission controls on Kiln Nos. 1 and 2.

Kilns Nos. 3 and 4 are batch kilns. Green utility poles are loaded onto a steel tram. The loaded tram is pushed into the kiln and kiln doors are closed. Steam from Boiler Nos. 1, 2, and 3 provides heat through steam coils in the kilns, the heat is then circulated inside the kiln by recirculating fans, drying the poles inside the kiln. Steam, water vapor, VOC, and HAP from the poles are exhausted through the kiln roof vents. Pole drying time averages forty- eight to fifty-two hours.

The facility's three Boilers (Nos.1, 2 and 3) have a maximum heat input capacity of 29.6, 42.9 and 28.7 MMBtu/hr, respectively, and are equipped with a wood gasification system. The boilers are fueled by wood waste that is generated during the processing of lumber at the facility. The fuel is conveyed using a variable speed screw conveyor into the gasifier. Ash from Boilers No.1 and No.2 is collected by multiclones and emptied into containers located under the multiclones. Ash from Boiler No.3 is conveyed by screw conveyor to an enclosed bin for removal by front-end loader. Steam production is continuously measured and recorded on a recording chart.

Wood waste handling and storage is an unregulated emission unit and is not subject to any specific emission-limiting standard except for the general visible emissions standard of less than 20% opacity. The wood waste (bark, sawdust and shavings from the planer mill) is conveyed to one of three fuel storage silos located adjacent to the boilers to be used as fuel or conveyed to the truck loading station for shipment off site. Scrap pieces of wood generated from the lumber process are forwarded to chippers where they are chipped into smaller pieces and conveyed to the truck loading station to be shipped off site. Wood waste handling and storage consists of miscellaneous blowpipe systems, conveyors, eight receiving cyclones and storage bins.

Reciprocating Internal Combustion Engines

This Title V facility contains one stationary reciprocating internal combustion engine (RICE) that is subject to 40 CFR 63, Subpart ZZZZ – NESHAP for Stationary Reciprocating Internal Combustion Engines, and 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines:

Engine Purpose	Engine Type	Date of Mfg	Engine Model	Brake hp	Power (kW)	Fuel
Generac Generator Set	Emergency	01/2012	F4GE9485A	132	80	Diesel

Subsection B. Summary of Emissions Units

EU No.	Brief Description
Regulated Emissions Units	
001	Boiler No. 1 (29.6 MMBtu/hr) and Boiler No. 3 (28.7 MMBtu/hr)
002	Boiler No. 2 (42.9 MMBtu/hr)
015	Four Lumber Drying Kilns
016	One New Diesel Powered Emergency CI RICE
Unregulated Emissions Units (see Appendix U, List of Unregulated Emissions Units and/or Activities)	
014	Wood Waste Handling and Storage

The Department has determined that Rex Lumber is not subject to Compliance Assurance Monitoring with the applicability of 40 CFR 63, Subpart DDDD – Plywood and Composite Wood Products.

Also included in this permit are miscellaneous insignificant emissions units and/or activities (see Appendix I, List of Insignificant Emissions Units and/or Activities).

Subsection C. Applicable Regulations.

Based on the Title V air operation permit revision application received August 22, 2014, this facility **is** a major source of hazardous air pollutants (HAP). The existing facility is a prevention of significant deterioration (PSD) major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
Federal Rule Citations	
40 CFR 60, Subpart A, NSPS General Provisions	Facility-Wide
40 CFR 60.48c [Subpart Dc] – Reporting and Recordkeeping Requirements	001
40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	016
40 CFR 63, Subpart A, NESHAP General Provisions	Facility-Wide
40 CFR 63, Subpart DDDD, NESHAP: Plywood and Composite Wood Products	Facility-Wide

40 CFR 63.9(b) [NESHAP Subpart A]– Initial Notification Requirements	015
40 CFR 63, Subpart ZZZZ - NESHAP for Stationary Reciprocating Internal Combustion Engines	016
State Rule Citations	
62-4 - Permits	Facility-Wide
62-204 – Air Pollution Control – General Provisions	Facility-Wide
62-204.800 - Standards Adopted	Facility-Wide
62-210 – Stationary Sources – General Requirements	Facility-Wide
62-210.370(3) - Annual Operating Report	Facility-Wide
62-210.700 - Excess Emissions	001, 002
62-212 – Stationary Sources – Preconstruction Review	Facility-Wide
62-213 – Operation Permits for Major Sources of Air Pollution	Facility-Wide
62-213.205 - Annual Emissions Fee	Facility-Wide
62-213.440 – Permit Content	Facility-Wide
62-213.440(3)(a) and (b) – Annual Statement of Compliance	Facility-Wide
62-296 – Stationary Sources – Emission Standards	Facility-Wide
62-296.320(1) – VOC Emissions Standard	Facility-Wide
62-296.320(2) - Objectionable Odor Prohibited	Facility-Wide
62-296.320(4)(b) - General Visible Emissions Standard	Facility-Wide
62-296.320(4)(c) - Unconfined Emissions of Particulate Matter	Facility-Wide
62-297 – Stationary Sources – Emissions Monitoring	Facility-Wide
62-297.310 - General Compliance Test Requirements	Facility-Wide
62-297.401 – Compliance Test Methods	Facility-Wide

The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section IV, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

FW2. Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means 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. [Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

FW3. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed-necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]

{Permitting Note: Nothing is deemed necessary and ordered at this time.}

FW4. General Visible Emissions. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]

FW5. Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter 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. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

a. Paving and maintenance of roads, parking areas and yards.
b. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
c. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
d. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
e. Landscaping or planting of vegetation.
f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
g. Confining abrasive blasting where possible.
h. Enclosure or covering of conveyor systems.

[Rule 62-296.320(4)(c), F.A.C.]

Annual Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements for additional details.

FW6. Electronic Annual Operating Report and Title V Annual Emissions Fees. The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection's Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP's Electronic Annual Operating

Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source's most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1st of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070.** Additional information is available by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: http://www.dep.state.fl.us/air/emission/tvfee.htm. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, §403.0872(11), Florida Statutes (2013)]

{Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: http://www.dep.state.fl.us/air/emission/eaor. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at eaor@dep.state.fl.us.}

{Permitting Note: The Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) has been repealed. ***A separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.****}*

FW7. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V permit was effective. [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

Subsection A. The specific conditions in this section apply to the following emission unit:

EU No.	Brief Description
001	Boiler No. 1 (29.6 MMBtu/hr) and Boiler No. 3 (28.7 MMBtu/hr)

These boilers are equipped with a wood gasification system and are fueled by wood waste generated during the processing of lumber at the facility. The fuel is conveyed using a variable speed screw conveyor into the gasifier. Steam production is continuously measured and recorded on a recording chart.

Boiler No. 1 is manufactured by Industrial Boiler and has a maximum heat input capacity of 29.6 MMBtu/hr. Particulate emissions are controlled by two (in series) multiple tube dry collectors manufactured by Zurn, model MTSA-30-9-CYT-A. Ash collected by multiclones is emptied into containers located under the multiclones. Due to the age and size of this boiler (built before June 1989 and less than 30 MMBtu/hr), it is subject to the visible emissions limitation in accordance with Rule 62-296.410(2)(a), F.A.C., Carbonaceous Fuel Burning Equipment.

Boiler No. 3 is manufactured by Hurst Boiler & Welding Company, model HYB-3900, and has a maximum heat input capacity of 28.7 MMBtu/hr. Particulate emissions are controlled by two (in series) multiple tube dry collectors manufactured by Hurst Boiler & Welding Company, models K12-16t and K9-44T. Ash is conveyed by an enclosed chain conveyor to an enclosed bin for removal by front-end loader. Due to the age and size of this boiler (built after June 1989 and less than 30 MMBtu/hr), it is subject to the visible emissions limitation in accordance with Rule 62-296.410(2)(a), F.A.C. and to the fuel record keeping requirements of 40 CFR 60.48c [NSPS Subpart Dc], Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

Essential Potential to Emit (PTE) Parameters

A.1. The maximum allowable heat input rates for these boilers are as follows:

EU No. 001	MMBtu/hr Heat Input	Fuel Type
Boiler No. 1	29.6	carbonaceous fuel (wood waste) only
Boiler No. 3	28.7	carbonaceous fuel (wood waste) only

[Rules 62-4.070(3), 62-210.200(PTE)]

A.2. Methods of Operation - (Fuels). These boilers shall be fueled by carbonaceous fuel (wood waste) only. [Rules 62-4.070(3), and 62-213.410, F.A.C., and 40 CFR 60.48c]

A.3. Hours of Operation. This emission unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.]

A.4. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Unless otherwise specified, the averaging times are based on the specified averaging time of the applicable test method.

A.5. Visible Emissions. Visible Emissions (VE) shall not exceed 20% opacity under normal operation except for up to two minutes in any one hour at not more than 40% opacity. [Rule 62-296.410(2)(a), F.A.C.]

Excess Emissions

A.6. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of

excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

A.7. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Test Methods and Procedures

{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.8. Test Methods. Required tests shall be performed in accordance with the following reference methods:

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

The above methods are described in 40 CFR 60, Appendix A, and 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 62-296.410(2)(a) and 62-297.401(9)(c), F.A.C.]

A.9. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

A.10. Annual Compliance Tests Required. During each federal fiscal year (October 1st to September 30th), each Boiler shall be tested to demonstrate compliance with the emissions standards for visible emissions. Notification of compliance testing and completed test reports may be submitted by electronic mail to nwdair@dep.state.fl.us. [Rules 62-296.410 and 62-297.310(2) and (7), F.A.C.]

{Permitting Note: Compliance test requirements for this emissions unit will change after startup, following completion of Project No. 0770007-018-AC. However, construction for that project is not complete and it is not a part of this permit.}

Recordkeeping and Reporting Requirements

A.11. Boiler No. 3 Reporting Requirements. Records of fuel usage for Boiler No.3 only shall be maintained and available for Department inspection. [Rules 62-4.070(3) and 62-213.410, F.A.C., and 40 CFR 60.48c]

A.12. Excess Emissions – Notification. In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

Subsection B. The specific conditions in this section apply to the following emission unit:

EU No.	Brief Description
002	Boiler No. 2 (42.9 MMBtu/hr)

This boiler is equipped with a wood gasification system and is fueled by the wood waste that is generated during the processing of lumber at the facility. The fuel is conveyed using a variable speed screw conveyor into the gasifier. Steam production is continuously measured and recorded on a recording chart.

Boiler No. 2 is manufactured by Industrial Boiler and has a maximum heat input capacity of 42.9 MMBtu/hr. Particulate emissions are controlled by two (in series) multiple tube dry collectors, manufactured by Zurn, model MTSA-30-9-CYT-A. Ash collected by multiclones is emptied into containers located under the multiclones. Due to the age and size of this boiler (built before June 1989 and greater than 30 MMBtu/hr), it is subject to the visible emissions limitation in accordance with Rule 62-296.410(2)(b), F.A.C., Carbonaceous Fuel Burning Equipment.

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The maximum allowable heat input rate for this boiler is as follows.
[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EU No. 002	MMBtu/hr Heat Input	Fuel Type
Boiler No. 2	42.9	carbonaceous fuel (wood waste) only

[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

B.2. Methods of Operation - (Fuels). This boiler shall be fueled by carbonaceous fuel (wood waste) only.
[Rules 62-4.070(3) and 62-213.440(1), F.A.C.]

B.3. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year.
[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

B.4. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards
{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Unless otherwise specified, the averaging times are based on the specified averaging time of the applicable test method.

B.5. Visible Emissions. Visible emissions (VE) shall not exceed 30% opacity under normal operation except for up to two minutes in any one hour at not more than 40% opacity. [Rule 62-296.410(2)(b)1, F.A.C.]

B.6. Particulate Matter. Particulate Matter (PM) emissions shall not exceed 0.2 lbs/MMBtu of heat input of carbonaceous fuel. [Rule 62-296.410(2)(b)2., F.A.C.]

Excess Emissions

B.7. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of

excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

B.8. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Test Methods and Procedures

{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

B.9. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
EPA Method 5	Determination of Particulate Emissions from Stationary Sources
DEP Method 9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above methods are described in 40 CFR 60, Appendix A, and 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 62-296.410(2)(b), 62-297.401(5) and 62-297.401(9)(c), F.A.C.]

B.10. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

B.11. Annual Compliance Tests Required. During each federal fiscal year (October 1st to September 30th), Boiler No. 2 shall be tested to demonstrate compliance with the emissions standards for VE and PM. Notification of compliance testing and completed test reports may be submitted by electronic mail to nwdair@dep.state.fl.us. [Rules 62-296.410 and 62-297.310(2) and (7), F.A.C.]

{Permitting Note: Compliance test requirements for this emissions unit will change after startup, following completion of Project No. 0770007-018-AC. However, construction for that project is not complete and it is not a part of this permit.}

Recordkeeping and Reporting Requirements

B.12. Excess Emissions. – Notification. In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

Subsection C. The specific conditions in this section apply to the following emission unit:

EU No.	Brief Description
015	Four Lumber Drying Kilns Nos. 1 through 4

This emissions unit consists of four lumber drying kilns. Kiln Nos. 1 and 2 are continuous, open-ended, countercurrent kilns used to dry lumber produced at the Rex sawmill. Kiln Nos. 3 and 4 are batch-process kilns used to dry debarked and peeled poles from Apalachee Pole Company (adjacent property owner). The steam used to heat the kilns is generated by three steam-producing boilers which are fueled by the wood waste generated on site. After the lumber is dried, it is transferred to the planer mill where the lumber is sized to specifications. The finished lumber is stored in miscellaneous storage sheds until it is shipped off site.

Emissions from the continuous kilns are vented uncontrolled through the open ends. Emissions from the batch kilns are vented uncontrolled through roof vents.

Essential Potential to Emit (PTE) Parameters

C.1. Permitted Capacities. The maximum lumber drying rate for each kiln shall not exceed the following:

EU No. 015	Maximum Drying Rate (board-feet per 12-month rolling period)
Kiln 1	85,000,000
Kiln 2	92,000,000
Kiln 3	9,000,000 (equivalent to 750,000 cubic feet)
Kiln 4	9,000,000 (equivalent to 750,000 cubic feet)

[Rules 62-4.070(3) and 62-21 0.200(PTE), F.A.C.; and Permit Nos. 0770007-014-AC and 0770007-017-AC]

{Permitting Note: Because poles are dried in Kilns 3 and 4, and pole volume is measured in cubic feet, the drying rate for these kilns is specified in both board-feet and cubic feet.}

C.2. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C., and Permit No. 0770007-014-AC]

C.3. Waste Wood Heating Value. During the month of July of each year, the Permittee shall obtain a representative sample of waste wood fired in the boilers. The results shall be available within 45 days of taking the sample. Each representative sample shall be analyzed for moisture content (% by weight) and heating value (Btu/lb, as-fired). The actual heating value shall be determined from the most recent four analyses. The actual average heating value (as-fired), determined from the most recent four analyses, shall be used in all calculations for the heat input rates and waste wood charging rates for the boilers. The permittee shall use the following methods or other equivalent methods for sampling and analysis of waste wood: preparation of composite fuel samples (ASTM E1757); determining heat content (ASTM E711); and determining moisture content (ASTM E871). [Rule 62-4.070(3), F.A.C., and Permit No. 0770007-014-AC]

Recordkeeping and Reporting Requirements

C.4. Production Data. Within at least ten days following each calendar month, the Permittee shall record the following information:

a. The amount of wood dried in each kiln (board-feet) for the previous calendar month; and

b. The amount of wood dried in each kiln (board-feet) for the previous 12 calendar months of operation.

The records shall be maintained in a written (or electronic) log available for inspection by the Department for a minimum period of 5 years. [Rule 62-4.070(3), F.A.C., and Permit Nos. 0770007-014-AC and 0770007-017-AC]

{Permitting Note: Permittee should use the best available data for reporting emissions from the kilns. Based on currently available data, the VOC emission factor for the kilns is 4.74 lb VOC/1000 board-feet, based on National Council for Air and Stream Improvement (NCASI) Bulletin 845 and emission factors for Formaldehyde and Methanol from the NCASI 2008 SARA Handbook.}

Other Requirements

C.5. Kiln1 and Kiln 2 Operating Practices. Permittee shall operate Kiln 1 and Kiln 2 in accordance with the following best operating practices. (See Attachments: Best Operating Practices, for Kiln Nos. 1 and 2, for details.)

1. Minimize over-drying the lumber;
2. Maintain consistent moisture content for the processed lumber charge; and
3. Dry at the minimum temperature for the given lumber charge.

Permittee may change the best operating practices plan for these continuous kilns by submitting a request in accordance with Rule 62-213.410(2), F.A.C. at least seven days prior to implementing the change.

[Rule 62-212.400(BACT), F.A.C., and Permit Nos. 0770007-014-AC and 0770007-017-AC]

NESHAP PROVISIONS

C.6. 40 CFR 63, Subpart DDDD. The facility is subject to the applicable requirements contained in 40 CFR 63, Subpart DDDD – NESHAP: Plywood and Composite Wood Products. Pursuant to §63.2232(b), *"The affected source includes lumber kilns at plywood and composite wood products and manufacturing facilities and at any other kind of facility"*. In addition, pursuant to §63.2252, "*Process units not subject to the compliance options or work practice requirements specified in §63.2240 (including, but not limited to, lumber kilns) are not required to comply with the compliance options, work practice requirements, performance testing, monitoring, SSM plans, and recordkeeping or reporting requirements of this subpart, or any other requirements in subpart A of this part, except for the initial notification requirements in §63.9(b)."*

The permittee shall comply with the initial notification requirements in §63.9(b). [§63.2232(b) and §63.2252]

Subsection D. The specific conditions in this section apply to the following emission unit:

ID No.	Emission Unit Description
016	One New Diesel Powered Emergency CI RICE

This emission unit consists of one stationary, diesel-fueled, emergency, compression ignition, reciprocating internal combustion engine (CI RICE) manufactured after 2007 with a displacement of less than 10 liters per cylinder.

The following table provides important details for this emissions unit:

Facility Location	Engine Type	Engine Mfg	Engine Model No.	Kw	Brake hp	Mfg/Model Year
Generator Set	Emergency	Generac	F4GE9485A	80	132	2012 (New)

This CI RICE is regulated by 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE and by 40 CFR 60, Subpart IIII, NSPS for Stationary Compression Ignition RICE, adopted in Rules 62.204.800(11)(b) & (8)(b), F.A.C. The engine is a post-2007 model year (new), stationary, emergency, diesel fueled, CI RICE, with a displacement of less than 10 liters per cylinder, located at a major source of HAP. Therefore, in accordance with provisions of 40 CFR 63.6590(c)(6), meeting the requirements of 40 CFR 60, Subpart IIII, satisfies compliance with the requirements of 40 CFR 63, Subpart ZZZZ.

Essential Potential to Emit (PTE) Parameters

D.1. Authorized Fuel. This stationary RICE must use diesel fuel that meets the following requirements for non-road diesel fuel:

a. *Sulfur Content*. The sulfur content shall not exceed 15 ppm, 0.0015% by weight, (ultra low sulfur) for non-road fuel.
b. *Use of Existing Fuel*. Any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

[40 CFR 60.4207(b), 80.510(b)]

D.2. Restricted Hours of Operation.

a. *Maintenance and Testing.* These engines are authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year.
b. *Emergency Situations*. There is no time limit on the use of emergency stationary RICE in emergency situations.
c. *Non-emergency Situations*. These engines may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing.
d. *Other Situations*. These engines cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity.

[40 CFR 60.4211(f)]

D.3. Operation and Maintenance. The owner or operator must operate and maintain the stationary CI RICE according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. These RICE must be maintained and operated to meet the emissions standards for NO_X + NMHC, CO and PM specified in this subsection over the entire life of the engine.
[40 CFR 60.4206, 4211(a)(1), (2) and (3)]

Emissions Standards

D.4. One Generac 132 HP Diesel Engine (emergency generator):

1. NO_X + NMHC Emissions. Emissions of NO_X plus non-methane hydrocarbons shall not exceed 4.0 grams per kilowatt hour (g/kW-hr).
2. CO Emissions. Carbon monoxide (CO) emissions shall not exceed 5.0 g/kW-hr.
3. PM Emissions. Particulate matter (PM) emissions shall not exceed 0.3 g/kW-hr.

[40 CFR 60.4205(b), 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a)]

Testing and Compliance Requirements

D.5. Engine Certification Requirements. The owner or operator must comply with the emissions standards specified above by having purchased an engine certified by the manufacturer to meet those limits. The engine must have been installed and configured according to the manufacturer's emission-related specifications, except as permitted in Specific Condition, *Compliance Requirements Due to Loss of Certification***.**
[40 CFR 60.4211(c)]

D.6. Compliance Requirements Due to Loss of Certification. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

You must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if you do not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

[40 CFR 60.4211(g)(1) and (2)]

D.7. Testing Requirements. In the event performance tests are required pursuant to Specific Condition, *Compliance Requirements Due to Loss of Certification*, the following requirements shall be met:

a. *Testing Procedures*. The performance test must be conducted according to the in-use testing procedures in 40 CFR Part 1039, Subpart F.

b. *NTE Standards*. Exhaust emissions from these engines must not exceed the not-to-exceed (NTE) numerical requirements, rounded to the same number of decimal places as the applicable standard (STD) in Specific Conditions, *Emissions Standards, for NO_X + NMHC, CO and PM*, specified in this subsection, determined from the following equation:

(eq.1) *For Each Pollutant: NTE Requirement = (1.25) x (STD)*

[40 CFR 60.4212(a) and (c)]

D.8. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

Monitoring Requirements

D.9. Hour Meter. The owner or operator must install a non-resettable hour meter if one is not already installed. [40 CFR 60.4209(a)]

Records and Reports

D.10. Hours of Operation Records. The owner or operator must keep records of the operation of the engine in emergency and non-emergency service that is recorded through the non-resettable hour meter. The owner or operator must record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214]

D.11. Maintenance Records. To demonstrate conformance with the manufacturer's written instructions for maintaining the certified engine and to document when compliance testing must be performed pursuant to Specific Condition, *Compliance Requirements Due to Loss of Certification*, the owner or operator must keep the following records:

a. Engine manufacturer data indicating compliance with the standards.
b. A copy of the manufacturer's written instructions for operation and maintenance of the certified engine.
c. A written maintenance log detailing the date and type of maintenance performed on the engine, as well as any deviations from the manufacturer's written instructions.

[Rule 62-213.440(1), F.A.C.]

D.12. Testing Notification. At such time that the requirements of Specific Condition, *Compliance Requirements Due to Loss of Certification,* become applicable, the owner or operator shall notify the compliance authority of the date by which the initial compliance test must be performed.
[Rule 62-213.440(1), F.A.C.]

D.13. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

General Provisions

D.14. 40 CFR 60, Subpart A, General Provisions. The owner or operator shall comply with the applicable requirements of 40 CFR 60, Subpart A, General Provisions, as specified below.

General Provisions Citation	Subject of Citation
40 CFR 60.1	General applicability of the General Provisions
40 CFR 60.2	Definitions (see also 40 CFR 60.4219)
40 CFR 60.3	Units and abbreviations
40 CFR 60.4	Address
40 CFR 60.5	Determination of construction or modification
40 CFR 60.6	Review of plans
40 CFR 60.9	Availability of information
40 CFR 60.10	State Authority
40 CFR 60.12	Circumvention
40 CFR 60.14	Modification
40 CFR 60.15	Reconstruction
40 CFR 60.16	Priority list
40 CFR 60.17	Incorporations by reference
40 CFR 60.19	General notification and reporting requirements

[40 CFR 60.4218 and Table 8 to Subpart IIII of 40 CFR 60]

SECTION IV. APPENDICES

The following appendices are enforceable parts of this permit

Appendices and Attachments:

Appendix A, Abbreviations, Acronyms, Citations, and Identification Numbers.
Appendix I, List of Insignificant Emissions Units and/or Activities.
Appendix ICE, Requirements for Internal Combustion Engines.
Appendix RR, Facility-wide Reporting Requirements.
Appendix TR, Facility-wide Testing Requirements.
Appendix TV, Title V General Conditions.
Appendix U, List of Unregulated Emissions Units and/or Activities.

REFERENCED ATTACHMENTS.

The Following Attachments Are Included for Applicant Convenience:

Referenced Attachments:

Figure 1, Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance.
Table H, Permit History.
Table 1, Summary of Air Pollutant Standards and Terms.
Table 2, Summary of Compliance Requirements.
Kiln 1 Best Operating Practices.
Kiln 2 Best Operating Practices.
Time Sensitive Action Chart