Title V Air Operation Permit Renewal
Permit No. 1230033-010-AV

APPLICANT

The applicant for this project is Gilman Building Products, LLC. The applicant's responsible official and mailing address are: Mr. Victor H. Garrett, President Gilman Building Products Company LLC, Perry Mill, 3823 Owens Road, Yulee, Florida 32097.

FACILITY DESCRIPTION

Gilman Building Products , LLC operates a lumber wood processing facility (SIC code 2421) This facility consists of several pieces of equipment used to process southern yellow pine logs into chips, bark, and graded lumber. Equipment includes one wood-fired boiler, one direct-fired kiln, two baghouses for the fuel systems, a log debarker, saw, chipper, sorter, planer, cyclones, two indirect-fired drying kilns, and a hammer mill**.**

The wood-fired boiler provides steam to the two indirect-fired kilns. It is fueled by dried wood waste. Two multi-cyclone collectors in series control particular matter emissions. CAM applies to the wood fired boiler.

The direct-fired lumber drying kiln has a waste wood fired burner which provides direct combustion air heat to the .The waste wood fired burner has an abort stack for heat release when necessary. Emissions exhaust through the kiln's roof vents. The vents are utilized to control the temperature and moisture content of the air within the kiln.

CAM does not apply to the direct-fired lumber kiln.

Insignificant Activity: The handling and transfer of green sawdust/chip/bark for use and sale off-site is not subject to any unit-specific regulatory requirement. Potential emissions are minimal therefore this activity is classified as an insignificant activity and is included in the Insignificant Activities List (Appendix I), of this Permit.

EMISSIONS UNIT DESCRIPTIONS.

<u>EU 001 Wood Fired Boiler</u>: The 46 MMBtu/hr wood-fired Industrial Boiler, Model No. HRT 3-5000-175 provides steam to both Indirect Fired Kiln #1 and Indirect Fired Kiln #2 (EUs 006 and 007, respectively). This boiler is fueled by dry wood wastes. Two, in series, multi-cyclone collectors are used to control particulate matter emissions.

This emissions unit is regulated under: Rule 62-296.410, F.A.C. – Carbonaceous Fuel Burning Equipment, and 40, CFR, Part 64- Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C. The Wood Fired Boiler is also subject to 40 CFR 63, Subpart DDDDD - National Emission Standards for HAP for Major Sources: Industrial, Commercial and Institutional Boilers.

This emissions unit must comply with the requirements of 40 CFR 63, Subpart DDDDD no later than January, 31, 2016.

EU 006 Indirect Fired Drying Kiln #1: Historically, the maximum annual production rate for this kiln was estimated to be 36,865 Mbf. This was based on the assumption that each drying cycle is 24 hours. Historical permit application submittals and RAI responses have also indicated the maximum design throughput rate of the kiln as being 30, 000 – 37,500 mbf/yr.

The 2007Annual operating report (2007) states that the kiln is capable of operating at about 37,814 mbf/yr. This is the largest operational throughput data for the kiln provided by the facility. The Department requested on August 27, 2013, that the facility provide documentation from the manufacturer (i.e., kiln dimensions, holding capacity, drying time per charge, etc.) in support of the stated maximum design capacity of 60 MMbft per year stated in the Title V Renewal application received August, 05, 2013. Applicant's supplied data dated September 12, 2013 indicates that the kiln manufacturer, Hemco, is no longer in business hence manufacturer's supply data is unavailable. In lieu of the manufacturer's data, the P.E. of record supplied an official letter to the Department indicating the estimated capacity of Kiln #1 as well as Kiln #2.

Kiln # 1 dimensions are 64' 5" x 34' 4" with two tracks for loading lumber. The maximum heat input rate for the burner is estimated to be 25.0 mmbtu/hr. From the September 12, 2013 applicant supplied data, the capacity of the kiln is estimated as 147,000 board feet per charge.

The kiln's maximum annual production rate is unrestricted based on the kiln's current configuration and operating methods.

Kiln # 1 is classified as an unregulated emissions unit as it is not subject to any unit-specific applicable emissions criteria.

EU 007 Indirect Fired Drying Kiln #2 : Kiln # 2 dimensions are 69' 1" x 22' 4" with one track for loading lumber. The maximum heat input rate for the burner is estimated to be 25.0 mmbtu/hr. From the September 12, 2013 data, the capacity of the kiln is estimated as 76,000 board feet per charge.

The kiln's maximum annual production rate is unrestricted based on the kiln's current configuration and operating methods.

Kiln #2 is classified as an unregulated emissions unit as it is not subject to any unit-specific applicable emissions criteria.

EU 002 and EU 005: The Bark & Sawdust Silo (EU 002) and #2 Fuel System (EU 005) are each equipped with a baghouse for the control of particulate matter emissions. From

the September 12, 2013 applicant supplied data, potential PM emissions are estimated as being 13.14 TPY for the Bark & Sawdust Silo and 5.26 TPY for the #2 Fuel System.

The Department is co-issuing a draft air Construction Permit, No. 1230033-011-AC, to update the rule applicability, regarding visible emissions limitations for EU Nos. 002 and 005.
Since these emissions units are not subject to a unit-specific rule that establishes a particulate matter emission standard, the established 5% opacity limitation (Rule 62-297.620(4), F.A.C.) is not applicable. The EUs are subject to the General Visible Emissions standard in Rule 62-296.320(4)(b), F.A.C. of less than 20% opacity. According to Rule 62-210.900(1), F.A.C. the General Visible Emissions standard is defined as a facility-wide limitation. As such, it is not included as a specific condition for an emissions unit unless the emissions unit is also subject to the Process Weight Table in Rule 62-296.320(4)(a), F.A.C.

The facility will not be required to perform a visible emissions compliance test at each emissions unit annually or prior to permit renewal. The facility may be required to perform a visible emissions compliance test when the Department believes that the general visible emissions standard is being violated in accordance with Chapter 62-297.310(7)(b), Special Compliance Tests.

Upon issuance of the final construction permit, both emissions units will be classified as unregulated emissions units in the Title V permit. Neither unit is subject to any unit-specific applicable emissions criteria.

<u>EU 004 #3 Direct Fired Lumber Drying Kiln:</u> The Kilntek manufactured direct fired lumber drying kiln has its independent 25.0 MMBtu/hr waste wood fired burner for the drying of cut lumber. The kiln has an abort stack for heat release when necessary, is fueled by dried wood waste and exhausts through its roof vents

The kiln is subject to the requirements of State Rule 62-296.410(2)(a), F.A.C.– Carbonaceous Fuel Burning Equipment, and 40 CFR 63, Subpart DDDD - National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products. However, the kiln not required to comply with any compliance/operating requirement, or the work practice standards; It is subject only to the initial notification requirement as required in 40 CFR 63.9(b).

PROJECT DESCRIPTION

The purpose of this permitting project is to renew the existing Title V permit for the above referenced facility.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Application for a Title V Air Operation Permit Renewal received August 05, 2013
Additional information received September 12, 2013
Notice of Intent to Issue Air Permit issued October 09, 2013
Public Notice Published XX, XX, 2013

PRIMARY REGULATORY REQUIREMENTS

Title III: The facility is identified as a major source of hazardous air pollutants (HAP). Potential emissions of methanol (H115) exceed 10 tons per year.

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

PSD: The facility is a Prevention of Significant Deterioration (PSD)-major source of air pollution in accordance with Rule 62-212.400, F.A.C. Potential emissions of Volatile Organic Compounds (VOCs) exceed 250 tons per year.

NSPS: The facility does not operate units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

NESHAP: The facility does operate units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63.

The Wood Fired Boiler is subject to 40 CFR 63, Subpart DDDDD - National Emission Standards for HAP for Major Sources: Industrial, Commercial and Institutional Boilers

CAIR: The facility is not subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

CAM: Compliance Assurance Monitoring (CAM) does apply to the wood-fired boiler which provides steam to the two indirect-fired kilns. The wood fired boiler is fueled by dried wood waste. Two multi-cyclone collectors in series are used to control particulate matter emissions.

GHG: On July 20, 2011, EPA promulgated the Deferral for CO_2 emissions from Bioenergy and Other biogenic Sources under the Prevention of Significant Deterioration (PSD) and Title V Programs. This action defers for a period of three (3) years the application of the PSD and Title V Permit requirements to biogenic carbon dioxide emissions from bioenergy and other biogenic stationary sources.

Pursuant to 40 CFR 71.2(2), prior to July 21, 2014, the mass of the greenhouse gas carbon dioxide shall not include carbon dioxide emissions resulting from the combustion or decomposition of non-fossilized and biodegradable organic material originating from plants, animals, or micro-organisms (including products, by-products, residues and waste from agriculture, forestry and related industries as well as the non-fossilized and biodegradable organic fractions of industrial and municipal wastes including gases and liquids recovered from the decomposition of non-fossilized and biodegradable organic material).

PROJECT REVIEW

Changes that were made as part of permit renewal 1230033-010-AV include reformatting: Title V Permit format effective 10/28/2010, replacement of TV-6 with Appendix TV – Title V General Conditions dated 11/01/2010, Appendix TR – Facility-Wide Testing Requirements dated 9/12/2008, and Appendix RR – Facility-Wide Reporting Requirements dated 9/17/2009.

CONCLUSION

This project renews Title V air operation permit No. 1230033-009-AV. This Title V air operation permit renewal is issued under the provisions of Chapter 403, Florida Statues (F.S.), and Chapters 62-4, 62-210 and 62-213, F.A.C.