FINAL DETERMINATION

Air Construction Permit
Klausner Holding USA Inc.
New Lumber Production Facility
Permit No. 1210468-001-AC (PSD-FL-417)

PERMITTEE

Klausner Holding USA Inc.
1297 Professional Drive, Suite 202
Myrtle Beach, South Carolina 29577

PERMITTING AUTHORITY

Florida Department of Environmental Protection (Department)
Division of Air Resource Management
Office of Permitting and Compliance (OPC)
2600 Blair Stone Road, MS #5505
Tallahassee, Florida 32399-2400

PROJECT

Permit No. 1210468-001-AC (PSD-FL-417)
Suwannee Mill, a 700 Million Board Feet per Year (MMBF/yr) Lumber Production Facility
Suwannee County, Florida

The Suwannee Mill facility produces dimensional kiln-dried lumber and timber byproducts consisting of bark, wood chips, sawdust, and dry shavings. When the facility is fully constructed, the mill has a maximum annual production capacity of 700 MMBF/yr. The mill processes tree-length green saw logs into dimensional lumber. Raw materials, finished lumber, and saleable byproducts are received and dispatched from the facility by truck or rail.

The project required a review under the state's rules for the Prevention of Significant Deterioration (PSD) of Air Quality and determinations of Best Available Control Technology (BACT) for volatile organic compounds (VOC), nitrogen oxides (NOx), carbon monoxide (CO), particulate matter (PM), PM with an aerodynamic diameter less than or equal to 10 micrometers (PM_{10}), and PM with an aerodynamic diameter less than or equal to 2.5 micrometers ($PM_{2.5}$).

NOTICES AND PUBLICATION

On March 30, 2012, the Department distributed a draft permit package for the proposed project. The applicant published the Public Notice of Intent to Issue Air Permit on April 6, 2012 in the Suwannee Democrat.

COMMENTS ON THE DRAFT PERMIT

No comments were received from the public or the EPA on the draft permit during the 30-day comment period that ended on May 6, 2012. On May 3, 2012, Klausner provided comments by electronic mail. The following summarizes the comments and the Department's response.

Comment #1 – Condition A.1: The applicant requested minor changes to clarify that the biomass-fired boilers will generate hot water and will not be equipped with a superheater, economizer, or air-cooled condensing unit.

A.1. Construction of Dutch oven Biomass-Fueled Boilers: The permittee is authorized to construct two Dutch oven biomass-fueled boilers for hot water generation at the Klausner facility. The boilers include a hot water ~~drum, super~~heater, ~~economizer,~~ air heater, ash hoppers, ducts, fuel feeding equipment, ~~air-cooled condensing unit,~~ air pollution control equipment, and other associated equipment. [Application No. 1210468-001-AC]

Response: The Department agrees and revised this condition accordingly.

Comments #2, #4, and #11 – Conditions A.2.b, A.18, and I.1.d: The applicant indicated that the reductant (e.g., ammonia or urea) for the SNCR system has not yet been selected. These permit conditions should be clarified to allow the use of either reductant.

A.2.b. SNCR System: The permittee shall design, install, operate, and maintain a ~~urea-based~~ SNCR system to reduce NOx emissions in the flue gas exhaust and achieve the NOx emissions standards specified in this subsection. The SNCR shall be on line and functioning properly whenever the boiler is in operation in accordance with the manufacturer's recommendations.

A.18. SNCR Reductant ~~Urea~~ Injection: In accordance with the manufacturer's specification, the permittee shall install, calibrate, operate and maintain a flow meter to measure and record the reductant ~~urea~~ injection rate for the SNCR system for each biomass boiler. The permittee shall operate at a reductant ~~urea~~ injection rate that ensures compliance with the NOx emissions standard. Reductant ~~Urea~~ injection records shall be maintained on site and made available upon request.

I.1.d. Storage Tanks: The permittee is authorized to construct ~~one~~ reductant storage of 10,000 gallon or less ~~urea storage (or anhydrous ammonia)~~ in accordance with 40 CFR 60.130. The storage of reductant ~~urea~~ that is used for NOx control in the SNCR shall comply with all applicable requirements of the Chemical Accident Prevention Provisions of 40 CFR 68.

Response: The Department agrees and clarified this throughout the permit. Also, in the descriptions of the biomass boilers (EU-001 and 002) and the miscellaneous storage tanks (EU-013), the terms "urea injection" and "anhydrous ammonia or urea" were replaced with "reductant injection (e.g., ammonia or urea)".

Comment #3 – Condition A.4: The applicant requests the allowance to provide hot water performance curves for the boilers within 180 days of both Dutch oven biomass-fired boilers becoming operational rather than the Suwannee Mill.

A.4. Boiler Hot Water Output: The maximum hot water output from all fuel combinations for each biomass boiler is 241,454 gallons per hour (4-hour average). Curves relating hot water output rates to heat input rates for each biomass boiler shall be submitted to the Compliance Authority no later than 180 days after the ~~Suwannee mill~~ both Dutch oven Biomass-Fueled Boilers becomes operational. The performance curves shall be based on the water flow through each boiler and the input and output temperature of the water or other measurements which result in an equivalent relationship of heat input to hot water output approved by the Compliance Authority. [Application No. 1210468-001-AC; Rules 62-4.070(3), 62-210.200(PTE), and 62-212.400(PSD), F.A.C.]

Response: This is acceptable and the condition was revised accordingly.

Comment #5 – Condition B.4: The applicant requests the allowance to provide hot water performance curves for the boilers within 180 days of the natural gas-fired boiler becoming operational rather than the Suwannee Mill.

B.4. Boiler Hot Water Output: The maximum hot water output for each natural gas fired boiler is 120,727gallons per hour (4-hour average). Performance curves relating hot water output to heat input from each natural gas boiler shall be submitted to the Compliance Authority no later than 180 days after the ~~Suwannee mill~~ Natural Gas Fired Boiler becomes operational. The heat input curves shall be based on the water flow through each boiler and the input and output temperature of the water or other measurements which result in an equivalent relationship of heat input to hot water output approved by the Compliance Authority. [Application No. 1210468-001-AC; Rules 62-4.070(3), 62-210.200(PTE), and 62-212.400(PSD), F.A.C.]

Response: This is acceptable and the condition was revised accordingly.

Comment #6 – EU-009 Description: The applicant requested minor clarification of the description of the two sorter line trimmers.

EU009 Description

Two Sorter Line Trimmers: The sorter line trimmers will send trimmed blocks and ends by gravity feed to a conveyance system ~~and combine with wet sawmill dry shavings and sawdust~~. Trimmed ends are collected and sold or conveyed to the byproduct screening building to be hogged and sent to a dry chip pile. Dry sawdust ~~Dust and shavings~~ from the sorter line trimmers are sent by vacuum duct to the dry shavings silos.

Response: This is acceptable and the condition was revised accordingly.

Comment #7 – Condition D.2: Again, the applicant requests a minor clarification for the two sorter line trimmers.

D.2. Two Sorter Line Trimmers: The permittee is authorized to construct two sorter line trimmers. The sorter line trimmers reduce the length of the finished planed dimensional lumber to standard market lengths. Trim blocks and ends are either collected and sold or sent by gravity open belt conveyor system to the hogger (grinder mill) then on to the byproduct screening building. Dust and shavings from the sorter line trimmers are sent by vacuum duct to the dry shavings silos. [Application No. 1210468-001-AC; Rules 62-212.400(BACT) and 62-4.070(3), F.A.C.]

Response: This is acceptable and the condition was revised accordingly.

Comment #8 – Conditions E.4, E.6, and E.7: The applicant requests clarification that there is only one baghouse for the boiler fly ash silo.

E. 4. VE Standard: Visible emissions from the silo baghouse~~s~~ shall not exceed 5% opacity as demonstrated by initial and annual compliance tests. [Application No. 1210468-001-AC; Rules 62-210.200 (PTE), 62-212.400(BACT), and Rule 62-4.070, F.A.C.]

E.6. Initial Compliance Tests: ~~Each~~ The silo shall be tested to demonstrate initial compliance with the VE emissions standard specified in Condition 3 of this subsection. The initial test shall be conducted within 180 days after initial operation. [Application No. 1210468-001-AC; Rules 62-210.200(PTE), 62-212.400(BACT), and 62-4.070, F.A.C.]

E.7. Annual Compliance Tests: During each federal fiscal year (October 1st to September 30th), ~~each~~ the silo shall be tested to demonstrate compliance with the VE emissions standard specified in Condition 3 of this subsection. [Application No. 1210468-001-AC; Rules 62-210.200 (PTE), 62-212.400(BACT), and 62-4.070, F.A.C.]

Response: The Department agrees and this was revised accordingly. In addition, this section included two "Condition E.2" conditions. This section was renumbered accordingly.

Comment #9 – EU-012 Description: The applicant requests clarification that "1.2 MMBtu/hour" represents the power output of the engine.

EU-012 Description

This emissions unit consists of five stationary compressions ignition reciprocating internal combustion engines (RICE) that each have a maximum engine rating of 460 brake-horsepower (bhp) at 100% load (approximately 1.2 MMBtu/ hour***;*** on a power output basis). The electrical generators have a nominal power rating of 343 kilowatt (kW). The emergency generators provide backup electrical power in the event of a power outage at the Suwannee Mill. The diesel-fueled generators are limited operation during emergencies or operated no more than 100 hours per year for testing, maintenance or other approved purposes per NSPS

Subpart IIII in 40 CFR 60. Each engine will meet the federal emission standards specified in NSPS Subpart IIII of 40 CFR Part 60.

Response: The Department agrees and this was revised.

Comment #10 – Condition G.1: The applicant requests correction of a typographical error on the power generation rate from 323 to 343 kW.

G.1. Emergency Generators: The permittee is authorized to install, operate, and maintain five 323 ~~343~~ kW or less emergency generators. [Application No. 1210468-001-AC and Rule 62-210.200 (PTE), F.A.C.]

Response: This typographical error was revised accordingly.

Miscellaneous: The Department also changed the spacing on page 3 to fit all four bullets under "Facility Regulatory Classification" on the same page, which eliminated page 4. The permit was renumbered accordingly and is now 30 pages long.

FINALIZATION OF THE BACT DETERMINATIONS

The Department hereby finalizes the BACT determinations as drafted in the TEPD for VOC, NOx, CO, PM, PM_{10}, and $PM_{2.5}$. The BACT emission limits, practices and technologies for each emission unit are incorporated within the conditions of the Final Permit.

CONCLUSION

The final action of the Department is to issue the final permit with the corrections described above.