

Air Permit Review

CDS No. 3729300147

Region: Winston-Salem Regional Office
County: Davidson
NC Facility ID: 2900147
Inspector's Name: Steve Moser
Date of Last Inspection: 04/14/2004
Compliance Code: 3/In Compliance - Inspection

Facility Data			Permit Applicability (this application only)		
<p>Applicant (Facility's Name): Thomasville Furniture Plant A/X/V Face</p> <p>Facility Address: Thomasville Furniture Plant A/X/V 320 West Main Street Thomasville, NC 27360</p> <p>SIC: 2511 / Wood Household Furniture NAICS: 337122 / Non-upholstered Wood Household Furniture Manufacturing</p> <p>Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V</p>			<p>SIP: 2D .0958 NSPS: NESHAP: DDDDD (boilers), DDDD (kilns) PSD: PSD Avoidance: NC Toxics: 2D .1100 112(r): Other:</p>		
Contact Data			Application Data		
Facility Contact	Authorized Contact	Technical Contact	<p>Application Number: 2900147.05A Date Received: 03/31/2005 Application Type: Renewal Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 02904/T20 Existing Permit Issue Date: 05/28/2004 Existing Permit Expiration Date: 12/31/2005</p>		
Rochelle Boyd Manager of Environmental Affairs (336) 476-2264 P O Box 339 Thomasville NC, 27361+0339	Rick Stanco Plant Manager (336) 472-4000 P O Box 339 Thomasville NC, 29361+0339	Rochelle Boyd Manager of Environmental Affairs (336) 476-2264 P O Box 339 Thomasville NC, 27361+0339			
Review Engineer: Michael Brandon, P.E.		Comments / Recommendations:			
Review Engineer's Signature: _____		<p>Issue 02904/T21 Permit Issue Date: _____ Permit Expiration Date: _____</p>			
Date: _____					

1. Purpose of Application

The Permittee is requesting renewal of the Title V permit and some changes as follows:

- a. the removal of applicable 2D .0504 requirements for wood firing because the requirements of 2D .0503 addresses the burning of wood in combination with other fuels;
- b. the removal of specific ASTM methods specified in 2D .0516 for the determination of coal sulfur content so that other methods may be used without requesting permit revision;
- c. the relaxation of visible emissions monitoring of combination fuel-fired boilers (ID Nos. ESBL1, ESBL2, and ESBL3) from daily to monthly based on past performance;
- d. the relaxation of coating and gluing spray booth filter inspection from weekly to monthly for 2D .0512 monitoring; and
- e. the relaxation of visible emissions monitoring for woodworking operations from weekly to monthly.

2. Facility Description

This facility manufactures household wood furniture from its own kiln dried lumber.

3. Application Chronology

The application chronology is detailed on the attached IBEAM Report.

4. Permit Modification/Changes

In regard to the Permittee's requested changes, the RCO and the WSRO have the following responses:

- 1.a. - The requirements of 2D .0504 are for wood firing only and the requirements for 2D .0503 are for wood firing in conjunction with other fuels and other fuels alone. If 2D .0504 were removed, the Title V permit would not reflect applicable regulations for a boiler firing wood only. The provisions of 2D .0504 should remain.

- 1.b. - The cited ASTM methods must remain as part of the accepted sulfur content determination methods in accordance with 15A NCAC 2D .0501(c)(4)(A). However, a caveat was added pursuant to 15A NCAC 2D.0501(c)(18) that alternate test methods may be approved by DAQ. Permit application would be required as part of this approval request for enforceability.
- 1.c. - The visible emissions monitoring frequency of wood, coal, and residual fuel-fired boilers has not been a negotiable item for the combustion of fuels that could result in visible emissions dependant on boiler operation. However, the condition has been modified to allow three missing days of monitoring data per semi annual period.
- 1.d. - The WSRO has acquiesced to allow the facility to perform filter checks at spray booth on a monthly rather than weekly basis.
- 1.e. - The requirement to monitor visible emissions from woodworking operation on a weekly basis will not be relaxed to monthly based on recommendation from the WSRO.

The permit was reformatted to eliminate the source group designation ESN1 for wood finish operations including 23 spray booths, two steam heated ovens, and four dip tanks. The permit now reflects these sources grouped by category with individual emission source IDs. The source group designation ESN2 for gluing operations (ID Nos. ESGL1, ESSB26, EGL2, FGL1, FGL2, and FGL3) was also eliminated in favor of individual emission sources. The two wood treatment booths were redesignated ESN3 and ESN4. The glue spray booth designated ESGL1 (presently having three ID Nos. ESN2, ESGL1, and ESSB26) was re-designated as a veneer edge treatment rather than a glue operation. This was done to avoid the confusion resulting from reference to two or three ID Nos. for one emission source. Additionally, the visible emission condition 2.1 D.2 can now be clarified, at the applicant's request, to apply only to sources that may result in visible emissions (ID Nos. ESSB1 through ESSB23, ESDO1 through ESDO8, ESGL1, and ESGL2) and not dip tanks (ID Nos. ESDT1 through ESDT4) or the glue application operations in Building A, V, and X (ID Nos. FGL1, FGL2, and FGL3).

Other changes to the permit are contained in the following table.

PAGE	SECTION	CHANGE
na	insignificant activities	Added six existing activities. Categorically exempt activities were not placed on the list (painting, heating/air conditioning). The cooling tower was also not placed on the list as it is not considered an emission source unless it employs salt water or other water of sufficient mineral/particle content.
6-9	1	Pneumatic transfer relay systems were described beyond the wood working designation (ID Nos. ESDS8, ESRE11, ESRE13, ESRE16, ESHG18, ESDS25, and ESDS26). Non-existent ESDS17 was removed. The bagfilter on ESGH18 was corrected to CDBF17. ESRE15 designation as a relay system was corrected to be the dust vault FDB1. Wood finishing and gluing equipment list was reformatted to show only one emission source ID No. per emission source. Sources were grouped categorically under a table heading.
14	2.1 B.3.e.	A caveat was added pursuant to 15A NCAC 2D.0501(c)(18) that alternate sulfur content test methods may be approved by DAQ.
14	2.1 B.4.c	The opacity monitoring requirement now allows for three days of missing data per semi annual reporting period.
17	2.1 C.3.c	The opacity monitoring requirement now allows for three days of missing data per semi annual reporting period.
18	2.1 D.1.b.	The spray booth filter inspection frequency was changed from weekly to monthly.

PAGE	SECTION	CHANGE
18	2.1 D.	The section was clarified to specify that the visible emission applies only to sources that may result in visible emissions (ID Nos. ESSB1 through ESSB23, ESDO1 through ESDO8, ESGL1, and ESGL2) and that 2D .0512 applies only to woodworking equipment (ID Nos. ESSB1 through ESSB23, and ESGL1). TAP assessment requirements were added to this condition in place of no applicable requirements.
19	2.1 E.1. 2.1 E.2. 2.1 E.3.	MACT, TAP assessment, and VOC work practice standard requirements were added for sources not subject to MACT JJ including the steam heated glue press (ID No. ESGL2), lumber kilns (ID No. ESDK), and miscellaneous gluing operations (ID Nos. FGL1, FGL2, and FGL3).
24-31	3	Updated General Conditions added.

5. Regulatory Review

The following regulations apply to this facility and are contained in the present Title V permit:

- 15A NCAC 2D .0503 - Particulates from Fuel Burning Indirect Heat Exchangers
- 15A NCAC 2D .0504 - Particulates from Wood Burning Indirect Heat Exchangers
- 15A NCAC 2D .0516 - Sulfur dioxide from Combustion Sources
- 15A NCAC 2D .0521 - Control of Visible Emissions

The following regulations apply to this facility and are not contained in the present Title V permit because they are newly applicable:

- 15A NCAC 2D .1111 (40 CFR 63, Subpart DDDD) - NESHAP for Plywood and Composite Wood Products;
- 15A NCAC 2D .0614 - Compliance Assurance Monitoring
- 15A NCAC 2D .0958 - Work Practice Standards for VOC
- 15A NCAC 2Q .0705 - Future last MACT Toxic Air Pollutant Assessment Requirements

15A NCAC 2D .1111

See Section 6 below.

15A NCAC 2D .0614

See Section 6 below.

15A NCAC 2D .0958

Sources subject to this regulation are all those included under the NESHAP for Plywood and Composite Wood Products. Section 2.1 E.3. was added for these requirements.

15A NCAC 2Q.0705

Pursuant to 15A NCAC 2Q .0705(b)(1) when the Permittee is required to submit a permit application to comply with the last MACT known to apply to the facility, the Permittee shall also submit a permit application to comply with 15A NCAC 2D.1100. The last MACT to apply to this facility is 40 CFR 63, Subpart DDDD "National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products". This MACT has been determined to include lumber kilns at all facilities and possibly the presses, resin preparation, and miscellaneous finishing operations. The applicable requirements are

- a. that the Permittee must comply by October 1, 2007. [40 CFR 63.2233(b)],
- b. that a demonstration of compliance must be made no later than March 29, 2008 if a performance test is required [40 CFR 63.2261(a)], or October 31, 2007 if a performance test is not required [40 CFR 63.2261(b)], and
- c. that notification of compliance status is due by May 28, 2008 if a performance test is required or by November 30, 2007 if a performance test is not required [40 CFR 63.2280(d)]

A toxic air pollutant demonstration is deemed due at the submittal of the notification of compliance, which is May 28, 2008 if a source test is required or November 30, 2007 if a performance test is not required. This demonstration does not include emissions from sources subject to 40 CFR 63, Subpart JJ - "Wood Furniture Manufacturing Operations" or to boilers burning virgin fuel. Section 2.1 E.2 was added to require the future demonstration. Alternatively, the Permittee may demonstrate that emissions from the affected sources are less than the toxic pollutant exemption rates (TPERs) contained in 15A NCAC 2Q .0711.

6. NSPS, NESHAPS, PSD, Attainment Status, 112(r), CAM

NSPS-The are no NSPS that apply to this facility at this time.

NESHAPS (15A NCAC 2D .1111) - a new NESHAP that applies is (40 CFR 63, Subpart DDDD) - NESHAP for Plywood and Composite Wood Products. The Permittee has notified the DAQ that the kilns are subject to the notification requirements of this MACT and that certain resin preparation operations (e.g., phenol/formaldehyde adhesives) may be subject to provisional requirement of the MACT (to be determined). A placeholders for future submittals and compliance demonstrations was added (i.e., Section 2.2 B.)

The NESHAP for Boilers (40 CFR 63, Subpart DDDDD) was determined to not apply to the boilers (ESBL1, ESBL2, and ESBL3) because they are fire tube boilers, which are not covered by the MACT.

PSD - There are no PSD Issues.

Attainment Status - The facility located in an early action compact VOC/NOx non-attainment county. No new requirements apply at this time.

112(r) -The Facility has no sources subject to 112(r)

CAM (15A NCAC 2D .0604)

The Permittee has submitted data showing that uncontrolled emissions from the boilers will be less than 100 tons per year for PM10 and CAM does not apply to the cyclones. Analyses of the wood waste collection and relay systems, except for the Plant X wood waste collection system (ID No. ESDS23), show that the uncontrolled emissions from each system will be less than 100 tons per year and CAM does not apply.

Further analysis of the Plant X sanding operations for which 263 tons of uncontrolled PM10 was estimated, shows that the sanding operations are not a finish sanding operation for which the high PM10 content (23.8%) of saw dust was determined but rather a planing operation using 30 to 50 grit sand paper. IT was determined that the size of the particulate generated is more likely similar to sawing operations (1.98% PM10). The more realistic estimated uncontrolled emissions are about 22 tons per year of PM10 and CAM does not apply.

7. Facility Wide Toxic Air Pollutants

Future TAP assessment required (see Section 5).

8. Facility Compliance Status

The facility is presently in compliance with all applicable regulations and permit conditions.

9. Statement of Compliance

The DAQ has reviewed the compliance status of this facility. Based on the latest inspection, the facility was in compliance with all applicable requirements. The applicant has certified that the facility will be in compliance with all applicable requirements at the time of permit issuance and will continue to comply with these requirements. The applicant has also certified that the facility will be in compliance with any applicable requirements taking effect during the term of the permit and will meet such requirements on a timely basis.

10. Facility Emissions Review

There is no change in emissions for this renewal.

11. Public Notice/EPA and Affected State Review

A notice of the Title V Permit will be placed in a newspaper of general circulation in the area where the facility is located. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Copies of the public notice will be sent to affected persons on the Title V mailing list and EPA. Concurrently, the Title V permit will be provided to EPA for a 45-day review period.

12. Conclusions, Comments, and Recommendations

The RCO and the WRSO recommend renewal of permit 2904T21