

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

(Draft) Air Permit Review

(10/21/05)

Permit Issue Date:

Region: Winston-Salem Regional Office
County: Davidson
NC Facility ID: 2900149
Inspector's Name: Steve Moser
Date of Last Inspection: 06/01/2005
Compliance Code: 3/In Compliance - Inspection

Facility Data			Permit Applicability (this application only)
Applicant (Facility's Name): Thomasville Furniture Plant C/M/W/SB Facility Address: Thomasville Furniture Plant C/M/W/SB 405 East Main Street Thomasville, NC 27360 SIC: 2511 / Wood Household Furniture NAICS: 337122 / Nonupholstered Wood Household Furniture Manufacturing Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V			SIP: NSPS: NESHAP: PSD: PSD Avoidance: NC Toxics: 112(r): Other:
Contact Data			Application Data
Facility Contact	Authorized Contact	Technical Contact	Application Number: 2900149.04C Date Received: 08/27/2004 Application Type: Renewal Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 03058/T18 Existing Permit Issue Date: 07/01/2004 Existing Permit Expiration Date: 05/31/2005
Rochelle Boyd Manager of Environmental Affairs (336) 476-2264 P O Box 339 Thomasville NC, 27361+0339	Thurman Lowry Plant Manager (336) 472-4000 P O Box 339 Thomasville NC, 27361+0339	Rochelle Boyd Manager of Environmental Affairs (336) 476-2264 P O Box 339 Thomasville NC, 27361+0339	
Review Engineer: Gautam Patnaik Review Engineer's Signature: _____ Date: _____		Comments / Recommendations: Issue 03058/T19 Permit Issue Date: Permit Expiration Date:	

1. Introduction:

This is a title V facility manufacturing furniture

2. Purpose of Application

This application is for the renewal for their title V application. The current Air Permit No. 03058T18 was effective from July 1, 2004 and will expire on May 31, 2005.

3. Application Chronology

This renewal application was received on 8/30/04. Since the initial title V permit was issued on 6/2/2000 the facility had applied for several permit modifications, the table below outlines the modifications to their permit.

Application #	Date Application Completed	Changes Made to the Permit	Permit Issued	Permit Issue Date
290149A5.A	12/30/1999	Initial Title V application	03058T15	6/2/2000
2900149.00A	6/29/2000	Administrative amendment	03058T16	8/28/2000
2900149.00B	9/21/2000	Administrative amendment	03058T17	11/20/2000
2900149.04A	4/22/2004	502(b)(10) modification to add multicyclones (ID Nos. CDMC2a and CDMC3a) in series with the existing multicyclones (ID Nos. CDMC2b and CDMC3b) on boilers (ESBL2 and ESBL3)	03058T18	11/20/2004

4. Permit Modification/Changes

No additions or changes have been made with this renewal of the permit.

5. Regulatory Review

The facility is subject to the following regulations:

15A NCAC 2D .0504: “Particulates from Wood Burning Indirect Heat Exchangers”

15A NCAC 2D .0503 “Particulates from Fuel Burning Indirect Heat Exchangers”

15A NCAC 2D .0512: “Particulates From Miscellaneous Wood Products Finishing Plants”

15A NCAC 2D .0516 “Sulfur Dioxide Emissions from Combustion Sources”

15A NCAC 2D .0521 “Control Of Visible Emissions”

15A NCAC 2D .1111 (MACT) 40 CFR Part 63, Subpart JJ: NATIONAL EMISSIONS STANDARD FOR WOOD FURNITURE MANUFACTURING OPERATIONS

However, no regulatory review is required at this time since for the above regulations.

5A NCAC 2Q .0705 “EXISTING FACILITES AND SIC CALLS”

This facility has to demonstrate compliance with toxics when the facility is subject to the last MACT regulation and for this facility the last MACT that this facility would be subject to is the “Plywood and Composite Wood Products” MACT (mentioned below) the compliance date for this MACT and thus this regulation is October 1, 2007.

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

NSPS

None of the sources at this facility is subject to this standard.

NESHAP/MACT

This facility is already subject to the “Wood Furniture Manufacturing” MACT standard (NSPS Subpart JJ). This rule was finalized on 12/7/1995.

The 18 Lumber drying kilns (ID No. ESDK) are also subject to the “Plywood and Composite Wood Products” MACT. Since the kilns, are existing sources their compliance date is October 1, 2007

The boilers at this facility are existing source for the Boiler MACT, i.e., 40 CFR Part 63, Subpart DDDDD “National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters” [40 CFR, §63.7480]

PSD

This facility is a minor PSD facility.

Attainment Status

This facility is located in Davidson County which is in nonattainment according to 2D .0902.

112(r)

This facility is not subject to Section 112(r) of the Clean Air Act requirements because it does not store any of the regulated substances in quantities above the thresholds in the Rule.

CAM

This facility has several cyclones and bagfilters for the control of particulate matter emissions from sources. These sources are subject to the particulate regulation of 15A NCAC 2D .0512, which requires adequate ductwork and properly designed collectors on woodworking processes. The facility tabulated that the emissions of PM10 from these sources are less than 100 tons per year, thus, Compliance Assurance Monitoring (CAM) (40 CFR Part 64) does apply to these control devices. The following tables provide an estimate of emissions of PM10 from the saw dust and sand dust operations based on the number of connections in each of the processes and the total amount of PM10 collected. The rest of the processes are transfer points as per the system schematics provided.

Table I

System	# of Connections		% of Total Connections		PM ₁₀ tons/yr from		Total PM ₁₀ tons/yr	Does CAM Apply
	Saw Dust	Sand Dust	[@] Saw Dust	[#] Sand Dust	[§] Saw Dust	[^] Sand Dust		
ESDS1	14.5	6	5%	5%	6.87	10.53	17.4	No
ESDS2	31.5	2	11%	2%	14.93	3.51	18.44	No
ESDS3	35.5	0	13%	0%	16.82	0.00	16.82	No
ESDS4	17	11	6%	9%	8.06	19.3	27.36	No
ESDS 5A	20.5	12	7%	9%	9.71	21.06	30.77	No
ESDS 5B	8	12	3%	9%	3.79	21.06	24.85	No
ESDS6	43.5	0.5	16%	0%	20.61	0.88	21.49	No
ESDS 7	2	23.5	1%	19%	0.95	41.24	42.19	No
ESDS8	36.5	6	13%	5%	17.3	10.53	27.83	No
ESDS9	0	27	0%	21%	0.00	47.38	47.38	No
ESDS10	11	12	4%	9%	5.21	21.06	26.27	No
ESDS11	13	11	5%	9%	6.16	19.3	25.46	No
ESDS12	27.5	0	10%	0%	13.03	0.00	13.03	No
ESDS13	8	3.5	3%	3%	3.79	6.14	9.93	No
ESHG 1	12	0	4%	0%	5.69	0.00	5.69	No
ESDS14	13	0	5%	0%	6.16	0.00	6.16	No
								No
Totals	280.5	126.5	100%	100%	132.92	221.99	354.92	

[@] - percentage based on total number of saw dust connections i.e., 280.5

[#] - percentage based on total number of sand dust connections i.e., 126.5

[§] - tonnage based on percentage of total saw dust times total PM10 from saw dust, (i.e., 132.92)

[^] - tonnage based on percentage of total sand dust times total PM10 from sand dust, (i.e., 221.99)

Table II

System	# of Connections		% of Total Connections		PM ₁₀ tons/yr from		Total PM ₁₀ tons/yr	Does CAM Apply
	Saw Dust	Sand Dust	[@] Saw Dust	[#] Sand Dust	[§] Saw Dust	[^] Sand Dust		
ESDS1S	25	6	100%	100%	0.95	2.8	3.75	No
Totals	25	6	100%	100%	0.95	2.8	3.75	

[@] - percentage based on total number of saw dust connections i.e., 25

[#] - percentage based on total number of sand dust connections i.e., 6

[§] - tonnage based on percentage of total saw dust times total PM10 from saw dust, (i.e., 0.95)

[^] - tonnage based on percentage of total sand dust times total PM10 from sand dust, (i.e., 2.8)

Table III

System	# of Connections		% of Total Connections		PM ₁₀ tons/yr from		Total PM ₁₀ tons/yr	Does CAM Apply
	Saw Dust	Sand Dust	[@] Saw Dust	[#] Sand Dust	[§] Saw Dust	[^] Sand Dust		
ESDS1 M	7	1	100%	100%	0.27	0.47	0.73	No
Totals	25	6	100%	100%	0.27	0.47	0.73	

[@] - percentage based on total number of saw dust connections i.e., 7

- # - percentage based on total number of sand dust connections i.e., 1
- § - tonnage based on percentage of total saw dust times total PM10 from saw dust, (i.e., 0.27)
- ^ - tonnage based on percentage of total sand dust times total PM10 from sand dust, (i.e., 0.47)

7. Facility Wide Air Toxics

Pursuant to 15A NCAC 2Q .0711 “Emission Rates Requiring a Permit,” the emissions from the facility do not exceed the Toxic Permit Emission Rates (TPERs) listed in 15A NCAC 2Q .0711. The emissions from the facility including fugitive emissions, will not exceed the TPERs listed in 15A NCAC 2Q .0711.

8. Construction Permit (Part II)

The sources listed under Part II of the current permit (The permit shield described in General Condition R did not apply to these sources in the current permit) are removed from this part of the permit. And since this permit will provide for 30 days for comment period for the public and 45 days for an EPA review, there will no longer be a Part II in the current permit.

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ESBL2	one wood/coal/finishing waste - fired boiler (35 million Btu per hour heat input rate)	*CDMC2a and CDMC2b	two multicyclones (20 nine inch diameter tubes) installed in series
ESBL3	one wood/coal/finishing waste - fired boiler (35 million Btu per hour heat input rate)	*CDMC3a and CDMC3b	two multicyclones (20 nine inch diameter tubes) installed in series

* These control devices were permitted as a 502(B)(10) change. The permit shield described in General Condition R of Part I of the permit did not apply to these sources.

9. Facility Compliance Status

As per the latest inspection report (on IBEAM) done on 6/17/2004 this facility was found to be in compliance.

10. 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.

11. Facility Emissions Review

There is no change in emissions for this renewal.

12. Stipulation Review

All stipulations are standard for this type of facility. The general conditions are updated with the latest version found in the title V shell.

13. Public Notice / EPA and Affected State Review

Pursuant to 2Q. 0521, a notice of the draft 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 persons on the Title V mailing list and EPA. Pursuant to 2Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant will be provided to EPA. Also pursuant to 2Q .0522, a notice of the draft Title V Permit will be provided to each affected State at or before the time notice provided to the public under 2Q .0521 above. There are no affected States for this facility.

14. Conclusions, Comments, and Recommendations

A professional engineer's seal was not required for this renewal.

A consistency determination was not required for this renewal.

Regional Office and the applicant were provided a draft of this permit and their comments taken into consideration.

The applicant stated that "Section B. should also contain the requirements for boiler ESBL3, since it is also a Wood/Finishing Fuel Fired boiler. There is only one multicyclone, so please revert back to the old nomenclature of CDMC3; no (a) or (b) should be listed. (See attached letter dated December 3, 2004 to DAQ, requesting that coal combustion allowance be removed from this boiler since we have chosen not to install the second multicyclone on ESBL3)." The applicant did request by a letter received by this Section on December 8, 2004 (App # 2900149.04D). Since the boiler ESBL3 only burns wood and finishing fuel it is listed in the current permit under section 2.1 B. Also as the applicant mentioned that the boiler ESBL3 currently controlled by multicyclone CDMC3a (old name being CDMC3) and since the applicant does not plan to build the permitted multicyclone CDMC3b, the applicant requests that the name of the multicyclone CDMC3a be changed to it's old ID of CDMC3.

Regional Office concurs(?) with RCO recommendation to issue air permit.

15. Regional Office memo in response to letter from the applicant dated August 27, 2004.

- a. The boilers ESBL2 and ESBL3 firing wood and coal are subject to 2D .0503 and 2D .0504 the applicant requested these boilers should only be subjected to 2D .0503 so that they could remove the alternate operating scenario for these sources.

- The Regional Office objected to this and thus these sources are subject to both these regulations.
- b. The same boilers are subject to certain ASTM Methods to comply with 2D .0516 the applicant wanted these methods to be removed.
 - The Regional Office objected to this and this condition is not changed in the new permit.
- c. The applicant wanted to change the daily monitoring of these same boilers to a monthly schedule to comply with 2D .0521.
 - The Regional Office felt that a daily monitoring for boilers firing both wood and coal was more appropriate.
- d. The applicant wanted to change the weekly monitoring of filters to a monthly schedule for compliance with 2D .512
 - The Regional Office concurs with this request and the change has been made in the new permit.
- e. The applicant requested to change the weekly monitoring of the dust system to a monthly monitoring for compliance with 2D .521.
 - The Regional Office objected to this request and thus no change has been made in the permit regarding this.

16. Table of Changes

Page Number	Condition Number	Change
Insignificant Activities		added # 2 to # 19 in the list in the new permit
2	Table Of Contents	Part II removed
3, 4 & 5	Permitted emission sources	Updated
7	2.1 B	added the one wood/finishing waste-fired boiler (ID No. ESBL3) and associated multicyclone (ID No. CDMC3) under this section and all the applicable conditions transferred to this Section. Note - This source was permitted to burn coal in the current permit and was controlled by multicyclones CDMC3a and CDMC3b (CDMC3a and CDMC3 are the same)
8	2.1 B. 1.	Removed testing requirement for compliance with 2D .0504
14	2.1 D. 1. b.	Monthly inspection of the spray booths' dry type
18	General Conditions	Updated