

**Air Permit Review**

**Permit Issue Date:**

**Region:** Mooresville Regional Office  
**County:** Lincoln  
**NC Facility ID:** 5500009  
**Inspector's Name:** Denise Fogleman  
**Date of Last Inspection:** 11/30/2004  
**Compliance Code:** C/In Compliance With  
 Procedural Reqr

<b>Facility Data</b>			<b>Permit Applicability (this application only)</b>	
<p><b>Applicant (Facility's Name):</b> Cochrane Furniture Divisions 10 20 35 and 55</p> <p><b>Facility Address:</b>                  Cochrane Furniture Divisions 10 20 35 and 55                  190 Cochrane Road                  Lincolnton, NC 28092</p> <p><b>SIC:</b> 2511 / Wood Household Furniture  <b>NAICS:</b> 337122 / Nonupholstered Wood Household Furniture Manufacturing</p> <p><b>Facility Classification: Before:</b> Title V <b>After:</b> Title V  <b>Fee Classification: Before:</b> Title V <b>After:</b> Title V</p>			<p><b>SIP:</b>  <b>NSPS:</b>  <b>NESHAP:</b>  <b>PSD:</b>  <b>PSD Avoidance:</b>  <b>NC Toxics:</b>  <b>112(r):</b>  <b>Other:</b></p>	
<b>Contact Data</b>			<b>Application Data</b>	
<b>Facility Contact</b>	<b>Authorized Contact</b>	<b>Technical Contact</b>	<p><b>Application Number:</b> 5500009.03B  <b>Date Received:</b> 12/19/2003  <b>Application Type:</b> Renewal  <b>Application Schedule:</b> TV-Renewal  <b>Existing Permit Data</b>  <b>Existing Permit Number:</b> 03774/T14  <b>Existing Permit Issue Date:</b> 07/16/2004  <b>Existing Permit Expiration Date:</b> 09/30/2004</p>	
Timothy Brooks Environmental Health and Safety Mngr. (704) 732-1151 190 Cochrane Rd. Lincolnton NC, 28092	Hobe Bradley VP Case Manufacturing (704) 732-1151 190 Cochrane Rd Lincolnton NC, 28093+0220	Timothy Brooks Environmental Health and Safety Mngr. (704) 732-1151 190 Cochrane Rd. Lincolnton NC, 28092		
<p><b>Review Engineer:</b> Jenny Sheppard</p> <p><b>Review Engineer's Signature:</b> _____ <b>Date:</b> _____</p>		<p style="text-align: center;"><b>Comments / Recommendations:</b></p> <p><b>Issue</b> 03774/T15  <b>Permit Issue Date:</b>  <b>Permit Expiration Date:</b></p>		

**1. Purpose of Application**

This revision is a renewal of an existing Title V permit pursuant to 2Q .0513. The existing Title V permit (03774T14) was issued on July 16, 2004 as a modification to the initial Title V (03774T13) issued on December 29, 1999. Permit number 02796T16 is currently scheduled to expire on October 31, 2004. The renewal application was received on December 19, 2003 or at least nine months prior to the expiration date. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

**2. Facility Description**

Cochrane Furniture manufactures, assembles, and finishes wooden household furniture. This facility is subject to 40 CFR, Subpart JJ, the Wood Furniture NESHAP.

**3. Application Chronology**

The application chronology is detailed on the attached IMPAQ Comprehensive Application Report and attached email correspondence.

#### 4. Permit Modification/Changes

The table below shows changes made to the initial Title V Permit (**Permit number 03774T13**) since issuance on December 29, 1999. One permit modification request was received on April 16, 2004 to add a bagfilter to the Division 10 wood dust collection system. A 502(b)(10) change was made and Permit Number **03774T14** was issued on July 16, 2004.

Condition #	Changes made to Permit Number 03774T13
Section 1	Add bagfilter (CD-10-BF7) to Division 10 wood dust collection system
Section 2.1 A.1	Add bagfilter (CD-10-BF7) to Division 10 wood dust collection system
Section 2.1 A.2	Add bagfilter (CD-10-BF7) to Division 10 wood dust collection system

The following table represents changes to the current Title V permit (02796T14) for this renewal:

Page Number	Condition Number	Change
	Entire Permit, where applicable	Changed reference to "Air Quality Title V Operation Permit" to "Air Quality Federal Title V and State Operation Permit" and "Air Quality Construction and Operation Permit" to "Air Quality State Operation Permit"
Cover Letter	Permit Information	Modified to reflect current permit number, issue and effective date, and associated application information Updated language with shell and added reference to Table of Changes
	Table of Changes	Added Table with changes to Title V as Attachment I
1	Permit Information	Modified to reflect current permit number, issue and effective date
5	2.1-A.1.	Updated section with shell language
6	2.1-A.2.	Updated section with shell language
7	2.1-A.3.	Add condition for CAM affected control devices
8	2.1-B.1.	Updated section with shell language
9	2.1-B.2.	Updated section with shell language
9	2.1-B.3.	Updated section with shell language
10	2.1-C.1.	Updated section with shell language
11	2.1-C.2.	Updated section with shell language
12	2.1-D.1	Updated section with shell language (Reporting from quarterly to semi-annual)
13	2.1-E.1.	Updated section with shell language (Reporting from quarterly to semi-annual)
13	2.1-F.1.	Updated section with shell language (Reporting from quarterly to semi-annual)
14	2.2-A.	Updated section with shell language
19	2.2-B.	Updated section with shell language
20-28	Section 3 List of Acronyms	Updated with most recent General Conditions and List of Acronyms

**5. Regulatory Review**

The facility is subject to the following regulations:

- 2D .0504 “Particulates from Wood Burning Indirect Heat Exchangers”
- 2D .0512 “Particulates from Wood Products Finishing Plants”
- 2D .0516 “Sulfur Dioxide Emissions from Combustion Sources”
- 2D .0521 “Control Of Visible Emissions”
- 2D .0317 “Avoidance Condition”
- 2D .1111 “Maximum Achievable Control Technology”
- 2D .1806 “Control and Prohibition of Odorous Emissions”

No regulatory review is required at this time for the above conditions.

There is one new applicable regulations for this permit revision (renewal), 2D .0614 “Compliance Assurance Monitoring” (CAM).

**CAM**

A Compliance Assurance Monitoring (CAM) (40 CFR Part 64) determination is required for this renewal because: (1) the facility is a Title V facility with potential emissions that exceed the Title V major source levels without considering controls; (2) there are sources subject to an emission limitation or standard that require controls in order to comply with the emission limitation.

The Permittee has provided a CAM analysis for their Woodworking Operations (ID Nos. ES-10-) based on DAQ guidance.

The following Table represents the results:

<b>Process and Description</b>	<b>Control Scheme</b>	<b>Potential Uncontrolled PM<sub>10</sub> Emissions Tons per Year</b>
WD-1 (Outside Hog) Rough Sawing – 100%	Ducted directly to CD-10 (cyclone) controlled by BF-1 (bagfilter)	4.14
WD-2 (Inside Hog) Rough Sawing – 100%	Ducted directly to CD-3 (cyclone)	3.16
WD-3 (Plant 2) Rough Sawing – 100%	Ducted directly to BF-4 (bagfilter)	11.59
WD-4 (Machine Room) Rough Sawing – 20% Fine Sawing – 30% Molding – 40% Sanding – 10%	Ducted directly to BF-6 (bagfilter)	1.96
WD-5 (Old Machine Room - Lathes) Rough Sawing – 20% Fine Sawing – 30% Molding – 40% Sanding – 10%	Ducted directly to CD-4 (cyclone)	1.63
WD-6 (Router Room) Rough Sawing – 20% Fine Sawing – 30% Molding – 40% Sanding – 10%	Ducted directly to BF-3 (bagfilter)	1.63
WD-7 (Sample Room)	Ducted directly to CD-2 (cyclone)	0.19

<b>Process and Description</b>	<b>Control Scheme</b>	<b>Potential Uncontrolled PM<sub>10</sub> Emissions Tons per Year</b>
Fine Sawing – 100%		
WD-8 (Sanding Room) Sanding – 100%	Ducted directly to BF-5 (bagfilter)	21.23
WD-9 (Old Machine Room) Fine Sawing – 100%	Ducted directly to BF-6 (bagfilter)	0.19
WD-10 (Dust Transfer) Rough Sawing – 100%	Ducted directly to CD-11 (cyclone) controlled by BF-1 (bagfilter)	8.64
WD-11 (Dust Transfer) Rough Sawing – 100%	Ducted directly to CD-7 (cyclone) controlled by BF-1 (bagfilter)	5.39
WD-12 (BF-7 Filter System) Rough Sawing – 20% Fine Sawing – 30% Molding – 40% Sanding – 10%	Ducted directly to BF-7 (bagfilter)	0.64
<b>Total</b>		<b>60.38</b>

Example Calculation using WD-1:

$178,774 \text{ BD-FT/YR} * 3.5 \text{ lbs/BD-FT} * 1 \text{ ton}/2000 \text{ lbs} = 312.85 \text{ tons per year processed}$

$312.85 \text{ tpy} * 20\% \text{ Waste} * 1.89\% \text{ PM}_{10} * (8760 \text{ Potential hrs per yr}/2500 \text{ Actual hrs per yr}) = 4.139 \text{ tpy PM}_{10}$

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

### NSPS

New Source Performance Standards (NSPS) do not apply to this facility.

### NESHAP/MACT

This facility is subject to the Wood Furniture Surface Coating MACT. The wood furniture finishing operations shall comply with all requirements of 15A NCAC 2D .1111 “Maximum Achievable Control Technology” and 40 CFR Part 63 Subpart JJ “National Emission Standards for Wood Furniture Manufacturing Operations.”

The facility may be subject to the proposed “National Emission Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters,” 40 CFR, Subpart DDDDD, proposed January 13, 2003. The final rule was signed on February 27, 2004; however, it has not been published in the Federal Register. Therefore, no compliance dates are available at this time. Once the final rule is published, the facility should be looked at for applicability during the next significant modification or renewal.

### PSD

This facility is not a major Prevention of Significant Deterioration (PSD) source.

### Attainment Status

This facility is located in Catawba County, which is in nonattainment according to US EPA's Boundary Designations for 8-hour Ozone Standard dated June 15, 2004. This county is participating in an Early Action Compact (EAC).

**112(r)**

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

**CAM**

A Compliance Assurance Monitoring (CAM) (40 CFR Part 64) determination is required for this renewal because: (1) the facility is a Title V facility with potential emissions that exceed the Title V major source levels without considering controls; (2) there are sources subject to an emission limitation or standard that require controls in order to comply with the emission limitation. However, the following exemptions apply:

- Wood Products Finishing Operations (ID Nos. ES-5) are exempt because they are subject to 40 CFR Part 63 Subpart JJ, which is a Section 112 standard promulgated after 11/15/90.
- Boiler (ID No. ES-1) is exempt because potential PM<sub>10</sub> emissions to the flyash collector are less than 100 tons per year pre-controlled.
- Boiler (ID No. ES-2) is exempt because potential PM<sub>10</sub> emissions to the flyash collector are less than 100 tons per year.
- Boiler (ID No. ES-3) is exempt because potential uncontrolled PM<sub>10</sub> emissions are less than 100 tons per year.
- Boiler (ID No. ES-4) is exempt because potential uncontrolled PM<sub>10</sub> emissions are less than 100 tons per year.
- Lumber Drying Operation (ID No. ES-8) are exempt because they have no applicable regulations and potential uncontrolled emissions are less than 100 tons per year.
- Woodworking Operations (ID No. ES-9) is exempt because potential uncontrolled PM<sub>10</sub> emissions prior to each control device (ID Nos. BF-6, CD-4, BF-7, CD-3, CD-2, BF-1, BF-3, BF-5, and BF-4) are less than 100 tons per year.

Therefore, the facility is exempt from the requirements of CAM.

The Permittee has provided a CAM analysis for their Woodworking Operations (ID No. ES-9) based on DAQ guidance (see attached email from HWS on July 23, 2004).

The following Table represents the results:

<b>Process and Description</b>	<b>Control Scheme</b>	<b>Potential Uncontrolled PM<sub>10</sub> Emissions Tons per Year</b>
WD-1 (Outside Hog) Rough Sawing – 100%	Ducted directly to CD-10 (cyclone) controlled by BF-1 (bagfilter)	4.14
WD-2 (Inside Hog) Rough Sawing – 100%	Ducted directly to CD-3 (cyclone)	3.16
WD-3 (Plant 2) Rough Sawing – 100%	Ducted directly to BF-4 (bagfilter)	11.59
WD-4 (Machine Room) Rough Sawing – 20% Fine Sawing – 30% Molding – 40% Sanding – 10%	Ducted directly to BF-6 (bagfilter)	1.96
WD-5 (Old Machine Room - Lathes)	Ducted directly to CD-4 (cyclone)	1.63

<b>Process and Description</b>	<b>Control Scheme</b>	<b>Potential Uncontrolled PM<sub>10</sub> Emissions Tons per Year</b>
Rough Sawing – 20% Fine Sawing – 30% Molding – 40% Sanding – 10%		
WD-6 (Router Room) Rough Sawing – 20% Fine Sawing – 30% Molding – 40% Sanding – 10%	Ducted directly to BF-3 (bagfilter)	1.63
WD-7 (Sample Room) Fine Sawing – 100%	Ducted directly to CD-2 (cyclone)	0.19
WD-8 (Sanding Room) Sanding – 100%	Ducted directly to BF-5 (bagfilter)	21.23
WD-9 (Old Machine Room) Fine Sawing – 100%	Ducted directly to BF-6 (bagfilter)	0.19
WD-10 (Dust Transfer) Rough Sawing – 100%	Ducted directly to CD-11 (cyclone) controlled by BF-1 (bagfilter)	8.64
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## 7. Facility Wide Air Toxics

The facility must comply with the emission limitations and other requirements of 2D .1111 and 40 CFR Part 63, Subpart JJ. Therefore, toxics requirements under 2Q .0711 do not apply.

## 8. Facility Compliance Status

The facility was last inspected on August 27, 2003 by Ms. Tamera Eplin, MRO. The facility was found to be in compliance with the applicable air quality regulations.

## 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.

*Facility Actual Emissions as reported for the 2003 Emission Inventory*

<b>Pollutant</b>	<b>Emissions (tons per year)</b>
Carbon Monoxide (CO)	XXX10.24
Oxides of Nitrogen (NOx)	XXX9.17
PM/TSP – Particulate Matter	XXX26.68
PM10	XXX10.72
PM2.5	XXX1.42
Sulfur Dioxide (SO2)	XXX0.72
Volatile Organic Compounds (VOC)	XXX89.92
Hazardous Air Pollutants (HAPs): >10 tpy or combinations >25 tpy	XXXX<3

**11. Stipulation Review**

All stipulations are standard for this type of facility.

**12. Public Notice / EPA and Affected State Review**

Pursuant to 2Q .0521, a notice of the draft Title V Permit shall 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 shall 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 shall be provided to EPA. Also pursuant to 2Q .0522, a notice of the draft Title V Permit shall 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.

*Public Notice of the DRAFT Title V Permit was published in the XXXXXXXXXX on XXXX XX, 2005 and the public comment period ran from XXXX XX, 2005 toXXXX XX, 2005.*

Comments Received on the Draft Permit –

*EPA’s 45 Day Review period ran fromXXXX XX, 2005 toXXXX XX, 2005. Per Mr. Scott Miller’s email dated XXXXX XX, 2005, the permit is ready for issuance.*

**13. Conclusions, Comments, and Recommendations**

A permit processing fee was not required for this renewal.

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

A consistency determination was not required for this renewal.

MRO recommends issuance of the permit per Denise Fogleman Recommendations and Comments received on June 6, 2005. The comments received have been addressed in the permit.

A draft permit and review were sent to the MRO for review on 2005 and comments received on June 6, 2005.

A draft permit was sent to the facility on 2005 and comments received on July 11, 2005.

RCO concurs with recommendation to issue Air Permit Number 03774T15.