

**NORTH CAROLINA DIVISION OF  
AIR QUALITY**

**Air Permit Review**

Permit Issue Date: **date, 2009**

**Region:** Asheville Regional Office  
**County:** Graham  
**NC Facility ID:** 3800005  
**Inspector's Name:** Brendan Davey  
**Date of Last Inspection:** 06/16/2009  
**Compliance Code:** 3 / Compliance - inspection

<b>Facility Data</b>			<b>Permit Applicability (this application only)</b>		
<b>Applicant (Facility's Name):</b> Stanley Furniture Company, Inc.  <b>Facility Address:</b> Stanley Furniture Company, Inc. 68 Snowbird Road Robbinsville, NC 28771  <b>SIC:</b> 2511 / Wood Household Furniture <b>NAICS:</b> 337122 / Nonupholstered Wood Household Furniture Manufacturing  <b>Facility Classification: Before:</b> Title V <b>After:</b> Title V <b>Fee Classification: Before:</b> Title V <b>After:</b> Title V			<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>		
<b>Contact Data</b>			<b>Application Data</b>		
<b>Facility Contact</b>	<b>Authorized Contact</b>	<b>Technical Contact</b>	<b>Application Number:</b> 3800005.09B <b>Date Received:</b> 10/05/2009 <b>Application Type:</b> Renewal <b>Application Schedule:</b> TV-Renewal <b>Existing Permit Data</b> <b>Existing Permit Number:</b> 03794/T17 <b>Existing Permit Issue Date:</b> 10/20/2008 <b>Existing Permit Expiration Date:</b> 06/30/2010		
Dicky Webster Industrial Engineer II (828) 479-3311 68 Snowbird Road Robbinsville, NC 28771	Steve Bullock Vice President of Operations (276) 627-2000 PO Box 30 Stanleystown, VA 24168	Cristina Loth Vice President of Engineering (276) 627-2000 P O Box 30 Stanleystown, VA 24168			
<b>Review Engineer:</b> Mark Cuilla  <b>Review Engineer's Signature:</b> <b>Date:</b> <b>date, 2009</b>			<b>Comments / Recommendations:</b> Issue 03794/T18 <b>Permit Issue Date:</b> <b>date, 2009</b> <b>Permit Expiration Date:</b> <b>date, 2014</b>		

**I. Purpose of Application**

This permitting action is a renewal of an existing Title V permit pursuant to 2Q .0513. The existing Title V permit (**03764T17**) was issued on **October 20, 2008**, and is currently scheduled to expire on **June 30, 2010**. The renewal application was received on **October 5, 2009**, 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.

In addition to renewal of this current air permit, the Permittee is requesting to add two additional 1.1 million Btu per hour steam-heated drying ovens to the list of insignificant activities.

**II. Facility Description**

The facility is a wood furniture manufacturer.

### III. History/Background/Application Chronology

**July 28, 2005** – Permit **03794T15** issued as a Title V renewal.

**March 8, 2008** – Permit **03794T16** issued as a State-only modification to remove the 15A NCAC 2Q .0705 Last MACT/air toxics compliance requirement.

**October 20, 2008** – Permit **03794T17** issued as a minor modification for the addition of one bagfilter (**ID No. BF-9**).

**June 16, 2009** – ARO performed a facility-wide compliance inspection as well as an investigation into an odor complaint against the facility.

**August 18, 2009** – Kevin Godwin of RCO issued a response to an Applicability Determination Request for the operation of two steam-heated drying ovens. His response noted that the ovens were being added for the purpose of improving drying and curing, that potential emissions would not change, no “de-bottlenecking” would result in their addition, and the amount of coating used would not change and therefore the sources qualified as insignificant sources. Kevin also recommended that these sources be added to the permit the next time the permit was reopened. (*Note..This request was made by the Permittee with the submittal of the renewal application.*)

**September 14, 2009** – Permit Application **3800005.09A** was received as a 112j Part II application in response to a July 2009 DAQ letter to all Title V permit holders.

**October 5, 2009** – Permit Application **3800005.09B** was received for permit renewal. Application was deemed complete for processing.

**October 9, 2009** – ARO responded via email to a RCO office question on whether boilers (**ID Nos. FB-2 and FB-3**) should be tested for particulate during the next permit cycle. ARO’s response was that testing was in order for both units but that testing should be near to the end of the next permit cycle. The renewed permit has been modified accordingly (see discussion in Section V of this Document). In addition to the testing requirement, ARO requested that the test for FB-3) not require the maximum amount of finishing waste allowed but rather a maximum normal rate. This test rate would be a more typical maximum rate rather than the absolute maximum rate.

**October 30, 2009** – DRAFT permit and review sent the Permittee and ARO for comment prior to public notice and EPA review.

**date, 2009** – DRAFT permit sent to public notice and EPA for review prior to issuance.

### IV. Permit Modifications/Changes and ESM Discussion

The following table describes the modifications to the current permit as part of the renewal process.

Page	Section	Description
Attachment	Insignificant activities	-amended equipment list per Permittee -amended permit revision number
Cover	-	-amended all dates and permit revision numbers
All	Header	-amended permit revision number
3-4	Equipment table	-added specific MACT Subpart designations

Page	Section	Description
4	2.1 A.1.a 2.1 A.1.b 2.1 A.1.c 2.1 A.2.a	-added ID numbers -corrected testing rule cross reference -added ID numbers -added ID numbers
5	2.1 A.2.b 2.1 A.2.c 2.1 A.2.e 2.1 A.3.b 2.1 A.3.c	-corrected testing rule cross reference -added ID numbers -updated shell language -corrected testing rule cross reference -added ID numbers
6	2.1 A.3.e 2.1 B.1.a 2.1 B.1.b 2.1 B.1.c	-updated shell language -added ID numbers -added testing date for boiler ( <b>ID No. FB-2</b> ) per ARO request -added ID numbers and updated shell language
7	2.1 B.1.e 2.1 B.2.a 2.1 B.2.b 2.1 B.2.c 2.1 B.3.b	-added ID numbers -added ID numbers -corrected testing rule cross reference -added ID numbers -corrected testing rule cross reference
7-8	2.1 B.3.c	-added ID numbers
8	2.1 B.3.e 2.1 C.1	-updated shell language -added regulatory citation
9	2.1 C.2.a 2.1 C.2.b  2.1 C.2.c  2.1 C.2.d 2.1 C.2.f	-added ID numbers -added separate paragraph for finishing waste firing limit (previously in another paragraph) -added testing date for boiler ( <b>ID No. FB-3</b> ) per ARO request -moved testing language to this paragraph (previously in another paragraph) -added ID numbers -added ID numbers and updated shell language
10	2.1 C.2.g 2.1 C.2.h 2.1 C.3.a 2.1 C.3.b 2.1 C.3.c 2.1 C.3.d 2.1 C.4.a 2.1 C.4.b 2.1 C.4.c 2.1 C.4.d	-added ID numbers -updated shell language -added ID numbers -corrected testing rule cross reference -added ID numbers -added ID numbers and corrected cross reference -added ID numbers -corrected testing rule cross reference -added ID numbers -added ID numbers
11	2.1 C.4.f 2.1 C.5.b  2.1 C.5.c	-added “no reporting” language for wood and finishing waste combustion -corrected testing rule cross reference -added ID numbers
12	2.1 C.5.e 2.1 D (table) 2.1 D.1.b 2.1 D.1.c	-updated shell language -added MACT Subpart title -added ID numbers and updated shell language -added ID numbers

Page	Section	Description
13	2.1 D.1.e 2.1 D.2.a 2.1 D.2.b 2.1 D.2.c 2.1 D.2.e	-updated shell language -added ID numbers -corrected testing rule cross reference -added ID numbers -updated shell language
14	2.1 E.1.b 2.1 E.1.e	-updated shell language -updated shell language
15	2.1 E.2.b	-corrected testing rule cross reference
16	2.1 F 2.1 F.1.a 2.1 F.1.c 2.1 G (table)	-added ID numbers -added ID numbers -updated shell language -added MACT Subpart title
17-19	2.2 A.1	-added ID numbers and updated shell language
20	2.2 B.1	-added facility-wide State-enforceable only odor control requirement
20-29	General Conditions	-updated general conditions (v3.0)

The equipment tables (both permitted and insignificant) were verified against ESM listings. Other than the addition of two insignificant sources, no changes to the permit or to ESM were necessary for this permit renewal.

## V. Regulatory Review

The facility is currently subject to the following regulations:

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 .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, Maximum Achievable Control Technology (40 CFR 63, Subparts JJ and DDDD)  
 15A NCAC 2Q .0317, Avoidance Conditions (for 15A NCAC 2D .0530, Prevention of Significant Deterioration)

A regulatory review for the existing sources will not be included in this document. No new requirements are necessary as part of this permit renewal.

However, as part of this permit renewal, the three existing boilers (**ID Nos. FB-1 through FB-3**) were evaluated for the need to complete particulate matter emissions testing as part of next permit cycle. Ed Martin, as part of his **July 16, 2004** Air Permit Review Document (**3800005.04A TV Renewal – 03794T15**), made the following observations:

*“Stack testing was previously performed in accordance with the initial Title V permit (**Permit No. 03794T12**) for wood-fired boilers FB-2 and FB-3. These tests have been completed with the following results (e-mail to Ed Martin from Brendan Davey dated **May 31, 2005**):*

*-FB-2 tested in compliance on 8/22/2001 at 0.136 lb particulate/mmBtu (0.127 filterable/0.009 condensible) vs a limit of 0.44 lb particulate/mmBtu.*

*-FB-3 tested in compliance on 6/5/2002 at 0.362 lb particulate/mmBtu (0.327 filterable/0.035 condensible) vs a limit of 0.44 lb particulate/mmBtu.*

*Since more frequent testing is required when the results of a test are closer to the limit, particulate testing for boiler FB-3 will be required again within one year of issuance of this renewed permit (Section 2.1 C.1.b) since this boiler previously tested at 82% of the limit. Testing for boiler FB-2 will not be required within the next five years since this boiler tested at 31% of the limit, but will be required later and should be put in the next renewed permit.*

**03794T15** was issued with a requirement that testing be completed for boiler (**ID No. FB-3**). ARO indicates in its latest inspection report that the testing was completed on **July 18, 2006**. That testing indicated compliance with the particulate limit in the permit.

ARO has also confirmed the appropriateness of testing of both boilers as part of this new permit cycle with a request that the next testing take place near the end of the five-year cycle. The testing requirements for both boilers have been added with the requirement that testing and submittal of results be completed prior to **July 31, 2014**.

(Note: No testing requirements are required for boiler (**ID No. FB-1**) as this boiler combusts only No. 6 fuel oil and the current permit requires no monitoring/recordkeeping/reporting to ensure compliance with the particulate standard.)

## **VI. NSPS, NESHAPS/MACT, PSD, 112(r), CAM**

**NSPS** – The Permittee is not currently subject to any New Source Performance Standards. This permit renewal does not affect this status.

**NESHAPS/MACT** – The Permittee is currently required to comply with the following Maximum Achievable Control Technology Standards:

1. 40 CFR 63, Subpart JJ “Wood Furniture MACT”. Applicable equipment includes spray booths, wash-off tanks, dip tanks, and drying ovens (**ID Nos. F-1a and F-1b**). Per regional review, the facility is in compliance with the MACT and continued compliance is expected.
2. 40 CFR 63, Subpart DDDD “Plywood and Composite Wood Manufacturing”. Applicable equipment includes the nine wood drying kilns (**ID Nos. DK-1 through DK-9**) and gluing operations (**ID No. G-1**). Although subject to this Subpart, there are no regulatory requirements other than initial notification. These notifications have been made; therefore, compliance has been demonstrated.

**PSD** – The Permittee is required to comply with one Prevention of Significant Deterioration Avoidance Condition for the operation of one spray booth (**ID No. F-1a-SB-14**). This source is limited to less than 40 tons volatile organic compounds per consecutive 12-month period. To ensure compliance, the Permittee shall calculate monthly VOC totals by multiplying the actual VOC-containing material consumed by the VOC content of the material. The permit also requires semi-annual reporting of these monthly and yearly totals. This permit renewal does not affect this status.

**112(r)** – The Permittee 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** – 40 CFR 64 requires that a continuous compliance assurance monitoring plan be developed for all equipment located at a major facility, that have pre-controlled emissions above the major source threshold, and use a control device to meet an applicable standard. The following table indicates the current equipment/control device relationships:

<b>Emission Source ID No.</b>	<b>Emission Source Description</b>	<b>Control Device ID No.</b>	<b>Control Device Description</b>
FB-2	One wood fuel-fired boiler (44.3 million Btu per hour heat input)	MC-2	One multicyclone (32 nine-inch diameter tubes)
FB-3	One wood fuel/No. 6 fuel oil/finishing waste-fired boiler (36.0 million Btu per hour heat input)	MC-3	One multicyclone (28 nine-inch diameter tubes)
WDS-1	One woodwaste collection system	BF-2 through BF-9	Eight bagfilters (4,880, 4,880, 4,880, 4,068, 4,880, 4,880, 4,068 and 6,297 square feet of filter area, respectively)
WDS-2	One woodwaste collection system on wood hog, wood grinder, and two woodwaste storage silos	BF-1  CLC-1, CLC-3, and CLC-4	One bagfilter (2,680 square feet of filter area)  Three cyclones (138, 138, and 60 inches in diameter, respectively)

The Permittee underwent a CAM demonstration as part of its previous title V renewal process (**03794T15/July 28, 2005**; See Ed Martin’s Air Permit Review for details). During that review process it was determined that CAM was not applicable to this facility. This permit renewal does not change this status.

**VII. Facility Wide Air Toxics**

The facility is not subject to the toxics regulations. This permit renewal does not affect this status.

**VIII. Facility Emissions Review**

The following table represents the latest years’ emission inventories from the facility:

<b>Pollutant(s)</b>	<b>2006 Actual Emissions (tpy)</b>	<b>2007 Actual Emissions (tpy)</b>
CO	16.98	12.87
NO <sub>x</sub>	21.82	20.60
PM <sub>10</sub>	13.23	13.15
SO <sub>2</sub>	44.56	56.26
VOC	336.83	371.51
Total HAP/TAP	58.29	65.86

## **IX. Stipulation Review**

Brendan Davey last completed a compliance inspection of this facility on **June 16, 2009**. Based on his observations, the facility appeared to be in compliance with the applicable air quality regulations.

## **X. Public Notice/EPA and Affected State(s) Review**

Pursuant to 15A NCAC 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 15A NCAC 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. Tennessee and Georgia are affected States within 50 miles of this facility.

## **XI. Conclusions, Comments, and Recommendations**

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

A consistency determination was not required for this renewal.

ARO recommends issuance of the permit and was sent a draft permit prior to issuance (see History Section of this Document above).

RCO concurs with ARO's recommendation to issue the renewed air permit.