

AIR PERMIT REVIEW

APPLICANT: Lexington Furniture Industries Plant 1	SITE LOCATION: Lexington	COUNTY: Davidson	
TECHNICAL CONTACT: Stuart Stapleton	PHONE: (336) 236-5316	RESPONSIBLE OFFICIAL: Bill Mitchell	TITLE: Vice President – Manufacturing
REVIEW ENGINEER: Mark Cuilla	SIGNATURE:	DATE: XXXXXX, 2003	
REGIONAL CONTACT: Margaret Love	REGIONAL OFFICE: WSRO	SIC CODE: 2511	
APPLICATION NUMBER: 2900050.03A	EXISTING PERMIT NUMBER: 02714T15	NEW PERMIT NUMBER: 02714T16	

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 (02714T15) was issued on May 21, 2001, and is currently scheduled to expire on March 31, 2004. The renewal application was received on June 12, 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.

II Facility Description

Lexington Furniture Plant No. 1 is a furniture manufacturer located in Lexington, Davidson County, North Carolina. This is a large manufacturing facility, producing bedroom and dining room furniture as well as casegoods. Standard hours of operation are 8 hours per day, 5 days per week, and 50 weeks per year.

III History/Background/Application Chronology

April 7, 1999 – First time title V permit 02714T12 issued.

January 7, 2000 – 502b(10) modification of permit to replace an existing cyclone with a bagfilter brought in from another facility (revised permit 02714T13 issued).

January 5, 2001 – 502b(10) modification of permit to request ability to burn natural gas in two boilers as primary fuel and keep fuel oil capability as backup (revised permit 02714T14 issued).

May 21, 2001 – 502b(10) modification of permit to add three day tanks (revised permit 02714T15 issued).

June 12, 2003 – Permit renewal application received and deemed complete for processing.

July 7, 2003 – I received the permit application review and inspection report from Ms. Margaret Love of the WSRO.

July 18, 2003 – I received the draft CAM plan from Mr. Stapleton. I then forwarded it on to Mr. Samir Parekh, DAQ Technical Services, for approval. I received approval of this language and informed Mr. Stapleton of the results.

August 26, 2003 – DRAFT permit sent to facility and WSRO for review via email.

August 27, 2003 – Comments on DRAFT permit and review received from WSRO via email. See Section XII of this document for a discussion.

August 28, 2003 – Comments on DRAFT permit received from Lexington Furniture via phone. See Section XII of this document for a discussion.

IV. Permit Modification/Changes

The following table describes the modifications to the current permit as part of the renewal process. (Note. See Section III of this document for a description of all 502(b)(10) modifications to the permit.)

Page(s)	Section	Description of Change(s)
Cover	NA	-Updated permit numbers and all dates
TOC	NA	-Removed reference to Part II
3-4	Equipment table	-Grouped like control devices -Added MACT references -Amended finishing operation equipment listing -Amended boiler control device orientation per WSRO
5	2.1 A (table)	-Amended equipment description -Corrected permit condition references -Added reference to Odor permit condition
5	2.1 A.1.a-c	-Updated condition language to “tvcond53.wpd”
5-6	2.1 A.2.a-g	-Updated condition language to “tvcond53.wpd” -Removed M/R/R requirements while combusting natural gas and/or No. 2 fuel oil
6-7	2.1 A.3.a-f	-Updated condition language to “tvcond53.wpd” -Removed M/R/R requirements while combusting natural gas and/or No. 2 fuel oil
7-8	2.1 A.4.a-e	-Updated condition language to “tvcond53.wpd” -Corrected condition reference to 2Q .0317
8	2.1 B (table)	-Amended equipment description -Added reference to Odor permit condition
8-9	2.1 B.1.a-f	-Updated condition language to “tvcond53.wpd”
9	2.1 B.2.a-c	-Updated condition language to “tvcond53.wpd”
9-10	2.1 B.3.a-e	-Updated condition language to “tvcond53.wpd”
10	2.1 C (table)	-Added reference to CAM and Odor permit conditions
11	2.1 C.1.a-e	-Updated condition language to “tvcond53.wpd”
11-12	2.1 C.2.a-f	-Updated condition language to “tvcond53.wpd”
12-14	2.1 C.3.a-d	-Added permit condition for CAM language
14	2.1 D (table)	-Amended equipment description -Corrected permit condition reference -Added reference to Odor permit condition
14-15	2.1 D.1.a-e	-Updated condition language to “tvcond53.wpd”
15-16	2.1 D.2.a-e	-Updated condition language to “tvcond53.wpd”
16	2.1 E (table)	-Added reference to Odor permit condition
16	2.2 A (table)	-Amended equipment description -Corrected permit condition reference
16-17	2.2 A.1.a-e	-Updated condition language to “tvcond53.wpd”
17	2.2 B	-Added permit condition for the control of odors

Page(s)	Section	Description of Change(s)
17-25	2.2 C.1-10	-Updated condition language to “tvcond53.wpd”
25-33	General Conditions	-Updated general conditions to “newshe38.wpd”
NA	NA	-Removed reference to Part II (including all astericks located throughout Part I)

V. Regulatory Review

The facility is subject to the following regulations:

- 15A NCAC 2D .0503, Particulates from Fuel Burning Indirect Heat Exchangers
- 15A NCAC 2D .0504, Particulates from Woodburning Indirect Heat Exchangers
- 15A NCAC 2D .0512, Particulates from Miscellaneous Wood Products Finishing
- 15A NCAC 2D .0516, Sulfur Dioxide Emissions from Combustion Sources
- 15A NCAC 2D .0521, Control of Visible Emissions
- 15A NCAC 2D .0524, NSPS 40 CFR Part 60 Subpart Dc
- 15A NCAC 2D .0614, Compliance Assurance Monitoring
- 15A NCAC 2D .1111, Maximum Achievable Control Technology (Subpart JJ)
- 15A NCAC 2D .1806, Control and Prohibition of Odorous Emissions
- 15A NCAC 2Q .0317, Avoidance Conditions (PSD Avoidance)

Except for CAM (See Section VI of this document for discussion), no new or additional requirements have been added to this renewed permit. Therefore, a regulatory review will not be included in this document.

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

NSPS

The facility is not currently subject to any New Source Performance Standards. This renewal application does not add any new requirements.

NESHAP/MACT

The facility is currently required to comply with 40 CFR 63, Subpart JJ “Wood Furniture MACT”. Applicable equipment includes 40 spray booths, four dip tanks, six wash-off tanks, gluing operations, and 11 liquid storage tanks. Per WSRO review, all booths and tanks are in compliance with the MACT and continued compliance is expected.

The permit condition for the MACT requirement has been updated per the most recent shell language (tvcond53.wpd).

PSD

This facility is currently a PSD major facility. It currently operates under two separate PSD avoidance conditions. The natural gas/Nos. 2/5/6 fuel oil boiler (ID No. ES-B3) is limited to 53 tons sulfur dioxide per year and all VOC emitting emission sources are limited to 572 tons per year. Per WSRO permit application review, all records were complete and quarterly reports, since the last inspection, have been received. The highest emissions for any 12-month period were 23.51 tons sulfur dioxide and 217.80 tons VOC indicating compliance with these requirements. Continued compliance is expected. Permit conditions 2.1 A.4 and 2.2 C. have been updated to reflect the language contained in shell conditions (tvcond53.wpd).

Attainment Status

This facility is located in Burke County, which is in attainment 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

40 CFR 64 requires that a continuous 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 woodworking operations at the facility are controlled by bagfilters and transfer cyclones (some stand-alone and some in series). Per DAQ guidance, CAM is required on those control devices which see pre-controlled PM10 emissions of 100 tons per year or more. As stated above, the CAM rule requires that the control device is installed on the emission source in order to meet an applicable standard. The woodworking operations are all subject to 15A NCAC 2D .0512, which requires “adequate ductwork and properly designed collectors.” 2D .0512 is an applicable standard; therefore CAM applies to this facility. DAQ argues that the transfer cyclones do not meet the definition of necessary equipment to meet the applicable standard. The particulate standard is met with the use of the bagfilters; therefore, the transfer cyclones will not require that a CAM plan be applied to them.

Permit condition 2.1 C.3. has been added to comply with this federal requirement. The woodworking operations are being controlled by thirteen bagfilters. As stated above, this emission source is subject to the particulate standard of 2D .0512 and the 20 percent opacity standard of 2D .0521. In its proposed CAM plan, the facility has chosen to measure and record as the primary method of compliance, the pressure drop across the bagfilters. Lexington argues “...bagfilters are designed to operate at a relatively constant pressure drop. Monitoring pressure drop provides a means of detecting a change in operation that could lead to an increase in emissions....” As a backup to the pressure drop, the facility is also proposing to monitor visible emissions. They state “...visible emissions were selected as the performance indicator because its indicative of good operation and maintenance of the bagfilters...”

VII. Facility Wide Air Toxics

The facility is not subject to the toxics regulations. There is no change required for this renewal.

VIII. Statement of Compliance

The DAQ has reviewed the compliance status of this facility. Based on visual observations and review of records at the time of the inspection, this facility was judged to be operating in compliance with Air Quality standards and regulations.

IX. Facility Emissions Review

There is no change in emissions for this renewal. The following table represents facility wide emissions as submitted by the facility in its latest* emissions inventory:

Pollutant	2001 Emissions (tons)
Particulate	27.4
Carbon Monoxide	60.2
Nitrogen Oxides	50.7
Sulfur Dioxide	22.7

Volatile Organic Compounds	211.9
Ethyl Acetate	1.42
Methanol	1.31
MEK	0.585
Toluene	4.23
Xylene	0.274
(all other HAPs/TAPs)	< 1 ton

*The 2003 inventory has been submitted using AERO and has not yet been reviewed.

X. Stipulation Review

WSRO noted the following needed permit corrections:

1. the permit lists two multicyclones installed one each on the two large boilers. These boilers share one multicyclone and one stack and this should be corrected in the next permit;
2. the stack testing of the boilers has been completed and this requirement should be removed;
3. the notifications of start-up of the bagfilter (ID No. CD-BF-M) and the 3 tanks have been submitted to EPA and DAQ and this requirement should be removed; and
4. the permit for this facility will expire on March 31, 2004. A letter reminding them of the deadline to request renewal was sent to Mr. Stapleton on June 5, 2003.

These changes (where needed) were incorporated into the permit (see table of changes in Section IV of this document).

XI. 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.

XII. Conclusions, Comments, and Recommendations

1. A professional engineer's seal was not required for this renewal.
2. A consistency determination was not required for this renewal.
3. WSRO recommends issuance of the permit and does request a DRAFT permit prior to issuance.
4. RCO concurs with WSRO's recommendation to issue air permit.
5. Comments received on DRAFT permit:

WSRO

- Comment was received on an error in salutation for the cover letter. Changes were made to correct reference from Mr. Stapleton to Mr. Mitchell.

- Comment was received on a clarification of the equipment list. Changes were made throughout permit to remove reference to ES-F1 and ES-F2 and replace with combined ES-FIN.

- Quality Improvement Plan (QIP) reference was added to list of acronyms. Change was made.

Lexington

- Facility requested that labeling of bagfilters L and M be swiched in the equipment table because they had mistakenly labeled them wrong at the facility. Change was made.

- In addition to grouping ES-F1 and ES-F2 for permitting purposes, it was requested that the details of the description in the equipment table be removed for clarification. Changes were made to remove the detail without losing compliance indicators.

- The facility pointed out a typographical error in the listing of opacity limits in 2.1 C. Changes were made to correct the equipment table.