

AIR PERMIT REVIEW

APPLICANT: Broyhill Furniture Industries Harper Facility	SITE LOCATION: Lenoir	COUNTY: Caldwell	
TECHNICAL CONTACT: David Stout	PHONE: (828) 758-3374	RESPONSIBLE OFFICIAL: Bill Sale	TITLE: Vice President
REVIEW ENGINEER: Mark Cuilla	SIGNATURE:	DATE: XXXXXX, 2003	
REGIONAL CONTACT: Laura Herbert	REGIONAL OFFICE: ARO	SIC CODE: 2511	
APPLICATION NUMBER: 1400013.03B	EXISTING PERMIT NUMBER: 02762T15	NEW PERMIT NUMBER: 02762T16	

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 (02762T15) was issued on September 29, 1999, and is currently scheduled to expire on June 30, 2004. The renewal application was received on July 30, 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

Broyhill Furniture – Harper Plant is a furniture manufacturer located in Lenoir, Caldwell County, North Carolina. This title V facility has currently permitted sources consisting of two boilers, woodworking operations, and MACT applicable painting and gluing operations as well as miscellaneous lumber drying operations and above ground storage tanks. The facility manufactures wood bedroom furniture. The facility operates approximately eight hours per day, five days per week.

III. History/Background/Application Chronology

September 29, 1999 – Initial title V permit 02762T15 issued.

July 30, 2003 – Permit renewal application received and deemed complete for processing except for the CAM analysis.

September 15, 2003 – I received CAM analysis for this plant. As indicated by the Permittee, CAM does not apply (See Section VI of this document for a discussion).

September 25, 2003 – I received the permit application review and inspection report from Laura Herbert of the ARO.

September 26, 2003 – DRAFT permit sent to facility, regional office and title V coordinator for review. Comments were addressed (See Section XII of this document for discussion).

IV. Permit Modification/Changes

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

Page(s)	Section	Description of Change(s)
Cover	-	-Updated all dates and permit revision numbers
3-4	Equipment table	-Amended description of the two boilers to include “fire-tube design” -Clarified description of bagfilters -Added identification numbers
4	2.1 A (description)	-Amended description of the two boilers to include “fire-tube design”
4-5	2.1 A (table)	-Added reference to 2D .1806
5	2.1 A.1	-Updated condition language to most recent shell condition (tvcond53.wpd)
5-6	2.1 A.2.a-g	-Updated condition language to most recent shell condition (tvcond53.wpd) -Added date by which testing of boiler is to be completed
6	2.1 A.3.a-c	-Updated condition language to most recent shell condition (tvcond53.wpd)
6	2.1 A.4.a-c	-Updated condition language to most recent shell condition (tvcond53.wpd)
6-7	2.1 A.5.a-e	-Updated condition language to most recent shell condition (tvcond53.wpd)
7	2.1 B (table)	-Added reference to 2D .1806
8	2.1 B.1.a-e	-Updated condition language to most recent shell condition (tvcond53.wpd) -Changed I&M requirements from monthly to weekly per ARO request
8-9	2.1 B.2.a-e	-Updated condition language to most recent shell condition (tvcond53.wpd)
9	2.1 C (description)	-Clarified description of horizontal reverse roll coater
9	2.1 C (table)	-Added reference to 2D .1806
9-10	2.1 C.1.a-e	-Updated condition language to most recent shell condition (tvcond53.wpd) -Changed I&M requirements from weekly to monthly
10-11	2.1 C.2.a-e	-Updated condition language to most recent shell condition (tvcond53.wpd)
11	2.2 A.1.a	-Updated condition language to most recent shell condition (tvcond53.wpd) -Corrected rule reference
11-14	2.2 B.1-8	-Updated condition language to most recent shell condition (tvcond53.wpd)
14-22	General Conditions	-Updated condition language to most recent shell conditions (newshe38.wpd)
23	Attachment	-Added reference to Quality Improvement Plan (QIP)
All	Header	-Corrected permit revision number to 02762T16

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 .1111, Maximum Achievable Control Technology (Subpart JJ)
 15A NCAC 2D .1806, Control and Prohibition of Odorous Emissions

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 NSPS requirements. The renewal of this permit does not require NSPS analysis.

NESHAP/MACT

Subpart JJ - The facility is currently required to comply with 40 CFR 63, Subpart JJ “Wood Furniture MACT”. Applicable equipment includes 15 spray booths, three wash-off tanks, gluing operations, two printers, and four steam heated drying ovens. Per ARO review, the facility is 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

The facility is not currently operating under a PSD avoidance condition. The renewal of this permit does not require PSD analysis.

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 cyclones. Per DAQ guidance, CAM is required on those control devices that see pre-controlled PM10 emissions of 100 tons per year or more. As stated above, CAM is required on control device that are installed on an 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 a CAM analysis is required.

The Permittee has provided a CAM analysis based on DAQ guidance. The following table represents the results.

Control Device Description	Process Description	% PM10*	PM10 tpy (uncontrolled emissions)
Bagfilter 1	Rough sawing	1.89	7.70
Bagfilter 2	Hog/rough sawing/relay	3.89	78.57
Bagfilter 3	Planing, molding, relay	2.0	18.15

Control Device Description	Process Description	% PM10*	PM10 tpy (uncontrolled emissions)
Bagfilter 4	Rough sawing, fine sawing, shaving, sanding	26.06	4.11
Bagfilter 5	Sanding	23.8	30.13
Bagfilter 6	Rough sawing	1.89	14.82
Bagfilter 7	Rough sawing, shaving	1.89	1.90
Bagfilter 8	Shaving	0.0	0.0
Bagfilter 9	Rough sawing	1.89	1.91
Bagfilter 10	Molding, rough sawing	1.89	35.18

* Percent PM10 based on NC wood working emissions spreadsheet (planning 0%, shaving/chipping 0%, rough sawing 1.89%, fine sawing 0.37%, milling/molding 0%, sanding 23.8%)

Based on the uncontrolled emissions supplied by the Permittee, CAM will not apply to any control device because all are less than the major source thresholds in the rule.

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 the latest inspection (July 31, 2003), the facility was in compliance with all applicable requirements

IX. Facility Emissions Review

There is no change in emissions for this renewal.

X. Stipulation Review

ARO requested the following permit condition changes/corrections:

1. verification that equipment on the current permit that has been removed from the facility is still needed to be listed on the renewed permit (specifically wash-off tanks T-1 and T-2 and printer P-2). *This request was made to the facility on September 26, 2003 via email. Mr. Stout of Broyhill requested that all currently permitted sources remain on the permit for flexibility.*
2. that the description of the two boilers include the phrase “fire-tube design” to help in the determination of future NESHAP applicability to these boilers. *This change has been made.*
3. change the frequency of I&M monitoring of the bagfilters and cyclones from monthly to weekly based on the inspection results. *This change has been made.*

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

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 **does** request a DRAFT permit prior to issuance.

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

Comments received on DRAFT permit:

Broyhill –

1. The facility requested that all references to odor control be removed from the permit because there has not been a problem noted at the facility and it is not expected. *The DRAFT permit was modified to remove the citation to the odor rule from each of the permitted equipment except for the finishing operations. It should be noted that Section 2.2 of the permit does contain a facility-wide odor requirement that was already established in the permit. According to state rules, the odor requirement would apply as a State-only enforceable permit condition even if the language did not appear in the permit.*

2. The facility requested that the monitoring language throughout the permit reflect that monitoring be done within a calendar year rather than within 12 months of the initial inspection. *No change; language has been amended to read as the current permit shells state.*

3. The facility requested that language be added throughout the permit stating that up to three recordkeeping omissions would not constitute a violation. *This has been added where appropriate. Wherever daily inspection and maintenance monitoring is required, DAQ allows up to three recordkeeping omissions per semi-annual period. All other frequencies are not allowed the same flexibility.*

4. The facility requested that where “normal” opacity ranges have been established, the Permittee would not be required to establish new normals within 30 days of the issuance of the permit. *Agree; the language has been removed.*

Other changes:

1. The facility requested (for another of their facilities) that the monitoring for visible emissions be removed for the spray equipment. Specifically they argue that the opacity measurements do not and are not expected to approach the permitted limits. *Agree; the permit has been amended to remove the monitoring, recordkeeping, and reporting of visible emissions for the finishing operations. It should be noted that ARO concurs with this request.*