

Air Permit Review

Permit Issue Date:

Region: Mooresville Regional Office
County: Iredell
NC Facility ID: 4900203
Inspector's Name: Jim Hafner
Date of Last Inspection: 04/20/2006
Compliance Code: C/In Compliance With
 Procedural Reqr

Facility Data			Permit Applicability (this application only)
<p>Applicant (Facility's Name): Armstrong Hardwood Flooring Company - Statesville Plant</p> <p>Facility Address: Armstrong Hardwood Flooring Company - Statesville Plant 755 Washington Avenue Statesville, NC 28677</p> <p>SIC: 2426 / Hardwood Dimension & Flooring NAICS: 321918 / Other Millwork (including Flooring)</p> <p>Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V</p>			<p>SIP: NSPS: NESHAP: PSD: PSD Avoidance: NC Toxics: 112(r): Other:</p>
Contact Data			Application Data
Facility Contact	Authorized Contact	Technical Contact	<p>Application Number: 4900203.06B and .06A Date Received: 08/28/2006, 08/17/2006 Application Type: Renewal Application Schedule: TV-Renewal TV-Significant Existing Permit Data Existing Permit Number: 07085/T10 Existing Permit Issue Date: 05/24/2005 Existing Permit Expiration Date: 05/31/2007</p>
Patrick Mecimore Plant Engineer (704) 873-1800 755 Washington Ave. Statesville NC, 28677	Tony Everidge Plant Manager (704) 873-1800 755 Washington Avenue Statesville NC, 28677	Patrick Mecimore Plant Engineer (704) 873-1800 755 Washington Ave. Statesville NC, 28677	
<p>Review Engineer: Purva Prabhu</p> <p>Review Engineer's Signature: _____ Date: _____</p>		<p style="text-align: center;">Comments / Recommendations:</p> <p>Issue 07085/T11 Permit Issue Date: Permit Expiration Date:</p>	

1. Purpose of Application

Armstrong Hardwood Flooring Company - Statesville Plant is currently operating under air permit No. 07085T10, which was issued on May 24, 2005 and will expire on May 31, 2007. The renewal application (4900203.06B) was received on August 28, 2006 or at least nine months prior to the expiration date. The permit is deemed complete for processing. 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.

Permittee also submitted an application (4900203.06A) on August 17, 2006 to avoid MACT subpart DDDD (plywood and composite wood products MACT) and subpart DDDDD (Industrial boilers and process heaters MACT) by limiting single HAP emissions to less than 10 tpy and total HAP emissions to less than 25 tpy. This significant modification application was consolidated with the renewal application.

Based on the information that was submitted via fax dated February 5, 2007 and also the permit review document for T9 revision, it appears that the facility is not a major source of HAP emissions. The facility-wide potential to emit any single HAP is less than 10 tons per year and any combination of HAPs is less than 25 tons per year.

The following paragraph is taken from initial Title V permit review document (revision T09). It gives information regarding facility-wide potential HAP emissions.

“Based on potential emissions of HAPs and criteria pollutants this facility would be classified as a small source. However, I spoke with Mr. Michael Krenek, of the Corporate Office located in Dallas Texas, about the facility’s classification status in February 2002. He stated that the company wishes to remain classified as a Title V source and receive an initial Title V permit. Therefore, the DAQ will proceed with the issuance of a Title V permit to this facility.”

The facility is not a major source for HAP emissions and MACT will not apply to the facility. The proposed MACT avoidance condition cannot be added to the permit, as the facility-wide potential to emit is less than HAP major source thresholds.

A MACT determination will be added to the permit under Permit Shield for Nonapplicable Requirements.

2. Facility Description

The facility manufactures hardwood flooring.

3. Application Chronology

August 17, 2006	Facility submitted an application for MACT avoidance (Application No. – 4900203.06A) to avoid MACT subpart DDDD (plywood and composite wood products MACT) and subpart DDDDD (Industrial boilers and process heaters MACT). Facility submitted the following: <ul style="list-style-type: none">• Form AA (Form AA did not have signature of the authorized official as per the permit requirement. But the form that was submitted on August 28, 2006 as part of the permit renewal application had correct signature.)• Form A4• Form E5• Application fee of \$834.00 Processing schedule for this application is TV-Significant. A copy of this application was sent to Mooresville regional office.
August 28, 2006	Application for renewal (Application No. – 4900203.06B) was received. Facility submitted the following: <ul style="list-style-type: none">• Form AA, AA2 (Form AA did have signature of the authorized official)• Form A3, A5, E5• Compliance assurance monitoring analysis
September 5, 2006	Comments on application 4900203.06A were received from regional office and email is attached.
September 8, 2006	Comments on application 4900203.06B were received from regional office and email is attached.
September 11, 2006	Called Mr. Chalam Pakala, the consultant for the facility. I told him to verify before control PM-10 emissions from flatline finishing operation (Id. No. – ES-P-300) and wood waste collection system operation (Id. No. – ES-1). Facility did not submit any PM-10 emissions from these two sources as part of CAM determination that was submitted on August 28, 2006.
September 12, 2006	Letter requesting above additional information was sent to the consultant and the facility and it is

attached.
Clock stopped.

September 14, 2006 Application submitted on August 17, 2006, requested avoidance for Plywood and Composite Wood Products MACT (DDDD) and Industrial Boilers and Process Heaters MACT (DDDDD) by taking emission limit for individual HAP to 9.99 tons per year and combination of HAPs to 24.99 tons per year.

Based on the emissions that were submitted as part of the CAM demonstration and also permit review for T9 revision, it appeared that the facility is not a major source of HAP emissions as potential to emit any single HAP is less than 10 tons per year and any combination of HAPs is less than 25 tons per year.

The facility is not a major source for HAP emissions and the above-mentioned MACTs will not apply to the facility and MACT avoidance condition cannot be added to the permit.
Email was sent to the consultant and the facility explaining the same.

October 3, 2006 Response was received from the facility to the letter that was sent on September 12, 2006. Facility's response was not complete in regard to the email that was sent on September 14, 2006.

October 16, 2006 Email was sent to the facility regarding the MACT applicability for Armstrong Hardwood Flooring Company, which had the following language.

“This has reference to our discussion this morning regarding the MACT applicability for Armstrong Hardwood Flooring Company. From our discussion I understand that this facility is a minor source for HAPs as the potential to emit any single HAP is less than 10 tons per year or any combination of HAPs is less than 25 tons per year and MACT does not apply to this facility. We can include this MACT determination in the permit under Permit Shield for Nonapplicable Requirements. Please provide information regarding the MACT that would have been applied to the facility if the facility were a major source. In such a case, we think that MACT subpart QQQQ (Surface Coating of Wood Building Products) would have been applied to the facility. Please send us a statement from the responsible official of the facility stating that the facility is a minor source for HAPs and provide supporting calculations for the same”.

October 19, 2006 Email was received from regional contact regarding adding a testing requirement for wood fired boiler (Id. No. ES-B-2).

December 4, 2006 Response received from the facility to the email that was sent on October 16, 2006 and it is attached.
Clock started.

February 2, 2007 Called Mr. Pakala to verify the following:

- Emissions calculation from emission sources ES-1 and ES-P-300 for CAM purposes were done using facility's actual operating hours as 8760 hrs per year. Mr. Pakala informed that the facility operates 8760 hours per year. It was also verified with Mr. Patrick Mecimore during phone conversation on February 6, 2007. Mr. Mecimore informed DAQ that the facility operates all the time except for the downtime of the machines for maintenance. Emissions Inventory data also indicates that the facility operates all the time.
- Facility's potential HAP emissions as submitted on December 4, 2006 did not include emissions from all sources at the facility. Mr. Pakala informed DAQ that he would update the calculations and resubmit the information.
- I again informed Mr. Pakala that The MACT avoidance condition cannot be added to the permit as requested in the letter that was submitted on December 4, 2006 as the facility is minor source for HAPS. A MACT determination can be added to the permit under Permit Shield for Nonapplicable Requirements. If the facility becomes major for HAPs in the future then they need to comply with the MACT or can take avoidance that

time.

- Formaldehyde emissions as reported in the 2005 emissions inventory were 64769.39 lbs/year. Mr. Pakala informed DAQ that in 2005 formaldehyde emissions were 1725 pounds per year and not 64769.39 pounds per year.

February 5, 2007 Fax received from the RO of the facility. It included revised facility-wide potential HAP calculations.

February 6, 2007 Phone conversation with Mr. Patrick Mecimore. I wanted to verify the control device description for emission source ID No. ES-1. Mr. Mecimore informed DAQ that bagfilters CD-2 and CD-3 are not parallel with bagfilter CD-4 as listed in the permit. These bagfilters control emissions from different sets of woodworking operations.

February 14, 2007 Draft permit and review was sent to the region and facility

February 22, 2007 Regional comments were received

March 12, 2007 Comments from the facility were received via fax and it is attached. The facility wanted to change the description of wood fired boiler (Id. No. ES-B-2) to wood-fired boiler (14.0 million Btu per hour maximum heat input) burning woodwaste generated from onsite engineered flooring operations. As per email attached, the facility can burn onsite generated woodwaste without triggering toxics review and hence the change was made to the description.

4. Permit History

The following list provides a very brief summary of the Title V permit revisions for this facility:

Permit No.	Issuance Date	Description of revision
07085T09	June 12, 2002	Initial TitleV permit
07085T10	May 24, 2005	TV-minor- This application was for increasing the production of the glue press operation (ID No. ES-GP-1) and add a 5,000 gallon, capacity, above ground tank (ID No. ES-2A) and to change the name of the facility to "Armstrong Hardwood Flooring Company – Statesville Plant."

5. Facility compliance status / Statement of compliance

This facility was last inspected by Mr. Jim Hafner of MRO on April 20, 2006. The facility was in compliance with all air quality requirements.

The regional contact (Mr. Jim Hafner) sent his comments on application 4900203.06A (MACT avoidance application) via email dated September 5, 2006 and on application 4900203.06B (renewal application) via email dated September 8, 2006.

In email dated September 8, 2006, Mr. Hafner had the following comment regarding the application form: "In regards to the renewal, you may want to re-send the acknowledgment letter because the authorized contact did not sign the application. Pat Mecimore signed it and Tony Everidge is actually the authorized contact".

The form that was submitted, as part of the application 4900203.06A did not have the signature of the authorized official. But the form that was submitted as part of the application 4900203.06B did have the signature of the authorized official, which satisfied the requirement.

Mr. Hafner also recommended adding a testing requirement for the wood-fired boiler to the permit. This testing requirement will be added to the permit.

Mr. Hafner sent comments on draft permit on February 22, 2007 and the following changes were done to the permit as per his comments.

1. enddated source Id. No. IES-8 (housekeeping operations and routine office operations) as it is categorically exempt
2. On page 8, under section 2.1C.2.c, changed weekly monitoring requirement to monthly
3. On page 9, under section 2.1D.2.c, changed weekly monitoring requirement to monthly

6. Regulatory Review

The facility is currently subject to the following regulations:

Emission Source ID	Applicable Regulations	
ES-B-1	15A NCAC 2D .0503	Particulates from fuel burning indirect heat exchangers
	15A NCAC 2D .0516	Sulfur Dioxide Emissions from Combustion Sources
	15A NCAC 2D .0521	Control of Visible Emissions
ES-B-2	15A NCAC 2D .0504*	Particulates from wood burning indirect heat exchangers
	15A NCAC 2D .0516	Sulfur Dioxide Emissions from Combustion Sources
	15A NCAC 2D .0521	Control of Visible Emissions
ES-1	15A NCAC 2D .0512	Particulates from miscellaneous wood product finishing plants
	15A NCAC 2D .0521	Control of Visible Emissions
ES-P-300	15A NCAC 2D .0512	Particulates from miscellaneous wood product finishing plants
	15A NCAC 2D .0521	Control of Visible Emissions
	15A NCAC 2D .0958	Work practices for source of volatile organic compounds
	15A NCAC 2Q .0711	Permit requirements for toxic air pollutants
ES-GP-1	15A NCAC 2D .0958	Work practices for source of volatile organic compounds
	15A NCAC 2Q .1100	Control of toxic air pollutants
	15A NCAC 2Q .0711	Permit requirements for toxic air pollutants

*Added testing requirement for wood-fired boiler during the renewal.

Also the following regulation have been added to the permit (refer section 7 for details):

Added Section 2.3 - Permit Shield for Nonapplicable Requirements to the permit. It was added to provide shield to the Permittee from “15A NCAC 2D .1111”, MACT applicability.

7. NSPS, NESHAPS/MACT, PSD, 112(r), CAM

NSPS – The facility is not subject to any applicable NSPS requirements. This renewal and modification action does not change this status.

NESHAPS/MACT – The facility is not subject to 40 CFR 63, National Emission Standards for Hazardous Air Pollutants as the facility-wide total potential HAP emissions are less than 25 tons per year and individual HAP emissions are less than 10 tons per year.

The following table represents facility’s actual/potential HAP emissions (The facility’s actual and potential operating hours are the same. The fax that was received on February 2, 2007 included facility-wide potential HAP emissions. The fax did not have correct HAP emissions from the wood-fired boiler. The following table has corrected numbers for the wood-fired boiler and they are taken from the application that was received on August 28, 2006.):

Emission Source ID. No.	Facility-wide actual/potential HAP Emissions (pounds /year)
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ES-B-2 (wood-fired boiler)	4752.4
ES-P-300 (flat line finishing system)	2765.24
ES-GP-1 (glue press operation)	1480
Total HAP	4.5 tons per year

The facility submitted an application for MACT avoidance (Application No. – 4900203.06A) to avoid MACT subpart DDDD (plywood and composite wood products MACT) and subpart DDDDD (Industrial boilers and process heaters MACT) on August 17, 2006. MACT subpart QQQQ (Surface Coating of Wood Building Products) would have been applied to the facility if the facility was a major source. Facility requested for MACT Subpart QQQQ avoidance via letter that was received on December 4, 2006.

As explained under application chronology, MACT does not apply to the facility and hence DAQ cannot include MACT avoidance condition in the permit. The facility can take MACT avoidance only if they become major source of HAPs in the future. At present, MACT determination is added to the permit under Permit Shield for Nonapplicable Requirements.

PSD – The facility is a minor source for PSD. This renewal action does not change this status.

112(r) – The facility is not subject to 112(r) requirements because it does not store any of the covered chemicals. This renewal action does not affect this status.

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 following table represents the CAM analysis for this facility.

Emission Source ID. No.	Control Device	Pre-controlled PM10 emissions (tpy)	CAM plan required
ES-B-1	No		NO
ES-B-2	Yes	18.15	NO
ES-1	Yes	91.9	NO
ES-P-300	Yes	89.87	NO
ES-GP-1	No		NO

8. Facility Wide Air Toxics

The facility has 15A NCAC 2Q .0711 and 15A NCAC 2D .1100 in the permit. This renewal and modification will not make any changes to the existing toxic conditions.

9. Facility Emissions Review

The following table represents the latest years emission inventory from the facility:

Pollutant(s)	2005 Actual Emissions (tpy)
CO	16.54
NO _x	13.54
PM-10	10.46
SO ₂	0.69
VOC	19.56
Total HAP*	<25
Individual HAP*	<10

*In 2005 emissions inventory formaldehyde emissions were reported as 64769.39 lbs/yr (32.4 tpy). As informed by Mr. Chalam Pakala that number is not correct and actual formaldehyde emissions in 2005 were 1725 pounds per year.

10. Stipulation Review/ Permit Modifications/Changes

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

Page(s)	Section	Description of Change(s)
Attachment	Insignificant Activities	-reorganized equipment table -enddated source Id. No. IES-8 (housekeeping operations and routine office operations) as it is categorically exempt
Cover	-	-amended all dates and permit revision numbers
TOC	-	-updated shell titles
All	Header	-amended permit revision number
3	- Equipment Table	-updated shell titles -removed note regarding emission source ES-GP-1 -revised emission source description
5	2.1.B.1.b 2.1.B.1.c	-revised condition as per shell language -added testing requirement for wood fired boiler
6	2.1.B.3.c	-revised condition as per shell language
8	2.1C.2.c	-revised monitoring requirements as per shell language -changed weekly monitoring requirement to monthly
9	2.1D.2.c	-revised monitoring requirements as per shell language -changed weekly monitoring requirement to monthly
13	2.3	-added Permit Shield for Nonapplicable Requirements
14-21	General Conditions	-updated general conditions as per shell language

Description of the following sources was changed in both ESM and the permit.

Equipment ID No.	Old ESM and PERMIT Description	New ESM and PERMIT Description
ES-1	wood waste collection system	woodworking operation
ES-B-2	wood-fired boiler (14.0 million Btu per hour maximum heat input)	wood-fired boiler (14.0 million Btu per hour maximum heat input) burning woodwaste generated from onsite engineered flooring operations
ES-P-300	flat line finishing system	flat line finishing system including woodworking operation
ES-GP-1	glue press operation with associated two resin tanks (ID Nos. ES-2 and ES-2A) *	glue press operation
IES-5	ink application for identification purposes	ink application for identification purposes (peel and stick area)

* The resin tanks IES-2 and IES-2A were already part of insignificant sources hence removed from this description.

In **ESM**, end dated control system CS-3 and CS-4 and added bagfilter CD-3 and CD-4 to control system CS-2.

In **permit**, revised description control device for emission source ID No. ES-1. Bagfilters CD-2 and CD-3 are not parallel with bagfilter CD-4. These bagfilters controls emissions from different sets of woodworking operations.

11. Public Notice/EPA and Affected State(s) Review

To be completed later

12. Conclusions, Comments, and Recommendations

All applicable DAQ air requirements should be met. I recommend issuance of the air permit.