

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Air Permit Review

Permit Issue Date: **date, 2005**

Region: Mooresville Regional Office
County: Stanly
NC Facility ID: 8400016
Inspector's Name: Jim Westmoreland
Date of Last Inspection: 02/01/2005
Compliance Code: 3/In Compliance - Inspection

Facility Data			Permit Applicability (this application only)		
Applicant (Facility's Name): Collins & Aikman Products Company, Albemarle Plant Facility Address: Collins & Aikman Products Company, Albemarle Plant 313 Bethany Road Albemarle, NC 28001 SIC: 2273 / Carpets And Rugs NAICS: 31411 / Carpet and Rug Mills Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V			SIP: 15A NCAC 2Q .0317 NSPS: NA NESHAP: NA PSD: NA PSD Avoidance: NA NC Toxics: NA 112(r): NA Other: NA		
Contact Data			Application Data		
Facility Contact	Authorized Contact	Technical Contact	Application Number: 8400016.05A Date Received: 03/07/2005 Application Type: Modification Application Schedule: TV-Significant Existing Permit Data Existing Permit Number: 05825/T07 Existing Permit Issue Date: 09/04/2003 Existing Permit Expiration Date: 08/31/2008		
Gerald Safrit Plant Engineer (704) 983-8334 PO Box 580 Albemarle NC, 28002	Todd Brandon Plant Manager (704) 983-8302 PO Box 580 Albemarle NC, 28002	Don Edwards Technical Manager (704) 983-8317 PO Box 580 Albemarle NC, 28002			
Review Engineer: Mark Cuilla Review Engineer's Signature: Date:			Comments / Recommendations: Issue 05825T08 Permit Issue Date: date, 2005 Permit Expiration Date: August 31, 2008		

I. Purpose of Application

Collins and Aikman submitted this application to modify its Title V permit voluntarily limiting its facility-wide potential to emit hazardous air pollutants to below the major source thresholds of 10 tons per year for a single HAP and 25 tons per year for any combination of HAPs. This permit modification is being processed as a one-step Title V significant modification.

II. Facility Description

The facility manufactures, dyes and finishes automobile carpeting. It operates three shifts per day, five to six days per week.

III. History/Background/Application Chronology

March 7, 2005 – Permit application **8400016.05A** received and deemed complete for processing.

March 23, 2005 – MRO application review received.

April 21, 2005 – I left message with Mr. George Beckey of Collins and Aikman concerning the modification of the permit language. I called to see if he wanted me to update all permit language or just add the requested permit restriction to avoid MACT.

April 22, 2005 – I spoke with Mr. Beckey concerning my previous phone message. He agreed to allow me to update all permit conditions and General Conditions to most recent shell language. A DRAFT permit will be sent to him prior to permit notice.

May 10, 2005 – DRAFT permit sent to Permittee, Title V Coordinator, and Regional Office prior to public notice. Response received from MRO noting no changes.

May 26, 2005 – Comments from Permittee on DRAFT permit received. See Section IX of this document for a discussion.

June 2, 2005 – I sent email to MRO requesting their concurrence with the proposed Permittee supplied monitoring language resulting from their review of the DRAFT permit. See brief description of that change in Section IX of this document. Response received from MRO via email concurring with the proposed changes.

July 20, 2005 – 30-day public comment period ends with no comments being received.

August 25, 2005 – Received comments from EPA. See Section X of this document for a discussion.

September 20, 2005 – Received email request from facility to not issue permit as modified by EPA but instead add a permit condition extending a permit shield for nonapplicable requirements for boiler (**ID No. ES-B3**) with regards to 15A NCAC 2D .0524 (Subpart Db). Draft language sent to Permittee and regional office prior to public notice and EPA review.

Date, 2005 – DRAFT permit sent to notice and EPA review.

IV. Permit Modifications/Changes

The following table lists all modifications associated with this permit action:

Page(s)	Section	Description of Change(s)
Cover	-	-amended all dates and permit revision numbers
TOC	-	-updated shell Section titles
All	Header	-amended permit revision number
3	-	-updated shell Section titles
3-4	Equipment Table	-corrected baghouse filter area size per regional office inspection
5	2.1 A (table)	-added reference to MACT Avoidance condition -removed NSPS Subpart Db citation -added reference to permit shield requirements
6	2.1 A.1	-numbered permit condition (requiring renumbering of all subsequent conditions in Section A)
6-7	2.1 A.2.a-1	-added equipment identification numbers where needed -updated to most recent shell language -corrected paragraph ordering
7-8	2.1 A.3.a-h	-corrected cross-reference changes -updated to most recent shell language
8-9	2.1 A.4.a-f	-corrected cross-reference changes -updated to most recent shell language
9-10	2.1 A.5.a-f	-corrected cross-reference changes -updated to most recent shell language
10-11	2.1 A.6	-removed NSPS permit condition per EPA comments

Page(s)	Section	Description of Change(s)
11-13	2.1 A.7.a-y	-corrected cross-reference changes -updated to most recent shell language -added equipment identification numbers where needed
14	2.1 B (table) 2.1 B.1.a-c	-added reference to MACT Avoidance condition -added equipment identification numbers where needed -updated to most recent shell language
14-15	2.1 B.2.a-c	-added equipment identification numbers where needed -updated to most recent shell language
15	2.1 B.3.a-c	-added equipment identification numbers where needed -updated to most recent shell language
15-16	2.1 C.1.a-f	-added equipment identification numbers where needed -updated to most recent shell language
16-17	2.1 C.2.a-e	-added equipment identification numbers where needed -updated to most recent shell language
17-18	2.1 C.3.a-f	-added equipment identification numbers where needed -updated to most recent shell language
18	2.2 A (table)	-added reference to MACT Avoidance condition
19	2.2 A.1.e	-updated reporting requirements
20-21	2.2 A.4.a-d	-added MACT Avoidance language
21	2.2 A.5	-added permit shield for nonapplicable requirements (Subpart Db)
22-30	General Conditions	-updated to most recent shall language

There are no ESM modifications needed as a result of this permit application. The only permit modifications add identification numbers to the exempt sources already noted in ESM.

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 .0515, Particulate Emissions from Miscellaneous Industrial Processes
- 15A NCAC 2D .0516, Sulfur Dioxide Emissions from Combustion Sources
- 15A NCAC 2D .0521, Control of Visible Emissions
- 15A NCAC 2D .0524, New Source Performance Standards (Avoidance/40 CFR 60 Subpart Dc)
- 15A NCAC 2D .0530, Prevention of Significant Deterioration
- 15A NCAC 2D .0958, Work Practices for Sources of Volatile Organic Compounds
- 15A NCAC 2D .1806, Control and Prohibition of Odorous Emissions
- 15A NCAC 2D .0711, Permit Requirements for Toxic Air Pollutants

This permit modification does not affect the status of any current requirements; therefore, a regulatory review will not be completed at this time.

However, as a result of the requested permit modification for inclusion of a HAP/MACT Avoidance condition, the following facility-wide permit condition has been added:

- 15A NCAC 2Q .0317, Avoidance Conditions

See Section VI (NESHAPS/MACT) of this document for a discussion of the requirements.

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

NSPS

The facility is currently subject to permit restrictions in order to avoid the applicability of new source performance standards for boilers (Subpart Db). To comply with the permit and avoid applicability of the NSPS, the Permittee shall not exceed 100 million Btu per hour heat input rate for the boiler (**ID No. ES-B3**). In addition, the Permittee is required to limit the maximum feed water flow rate to the boiler to less than 180 gallons per minute and limit the maximum steam load generated by the boiler to less than 70,000 pounds per hour based on an approximate operating efficiency range of 70% to 80% as calculated with equations contained in the permit. This permit modification does not affect this status; continued compliance is expected.

It should be noted that as a result of this modification, 15A NCAC 2D .0524 has been removed from the permit. The subject boiler (**ID No. ES-B3**) was derated prior to NSPS applicability. EPA has presented official comments and has requested in response to a Section 114 letter to the facility, that DAQ remove the NSPS avoidance condition. This permit condition was removed as requested by EPA. In addition, the following language has been added to Section 2.2 of the permit extending a permit shield over the boiler (**ID No. ES-B3**) for nonapplicable requirements (15A NCAC 2D .0524, Subpart Db):

5. Permit Shield for Nonapplicable Requirements

The Permittee is shielded from the following nonapplicable requirement as of the date of issuance of this permit based on information furnished with all previous applications. This shield does not apply to future modifications or changes in the method of operation. [15A NCAC 2Q .0512(a)(1)(B)]

- a. *The following requirement is not applicable to boiler (**ID No. ES-3**):*
 - i. *15A NCAC 2D .0524, NSPS promulgated in 40 CFR Part 60, Subpart Db.*

NESHAPS/MACTS

The Permittee notes that it has three boilers that are permitted to combust coal under two operating scenarios. The MACT standard (40 CFR 63, Subpart DDDDD) dated September 13, 2004, that is applicable to coal fired boilers establishes a HCl limit of 0.09 pounds per million Btu. Under this limit, the boilers have the potential to be major sources of HAPs due to HCl emissions. As a result of the combustion MACT rule, the MACT standard for fabric coating (40 CFR 63, Subpart OOOO) would also be applicable. With an enforceable limit in its permit, the facility will ensure that neither the combustion MACT nor the fabric coating MACT will be applicable.

Therefore, a MACT Avoidance (15A NCAC 2Q .0317 for 15A NCAC 2D .1111) permit condition has been placed in the permit. This restriction, limits facility-wide HAP emissions from all sources to below 10 tons per year for any single HAP and 25 tons per year for any combination of HAPs. To ensure compliance with these limits the Permittee shall comply with the following permit restrictions:

4. 15A NCAC 2Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

- a. *In order to remain classified a minor source for hazardous air pollutants and avoid applicability of this regulation, facility-wide emissions of hazardous air pollutants shall be less than:*
 - i. *10 tons per year of each hazardous air pollutant, and*
 - ii. *25 tons per year of all hazardous air pollutants combined.*

The Permittee shall be deemed in noncompliance with this condition and 2D .1111 if the HAP emissions exceed this limit.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

- b. *To ensure compliance with the limits above, the Permittee shall maintain monthly records of all coal combusted in boilers (**ID Nos. ES-B1, ES-B2, and ES-B3**) as follows:*
 - i. *quantity of individual hazardous air pollutants in pounds used by the facility each month and for the 12-month period ending on that month, and*

- ii. quantity of all hazardous air pollutants in pounds used by the plant each month and for the 12-month period ending on that month.

Monthly emissions of hydrochloric acid shall be determined by calculation from the chlorine content of each coal lot as determined by analytical testing by the supplier in accordance with ASTM Method D-2361 and the amount of coal received with the associated lot.

- c. To ensure compliance with the limits above, the Permittee shall maintain monthly records of all dyes and coatings processed in the coating ranges (**ID Nos. ES-CDRI, ES-CDR2, ES-CDR3, ES-CRI, ES-D6, ES-RR4, and ES-RD**) as follows:

- i. quantity of individual hazardous air pollutants in pounds used by the facility each month and for the 12-month period ending on that month, and
- ii. quantity of all hazardous air pollutants in pounds used by the plant each month and for the 12-month period ending on that month.

Monthly emissions of hazardous air pollutants shall be determined by calculation of the hazardous air pollutant MSDS content of the dye or latex coating consumed and the quantity of the dyes and the latex consumed.

- d. The Permittee shall keep a record of the applicability determination on site at the source for a period of five years after the determination, or until the source becomes an affected source. The determination must include the analysis demonstrating why the Permittee believes the source is unaffected pursuant to 40 CFR 63.10(b)(3). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

- e. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before March 1 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following records:

- i. quantity of coal received and consumed
 - A. for each month during the semi-annual period, and
 - B. for each 12-month period ending on each month during the semi-annual period using a 12-month rolling total;
- ii. quantity of all dyes and coatings consumed,
 - A. for each month during the semi-annual period, and
 - B. for each 12-month period ending on each month during the semi-annual period using a 12-month rolling total;
- iii. greatest quantity in pounds of an individual hazardous air pollutant,
 - A. for each month during the semi-annual period, and
 - B. for each 12-month period ending on each month during the semi-annual period using a 12-month rolling total; and
- iv. pounds of all hazardous air pollutants used,
 - A. for each month during the semi-annual period, and
 - B. for each 12-month period ending on each month during the semi-annual period using a 12-month rolling total.

PSD

The facility currently operates under two separate PSD conditions. Boiler No. 3 (**ID No. ES-B3**) is required to meet the following “Best Available Control Technology” limitations:

- Sulfur Dioxide – 1.5 pounds per million Btu
- Particulate Matter – 0.05 pounds per million Btu
- Nitrogen Oxides – 0.6 pounds per million Btu
- Flourides – 0.0064 pounds per million Btu
- Sulfuric Acid – 0.021 pounds per million Btu
- Opacity – 20 percent.

Storage silos (**ID Nos. ES-CS1 and ES-AS1**) are required to meet the following “Best Available Control Technology” limitation:

Particulate Matter – 0.001 pounds per hour each.

This permit modification does not affect this status; continued compliance is expected.

112(r)

The facility is not required to comply with the requirements of 40 CFR 68 “Prevention of Accidental Releases” – Section 112(r) because it does not store any regulated chemicals in amounts that exceed the thresholds of the regulation. This permit modification does not affect this status; continued compliance is expected.

CAM

40 CFR 64 applies to each pollutant specific emission unit that meets all of the following three requirements. First, the unit must be subject to an emission limitation or standard. Second, it must use a control device to achieve compliance. Finally, it must have pre-control emissions that exceed or are equivalent to the major source threshold. The Permittee has requested that a facility-wide emissions cap be placed in the permit for HAP emissions from all sources. Therefore, CAM will not apply at this time. While the permit restriction is an applicable limitation, its limit is below the major source threshold levels for HAP emissions. In addition, the currently permitted control equipment is not installed for HAP control.

VII. Facility Wide Air Toxics

The facility is currently required to comply with air toxics limitations as a result of an approved demonstration that the facility-wide actual emissions do not exceed the toxic permit emission rates (TPERs) listed in 2Q .0711 for acetaldehyde, 1,4-dioxane, and formaldehyde. The Permittee is required to operate and maintain his facility in such a manner that emissions of the listed toxics will not exceed the TPER. This permit modification does not affect this status; continued compliance is expected.

VIII. Facility Emissions Review

The following table lists the reported emission summary for the most recent year’s inventory:

Pollutant	2003 Actual Emissions (tons/year)
CO	38.72
NO _x	81.67
PM ₁₀	3.33
SO ₂	218.82
VOC	169.55
Total HAPs/TAPs	11.29

IX. Stipulation Review

Mooreville Regional Office notes that the Permittee has made an application to modify its existing permit to limit the facility’s potential HAP emissions to below the major source thresholds and that the Permittee has proposed language for the limitation of hydrochloric acid. The draft language as presented appears to be reasonable.

In addition to the new regulatory requirement, the permit has been modified with the permission of the Permittee to update all permit conditions and general conditions to the most recent shell language. In addition to these changes, the Permittee had the following comments on the DRAFT permit prior to notice:

1. correct regional office address on first page of permit. *Agree; change has been made.*
2. correct bagfilter square footage from 13,500 square feet to 13,000 square feet (2.1 A.2.h). *Agree; change has been made to make permit agree with ESM description.*

3. reword bagfilter inspection and replacement language (2.1 A.2.h). *Agree with MRO concurrence; change has been made.*
4. correct bagfilter square footage from 13,500 square feet to 13,000 square feet (2.1 A.7.k). *Agree; change has been made to make permit agree with ESM description.*
5. reword bagfilter inspection and replacement language (2.1 A.7.k.i through iii). *Agree with MRO concurrence; change has been made.*
6. reword bagfilter replacement language (2.1 C.1.c.iii). *Agree with MRO concurrence; change has been made.*

The Permittee also requested that the following list which identifies previous terms, conditions, testing, monitoring, and other related requirements that were identified in 05825T07 and have already been completed to the satisfaction of DAQ as of the date noted are not required to be repeated as part of this permit modification:

1. boiler **ES-B3** stack testing completed and approved on or about June 16, 2004,
2. boiler **ES-B3** stack testing for oxygen range determination completed and approved on or about January 1, 2005 and February 1, 2005,
3. boiler **ES-B3** visible emissions testing conducted and approved, and
4. boiler **ES-B3** visible emissions “normal” range established within first 30 days of receipt of revision T07.

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 of 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.

The following comments were received from EPA as part of their review of the DRAFT permit. It should be noted EPA has sent the facility a 114 letter regarding the NSPS boiler derate that took place some time ago.

1. Please remove the NSPS avoidance conditions found at permit condition 2.1 A.6 as discussed between DAQ and EPA. *Agree; language will be removed.*

XI. Conclusions, Comments, and Recommendations

Mooresville Regional Office recommends issuance of modified permit as requested and was presented with a DRAFT permit prior to public notice and EPA review for comment.

RCO concurs with this recommendation.