

**NORTH CAROLINA DIVISION OF  
AIR QUALITY**

**Air Permit Review**

**Permit Issue Date:**

**Region:** Mooresville Regional Office  
**County:** Catawba  
**NC Facility ID:** 1800427  
**Inspector's Name:** Bruce Ingle  
**Date of Last Inspection:** 11/19/2004  
**Compliance Code:** C/In Compliance With  
 Procedural Reqr

<b>Facility Data</b>			<b>Permit Applicability (this application only)</b>
<b>Applicant (Facility's Name):</b> Synthetics Finishing Hickory  <b>Facility Address:</b> Synthetics Finishing Hickory 569 Highway 321 NW Hickory, NC 28601  <b>SIC:</b> 2262 / Finishing Plants, Synthetics <b>NAICS:</b> 313311 / Broadwoven Fabric Finishing Mills  <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> 2D .0958, 2D .0614 (CAM), 2D .1111 (MACT Subpart OOOO) <b>NSPS:</b> <b>NESHAP:</b> <b>PSD:</b> <b>PSD Avoidance:</b> <b>NC Toxics:</b> 2Q .0705 <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> 1800427.04A <b>Date Received:</b> 04/26/2004 <b>Application Type:</b> Renewal <b>Application Schedule:</b> TV-Renewal <b>Existing Permit Data</b> <b>Existing Permit Number:</b> 07601/T04 <b>Existing Permit Issue Date:</b> 11/15/2001 <b>Existing Permit Expiration Date:</b> 01/31/2005
Jim Clanton Vice President (828) 328-5522 P O Box 2141 Hickory NC, 28602	Jim Clanton Vice President (828) 328-5522 P O Box 2141 Hickory NC, 28602	Jim Clanton Vice President (828) 328-5522 P O Box 2141 Hickory NC, 28602	
<b>Review Engineer:</b> Ed Martin  <b>Review Engineer's Signature:</b> _____ <b>Date:</b> 05/20/2005  <b>DRAFT FOR PUBLIC NOTICE</b>		<b>Comments / Recommendations:</b> <b>Issue</b> 07601/T05 <b>Permit Issue Date:</b> <b>Permit Expiration Date:</b>	

**I. Purpose of Application:**

This permit revision is a renewal of an existing Title V permit pursuant to 2Q .0513. The renewal application was received on April 26, 2004, or at least nine months prior to the expiration date. Therefore, the existing permit will not expire until the renewal permit has been issued or denied. Additional information was requested (see Section III below) regarding applicability of CAM and MACT Subpart OOOO to the Stain Repellant Coater (ID No. ES3) and regarding applicability of MACT to the Tenter Frames (ID Nos. ES1 and ES2). A revised CAM Plan, was received February 21, 2005 to address CAM for the Stain Repellant Coater. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

**II. Permit Changes:**

The following changes were made to the Synthetics Finishing Air Quality Permit No. 07601T05:

Page Number	Condition Number	Change
<b>Additions or Changes to Insignificant Activities List (Attachment to cover letter)</b>		
-	-	Added the following to the insignificant activities list: trichloroethylene storage tank (6,000 gallon) recovered solvent storage tank (1,000 gallon) two solvent mixing tanks (100 gallon each)
<b>Part I</b>		
Cover	Permit Information	Modified to reflect current permit number, issue and effective date, and associated application information.
3	Permitted Emission Sources table	Added "(MACT Subpart OOOO)" for ID Nos. ES1, ES2 and ES3.
4	Part I, Section 2.1 A regulation table	Replaced 2D .0518 with 2D .0958. Added 2D .1111 MACT. Added 2Q .0705.
5 7 9	Part I, Section 2.1 A.3.c Part I, Section 2.1 B.3.c Part I, Section 2.1 C.2.c	Removed the sentence: <i>The Permittee shall establish "normal" for the source in the first 30 days following permit issuance.</i> "Normal" has already been established for visible emissions for these sources. Added the sentence: <i>The Permittee shall be allowed three (3) days of absent observations per semi-annual period.</i>
5	Part I, Section 2.1 A.4	Added 2D .1111 MACT requirements.
5	Part I, Section 2.1 A.5	Added 2Q .0705 requirements.
6	Part I, Section 2.1 B regulation table	Replaced 2D .0518 with 2D .0958. Added 2D .1111 MACT. Added 2Q .0705.
7	Part I, Section 2.1 B.4	Added 2D .1111 MACT requirements.
7	Part I, Section 2.1 B.5	Added 2Q .0705 requirements.
8	Part I, Section 2.1 C regulation table	Replaced 2D .0518 with 2D .0958 and 2D .0958(e). Added 2D .0614 CAM. Added 2D .1111 MACT. Added 2Q .0705.
9-10	Part I, Section 2.1 C.3	Revised this section.
10	Part I, Section 2.1 C.4	Added 2D .0614 CAM requirements.
10	Part I, Section 2.1 C.5	Added 2D .1111 MACT requirements.
10	Part I, Section 2.1 C.6	Added 2Q .0705 requirements.
11-13	Part I, Section 2.2 A regulation table Part I, Section 2.2 A.1 Part I, Section 2.2 A.2	Replaced 2D .0518 requirements with 2D .0958 and 2D .0958(e) requirements.

14	Part I, Section 2.3 B	Revised to say Subpart VVV does not apply to Tenter Frame ( <b>ID No. ES2</b> ) "...due to the use of waterborne coatings with greater than five percent water and <b>not greater than nine percent VOC content</b> in the volatile fraction of the coating." rather than "...due to the use of waterborne coatings with greater than five percent water and <b>less than nine percent water</b> in the volatile fraction of the coating."
15-22	Part I, Section 3	Added new set of General Conditions.

The Permit was converted from WordPerfect to MS Word at this time.

### III. Application Chronology:

The initial application did not include any information related to applicability of CAM or MACT. During renewal of the Title V application, the applicability of CAM is to be addressed. The Stain Repellant Coater (ID Nos. CD06 and CD07) has a control device (two dual bed carbon adsorption systems, ID Nos. CD06 and CD07) and appeared to have potential pre-control VOC emissions greater than 100 tons per year, which would meet the criteria for CAM. This was discussed with Mr. Jim Clanton (the Responsible Official and technical contact) at Synthetics Finishing on June 15, 2004 (see e-mail to Jim Clanton from Ed Martin dated June 30, 2004). Mr. Clanton explained that he did not think CAM (40 CFR Part 64) was applicable because the source is subject to NSPS Subpart VVV and therefore, as a post-November 15, 1990 standard, the source would be exempt per 40 CFR 64.2(b)(1)(i). However, Subpart VVV is dated September 11, 1989, and is therefore not a post-1990 regulation. Therefore, they would not be exempt for this reason. In addition, they are subject to 2D .0518 (which is now replaced by 2D .0958) for VOCs and would therefore be subject to CAM for this regulation as well. Synthetics Finishing was requested to revise their application to include the CAM requirements for the Stain Repellant Coater. The CAM Plan for the Stain Repellant Coater was received on October 25, 2004. This plan was prepared by Mr. Ronald T. Bannister, P.E., with Engineering and Environmental Services in Hickory. After further discussions with Mr. Clanton and Mr. Bannister, a revised CAM Plan was requested and received February 21, 2005.

Also, the applicability of MACT Subpart OOOO was discussed with Mr. Clanton on June 15, 2004 (see e-mail to Jim Clanton from Ed Martin dated June 30, 2004). Mr. Clanton stated that he did not think the facility was subject to the MACT because they do not use an aqueous solution in finishing. Mr. Clanton referred to Section III of the preamble to the MACT, which states: "Dyes and finishes are applied to yarn, fiber, cord, thread, or fabric in aqueous solutions and then dried." He stated that they use trichloroethylene in the process instead of an aqueous solution. After discussing this on June 29, 2004, with Mr. Paul Almodovar with EPA's Coatings and Consumer Products Group, Emissions Standards Division, who is the contact given in the MACT for further information, I informed Mr. Clanton that the discussion in the preamble is meant to discuss a typical process not all cases. In paragraph 63.4371 of the rule itself, the definitions of finishing, finishing materials or finishing operations do not specify that an aqueous solution must be used in order to be subject to the rule. The use of trichloroethylene would actually result in more HAP emissions than if an aqueous solution were used. Therefore, Synthetics Finishing was requested to revise their application to include the MACT Subpart OOOO requirements (e-mail of June 30, 2004). In an e-mail to Ed Martin from Mr. Bannister dated April 1, 2005, Synthetics Finishing states: "They are preparing a proposal for submittal to EPA for MACT coverage of their facility. They do not wish Subpart OOOO to be applied to the facility at this time." DAQ sees no reason why MACT Subpart OOOO would not apply to the facility and has written the draft permit accordingly to show the Tenter Frames (ID Nos. ES1 and ES2) and the Stain Repellant Coater (ID No. ES3) being subject to Subpart OOOO.

In addition, Mr. Clanton was informed of the following (ref: e-mail to Jim Clanton from Ed Martin dated July 22, 2004):

Existing affected sources subject to MACT Subpart OOOO must be in compliance by May 30, 2006, which is the compliance date (see Section III.D.1 of the preamble and 63.4283(b) of the rule). *Initial*

*Notification* was due June 2, 2004, as per Section III.F.1 of the preamble and 63.4310(b) of the rule. The compliance date begins the "initial compliance period" during which the initial compliance demonstration described in 63.4320, 63.4330, 63.4340, and 63.4350 must be conducted. The end of the initial compliance period varies according to which option is used. The *Notification of Compliance Status* (63.4310(c)) must be submitted 30 days after the end of the initial compliance period.

At this time the MACT condition in the permit will contain the initial notification requirements only. This condition will be expanded later to reflect details of how the facility will comply with the MACT after the option(s) for compliance (see 63.4291) is determined and the *Notification of Compliance Status* is submitted and other relevant information is known.

Additional application chronology is detailed on the attached ATS Comprehensive Application Report.

#### **IV. Facility Description**

Synthetic Finishing, Hickory Plant, is a textile finishing facility which applies latex (backing) and a stain repellent coatings to fabrics. The facility consists of two latex coaters (installed in June 1965 and September 1991, respectively), and a stain repellent coater with controls (installed October 1992); plus insignificant activities.

#### **V. Statement of Compliance**

Based on the most recent inspection for this facility on November 19, 2004, by Bruce Ingle, the facility appeared to be in compliance with the applicable air quality regulations.

#### **VI. Summary of Changes to Emission Sources and Control Devices**

There are no changes to emission sources or control devices.

#### **VII. Emission and Regulatory Evaluation**

##### New Regulations

The following new regulations were added for Tenter Frames (ID Nos. ES1 and ES2):

1. 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (40 CFR Part 63 Subpart OOOO: National Emissions Standards for Hazardous Air Pollutants: Printing, Coating, and Dyeing of Fabrics and Other Textiles)
2. 2Q .0705 EXISTING FACILITIES AND SIC CALLS (State Enforceable Only)

The following new regulations were added for the Stain Repellent Coater (ID No. ES3):

1. 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (40 CFR Part 63 Subpart OOOO: National Emissions Standards for Hazardous Air Pollutants: Printing, Coating, and Dyeing of Fabrics and Other Textiles)
2. 2D .0614: COMPLIANCE ASSURANCE MONITORING (40 CFR 64)
3. 2Q .0705 EXISTING FACILITIES AND SIC CALLS (State Enforceable Only)

##### Change to Existing Regulation

The two Tenter Frames for Latex Backing Application (ID Nos. ES1 and ES2) and the Stain Repellent Coater (ID No. ES3) had been subject to 2D .0518 MISCELLANEOUS VOLATILE ORGANIC COMPOUND EMISSIONS. This is now changed to 2D .0958. Since the Stain Repellent Coater is a source on which a control device (two Dual Bed Carbon Adsorbers) has been installed to comply with 15A NCAC 2D .0518(d), the control device must be maintained and operated unless the Director determines

that the removal of the control device shall not cause or contribute to a violation of the ozone ambient air quality standard.

#### Streamlining of Permit Monitoring Requirements

Certain monitoring requirements for 2D .0524 (NSPS Subpart VVV), 2D .0614 (CAM) and 2D .0958(e) overlap and are redundant. Therefore, streamlining has been incorporated in accordance with Part 70.6(a)(3)(A) provisions to cross-reference those requirements.

### **VIII. Permit Shield (including non-applicable requirements)**

In accordance with 2Q .0512 the permit will contain a provision stating that compliance with the terms, conditions, and limitations of the Title V permit shall be deemed in compliance with applicable requirements specifically identified in the permit, as of the date of permit issuance. If the permit does not expressly state that a permit shield exists then it shall be presumed not to provide such a shield.

Section 2.3 contains the permit shield for the following nonapplicable requirements per 15A NCAC 2Q .0512(a)(1)(B):

- A. The New Source Performance Standards for Polymeric Coating of Supporting Substrates (40 CFR 60, Subpart VVV) are not applicable to Tenter Frame (**ID No. ES1**) as it was constructed prior to April 30, 1987.
- B. The New Source Performance Standards for Polymeric Coating of Supporting Substrates (40 CFR 60, Subpart VVV) are not applicable to Tenter Frame (**ID No. ES2**) due to the use of waterborne coatings with greater than five percent water and not greater than nine percent VOC content in the volatile fraction of the coating.

### **IX. Public Notice and EPA Review**

This renewal permit is being processed under 2Q .0513 which requires public notice. The draft permit will also be sent to EPA for review at the time of public notice (parallel review). Pursuant to 2Q .0521, a notice of the draft Title V Permit will 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 will 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 will 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. South Carolina is the only affected State for this facility.

### **X. Other Requirements**

#### PE Seal

A professional engineer's seal was not required for this renewal since there are no new control devices or changes to any existing control devices.

#### Zoning

A consistency determination was not required for this renewal since the facility is not being expanded.

#### Fee Classification

The facility fee classification before and after this modification will remain as "Title V".

### **XI. Recommendations**

later