| NORTH CAROLINA DIVISION OF AIR QUALITY<br>**Air Permit Review**<br>**Permit Issue Date:** | **Region:** Asheville Regional Office<br>**County:** McDowell<br>**NC Facility ID:** 5600001<br>**Inspector's Name:** Mike Parkin<br>**Date of Last Inspection:** 08/21/2008<br>**Compliance Code:** C / In Compliance With Procedural Reqr |
|---|---|
| **Facility Data**<br><br>**Applicant (Facility's Name):** Coats North America - Sevier Plant<br><br>**Facility Address:**<br>Coats North America - Sevier Plant<br>630 American Thread Road<br>Woodlawn, NC 28752<br><br>**SIC:** 2269 / Finishing Plants, Nec<br>**NAICS:** 313312 / Textile and Fabric Finishing (except Broadwoven Fabric) Mills<br><br>**Facility Classification: Before:** Title V **After:** Title V<br>**Fee Classification: Before:** Title V **After:** Title V | **Permit Applicability (this application only)**<br><br>**SIP:**<br>**NSPS:**<br>**NESHAP:**<br>**PSD:**<br>**PSD Avoidance:**<br>**NC Toxics:**<br>**112(r):**<br>**Other:** |

**Contact Data**

| Facility Contact | Authorized Contact | Technical Contact |
|---|---|---|
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**Application Data**

**Application Number:** 5600001.08A
**Date Received:** 06/19/2008
**Application Type:** Modification
**Application Schedule:** TV-Significant

**Existing Permit Data**

**Existing Permit Number:** 01895/T21
**Existing Permit Issue Date:** 07/02/2007
**Existing Permit Expiration Date:** 11/28/2010

| **Review Engineer:** Gautam Patnaik<br><br>**Review Engineer's Signature:** **Date:** | **Comments / Recommendations:**<br>**Issue** 01895/T22<br>**Permit Issue Date:**<br>**Permit Expiration Date:** |
|---|---|

## 1. Facility Description.

This facility manufactures coated threads. The threads are coated with a bonding solution using a variety of water and solvent based solutions, by the bonding machines.

## 2. Purpose of Application

In July 2, 2007, this facility was issued an Air Quality Permit No. 01895T21 for the installation of two thread bonders consisting of bonders (ID Nos. ES-12), water repellant fiber coating station (ID No. ES-13) and a plate impingement scrubber (ID No. CD-04). As required by permit T21, the applicant was required to file a part 2 Title V Air Quality Permit application pursuant to 15A NCAC 2Q .0504, on or before 12 months after commencement of operations of these sources or control device.

This application, received by DAQ on June 19, 2008, fulfills the T21 permit part 2 requirement. was filed in pursuant of the requirements of the current permit and was signed by Ms. Kelly Means the responsible official of the facility and. Ms. Means certified that the facility was in compliance with all applicable requirements.

The applicant also requested several changes. These changes and the action taken are mentioned below:

1) HAP Synthetic Minor Limits and Boiler MACT Avoidance -

"Overall, the HAP synthetic minor limits in the permit appear reasonable and the specific conditions on pages 39 and 40 will ensure the <10/25 TPY HAP limits are federally and practically enforceable and that the Boiler MACT is now avoided at the site. Several items that we should coordinate with NC DENR in this regard include:

1. Using an AP-42 emission factor for HCl and HF based on a controlled emission rate (i.e. scrubber use), and an uncontrolled factor for all other coal boiler pollutants. (We plan to apply the scrubber efficiency as determined by previous testing for HCl and HF emissions reductions).
2. Elimination of the need to track VOC emissions as part of the <10/25 TPY HAP compliance demonstration as now listed on page 39 item C.1.b (i.e. VOC emission tracking is meaningless with regard to HAP emissions and is not required in other NC DENR HAP synthetic minor permits). "

DAQ Response – The applicant is now required to maintain monthly HAPs emissions records as follows:

1) quantity of individual hazardous air pollutants (HAPs) in pounds used by the plant each month and for the 12-month period ending on that month,
2) quantity of all hazardous air pollutants in pounds used by the plant each month and for the 12-month period ending on that month,
3) applicant shall calculate the emissions of HAPs from the boilers each month using the latest AP-42 factors,
4) applicant shall calculate the emissions of HCL and HF from the boiler (ID No. ES-01) each month using the latest AP-42 factors and a control efficiency of 74.2 % for emissions of HCL and HF from the boiler while the scrubbers are in operation,
5) The applicant shall maintain a record of purchase orders and invoices of materials containing HAPs.

These requirements are incorporated in the Section 2.2 C. 1. b., of the new permit.

2) Fabric MACT Compliance -

"Even though the Fabric MACT compliance conditions on pages 33 through 39 are generally kay, the following items should be considered:

1. The permit provides lots of details related to the compliance requirements for the dyeing/finishing subcategory (5+ pages), but very little detail related to coating subcategory compliance (<1 page)!? NC DENR used the Fabric MACT compliance language we gave them for the coating operations, but not the dyeing/finishing operations;
2. On page 33 of the permit, the two (2) new MP bonders and the single new water repellant line are listed as new Title V sources, and correctly listed as existing sources under the Fabric MACT; and
3. On page 38, item B) a. should list all site-wide coating operations (eg. ES-03, ES-12 (2 - MP Bonders), ES-13 (Water Repellant), and ES - 14 (Dressing), etc.). Also, the 2 new MP Bonders are incorrectly referred to as MP2 and MP5 on the table on page 4 (and possible other locations). The correct reference for the 2 new MP bonders should be MP1 and MP2."

DAQ Response – The following changes are made as follows:

1) Source ES-12 is corrected to include two thread bonders (MP-1 and MP-2) in source table and other areas as noted in the table of changes.

2) Added sources (ID Nos. ES-03, ES-07, ES-08, ES-12, ES-13, and ES-14) as applicable to the coating/printing MACT operations as specified in the Section 2.2 B. 1. B. a., of the new permit.

Other requested changes -

1) Bonder 06 is included in source ES-03 as total of 9 bonders.
2) The foot note stating that the control device (CD-06) is permitted to control only the bonding machines (W19, W20 and W21) (on page 4 of the current permit) is redundant and thus removed.
3) Section 2.2 F., of the current permit lists fifteen thread bonding machines the right number is twelve thread bonding machines (ID Nos. W9, W10, W11, W12, W13, W15, W16, W17, W18, W19, W20 and W21).
4) Insignificant source ID 17 is modified and described as twisting operations.
5) The following list of insignificant sources are added under the 2Q .0503 (8) insignificant list:

| Emission Source ID | Emission Source Description |
|---|---|
| 18 | Eco Bond |
| 19 | Feminine Hygiene “Pearl Room” |
| 20 | Cheroke Yarn Spinning Equipment |

## 3. Regulatory Review of sources:

There were no regulatory changes to the permit due to this application procedure. All the updates to the General Conditions, testing references and visibility (2D .0521) monitoring changes are mentioned in the table of changes below. (For detailed regulatory review for the above sources and control device refer to the review for application # 5600001.07B)

## 4. NSPS, NESHAPS, PSD, Attainment Status, 112(r), CAM, Application Classification, Facility Wide Air Toxics & “Last MACT” Air Toxics Demonstration

***NSPS***

The two propane/natural gas/No. 2 fuel oil-fired boilers (ID Nos. ES-09 and ES-10) are subject to NSPS 40 CFR 60, Subpart Dc.

The two thread bonders and the water repellant fiber coating station (ID Nos. ES-12 and ES-13) are subject to NSPS 40 CFR 60, Subpart VVV.

***NESHAP/MACT***

This facility is subject to the “Printing, Coating, and Dyeing of Fabrics and Other Textiles” MACT standard (NSPS Subpart OOOO). The compliance date for this MACT was 3 years after May 29, 2003, thus, this MACT is in effect for the facility. The current permit has the compliance provisions for this MACT (dyeing, finishing and coating subcategory).

The boilers at this facility were subject to the now vacated "Industrial, Commercial, and Institutional Boilers and Process Heaters" MACT (NSPS Subpart DDDDD). The applicant had earlier requested to limit the emission of HAPs from the facility to less than 10 tons per year for any single HAP and less than 25 tons per year for all the combinations of HAPs (Application # 5600001.07B). The intent of this limit was to avoid the boiler MACT (Subpart DDDDD). This limit is still incorporated in the permit since the applicant wishes to avoid any future MACTs.

***PSD***

This facility is a major for VOC for PSD purpose.

***Attainment Status***

This facility is located in McDowell County, which is in attainment for all criteria pollutants.

***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***

The facility has Compliance Assurance Monitoring (CAM) plans for the following control devices:

a. multicyclone (ID No. CD-01),
b. plate impingment scrubbers (ID Nos. CD-02 and 04),
c. catalytic oxidizer (ID No. CD-05) and
d. catalytic oxidizer (ID No. CD-06).

***Facility Wide Air Toxics & "Last MACT" Air Toxics Demonstration***

The facility has since July 2, 2007 been in compliance with 15A NCAC 2Q .0705.

## 5. Permit Shield.

The current permit does not have a Part II. However, the permit shield described in General Condition R does not currently apply to the two thread bonders consisting of bonders (ID Nos. ES-12), water repellant fiber coating station (ID No. ES-13) and a plate impingement scrubber (ID No. CD-04) since the last/current permit did not provide for a 30 day comment period for the public and 45 days for an EPA review. Because this application will be subject to a 30 day public notice as per 15A NCAC 2Q .0521 and a 45 day EPA review as per 15A NCAC 2Q .0522 the above referenced sources will, after permit issuance, be covered by the permit shield provisions.

## 6. Facility Compliance Status, Conclusions, Comments, and Recommendations

As per the most recent inspection was conducted on May 7, 2009 and the facility was found to be operating in compliance with its current air permit. However on 8/25/08 this facility was issued a NOV for exceeding the opacity limit for boiler (ID No. ES-01). However this application will provide a permit shield to the earlier mentioned sources and control device and will help the facility to achieve compliance for these sources and control device.

A professional engineer's seal was not required.

Consistency determination was not required for this application.

The applicant and the Regional Office were provided with the new drafts permit for this application and their comments will be taken into account.

The major changes requested by the Regional Office and the action taken are noted below:

1) The Regional Office suggested some changes in the permit to reflect the twelve watertown thread bonding machines (Nos. W9, W10, W11, W12, W13, W15, W16, W17, W18, W19, W20 and W21).
- These changes were made as suggested.

2) The Regional Office and the applicant that they would rather not have a 74.2% control efficiency specifically listed on the permit. However, as per the procedure followed by the Section requires that control efficiency determined during the most recent tests should be hard coded in the permit. This number can be changed administratively to reflect the latest control efficiency. After discussion with the Section chief (on 6/12/09) this request is denied.

## 7. Table of Changes

| Page Number | Condition Number | Change |
|---|---|---|
| 5, 6, 7, 8, 9, 10, 12, 14, 16, 17, 20, 23, 25, 27, 28, 30, and 32 | Testing. | Change all testing reference |
| 3 | Source table | Bonder 06 is included in source ES-03 |
| 4 | Source table | Source ES-12 is corrected to include two thread bonders (MP-1 and MP-2) |
| 4 | Source table (current permit) | The foot note stating that the control device (CD-06) is permitted to control only the bonding machines (W19, W20 and W21) is removed |
| 8 | 2.1. A. 3. e. ii. | Monitoring includes Method 9 for 12 minutes |
| 12 | 2.1. C. 2. c. ii. | Monitoring includes Method 9 for 12 minutes |
| 16 | Regulation table for 2.1 D. | Source ES-12 is corrected to include two thread bonders (MP-1 and MP-2) |
| 17 | 2.1. D. 2. c. ii. | Monitoring includes Method 9 for 12 minutes |
| 22 | 2.1 F | Section 2.1 F. lists twelve thread bonding machines (ID Nos. W9, W10, W11, W12, W13, W15, W16, W17, W18, W19, W20 and |

| | | |
|---|---|---|
| | | W21). |
| 38 | 2.2 B. 1. B. a. | Added sources (ID Nos. ES-03, ES-07, ES-08, ES-12, ES-13, and ES-14) as applicable to the coating/printing operations |
| 49 to 58 | General Conditions | Updated |