

**NORTH CAROLINA DIVISION OF  
AIR QUALITY**

**Air Permit Review**

**Permit Issue Date: XX**

**Region:** Raleigh Regional Office  
**County:** Granville  
**NC Facility ID:** 3900009  
**Inspector's Name:** Steve Hall  
**Date of Last Inspection:** 04/14/2005  
**Compliance Code:** 3/In Compliance - Inspection

<b>Facility Data</b>			<b>Permit Applicability (this application only)</b>	
<b>Applicant (Facility's Name):</b> Bandag Incorporated  <b>Facility Address:</b> Bandag Incorporated 505 West Industry Drive Oxford, NC 27565  <b>SIC:</b> 3011 / Tires And Inner Tubes <b>NAICS:</b> 326212 / Tire Retreading  <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> <b>NSPS:</b> <b>NESHAP:</b> <b>PSD:</b> <b>PSD Avoidance:</b> <b>NC Toxics:</b> <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> 3900009.04A <b>Date Received:</b> 12/20/2004 <b>Application Type:</b> Renewal <b>Application Schedule:</b> TV-Renewal <b>Existing Permit Data</b> <b>Existing Permit Number:</b> 02889/T12 <b>Existing Permit Issue Date:</b> 03/07/2003 <b>Existing Permit Expiration Date:</b> 10/31/2005	
Michael Young, CQE Environmental Manager (919) 603-5229 505 West Industry Drive Oxford NC, 27565	Marshall Tanner Plant Manager (919) 603-5234 505 West Industry Drive Oxford NC, 27565	Michael Young, CQE Environmental Manager (919) 603-5229 505 West Industry Drive Oxford NC, 27565		
<b>Review Engineer:</b> Kevin Godwin  <b>Review Engineer's Signature:</b> _____ <b>Date:</b> _____		<b>Comments / Recommendations:</b> Issue 02889/T13 <b>Permit Issue Date:</b> <b>Permit Expiration Date:</b>		

**1. Purpose of Application**

This permit revision is a renewal of existing Title V permit 02889T12 pursuant to 15A NCAC 2Q .0513. The initial Title V permit was issued on November 22, 2000 and is set to expire on October 31, 2005. The renewal application was received on December 20, 2004 or at least nine months prior to the expiration date. Therefore, the existing permit shall not expire until the renewed permit has been either issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewed permit has been issued or denied.

**2. Facility Description**

Bandag produces rubber tread and ancillary products for tire retreading at this Granville County site. According to the renewal application, operations include rubber compound mixing, rubber mills, rubber tire tread curing, and tread buffing with rotating wire brushes.

### 3. Permit Modification/Changes

The initial Title V permit was issued on November 22, 2000. A permit revision was made to add a cartridge-type filter to an existing insignificant activity (#3 Banbury drop mill, ID No. ES-20). This revision was issued on March 7, 2003 and considered a 502(b)(10) change. No other permit changes have taken place.

### 4. Application Chronology

December 20, 2004      Received renewal application from Bandag Incorporated.  
 May 31, 2005            Received information regarding CAM exemption  
 , 2005                      Draft noticed to public and EPA

### 5. Regulatory Review

Bandag – Oxford Plant is subject to the following regulations:

- 15A NCAC 2D .0503 “Particulates from Fuel Burning Indirect Heat Exchangers”
- 15A NCAC 2D .0515 “Particulates 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 .0535 “Excess Emissions Reporting and Malfunctions”
- 15A NCAC 2D .0958 “Work Practices for Sources of Volatile Organic Compounds”
- 15A NCAC 2D .1806 “Control and Prohibition of Odorous Emissions”

Below is a summary of potential facility-wide criteria pollutant emissions based on 2003 emissions inventory information.

Pollutant	Emission Rate (tpy)
Carbon monoxide	4
Nitrogen oxides	15.6
Particulate matter less than 10 microns	16.5
Sulfur dioxide	32.2
Volatile organic compounds	221

The following table summarizes the changes to the existing permit:

Pages	Section	Description of Change
Entire permit	Entire Permit, where applicable	Changed reference from “Air Quality Title V Operation Permit” to “Air Quality Federal Title V and State Operation Permit” and “Air Quality Construction and Operation Permit” to “Air Quality State Operation Permit”
Cover letter	Cover letter	Modified to reflect current permit number, issue and effective date, and associated application information.
N/A	Attachment	Added table with changes to Title V as Attachment
N/A	Attachment	As recommended in the Regional inspection report, included three additional insignificant activities in attached table

8	Section 2.1 A.3.	As recommended in the Regional inspection report, corrected visible emission standard for boiler (ID No. ES-1) from 40% opacity to 20% opacity.
17	Section 3	Updated with most recent General Conditions and List of Acronyms

## 6. NSPS, NESHAPS, PSD, Attainment Status, 112(r), and CAM

### NSPS

New Source Performance Standards do not apply to this facility.

### NESHAPS

Based on emissions reported in the renewal application, Bandag – Oxford Plant is considered a minor HAP source. Bandag reports the highest single pollutant HAP is carbon disulfide (6.9 tpy) and total combined HAPs (10.07 tpy). A review of past emissions inventories confirms that these reported emission rates are consistent with historically reported emission rates.

### PSD

Based on potential VOC emissions this facility is classified as PSD minor.

### Attainment Status

Granville County is in attainment for all pollutants.

### 112(r)

Based on the most recent inspection report, Bandag – Oxford Plant does not have any sources that are subject to Section 112(r) of the 1990 CAAA.

### CAM

A compliance assurance monitoring (CAM) applicability determination is required for this renewal because: (1) the facility is a Title V source with potential emissions that exceed the Title V major source thresholds without considering controls; and (2) there are sources subject to an emission standard that require controls in order to comply with that standard.

The emission sources that are potentially subject to CAM are: The Banbury mixers (ID Nos. ES-3, ES-4, and ES-5) controlled by cartridge-type filters, and the tire buffing operation (ID Nos. ES-6, ES-7, and ES-8). The following exemptions apply:

Each of the three Banbury mixers has its own filter. The applicant reports that the No. 1 Banbury uses the largest amount of dry chemicals and will therefore have the largest PM<sub>10</sub> emission rate of the three. Based on source testing performed at the Oxford plant, maximum pre-control PM<sub>10</sub> emissions from the No. 1 Banbury are reported to be 23.4 pounds per hour. The Banburys are batch operated at a maximum of 6,000 hour per year. This yields a potential pre-control emission rate of 70.2 tons per year PM<sub>10</sub>.

Each of the three finishing line buffers has its own control system consisting of a simple cyclone in series with a bagfilter. Based on source testing at the Oxford plant, pre-control particulate emissions are 25 lb/hr/line. Under the conservative assumption that 75% of the total PM is PM<sub>10</sub>, emissions are calculated to be 82.1 tons PM<sub>10</sub> per year per finishing line.

Since pre-control PM<sub>10</sub> emissions are less than 100 tpy, the facility is exempt from the requirements of CAM.

## **7. Facility-wide Air Toxics**

An increase in facility-wide TAP emissions is not expected. The existing permit does not contain any conditions relating to TAP emissions.

## **8. Facility Compliance Status**

The DAQ has reviewed the compliance status of this facility. Bandag – Oxford Plant was last inspected on April 14, 2005 by Mr. Steve Hall (RRO). At the time of inspection, Bandag – Oxford Plant appeared to be in compliance with the requirements of the permit. The facility's five year compliance history is detailed in the inspection report.

The applicant has certified that the facility will be in compliance with all applicable requirements at the time of permit issuance and will continue to comply with these requirements. The applicant also certified that the facility will be in compliance with any applicable requirements taking effect during the term of the permit and will meet such requirements on a timely basis.

## **9. Stipulation Review**

The following stipulation change is made upon this renewal:

As recommended in the regional inspection report, the visible emissions standard for boiler (ID No. ES-1) is changed from 40% opacity to 20% opacity (see description in April 20, 2005 inspection report).

No other stipulations are changed upon this renewal. All other stipulations are standard for this type of facility.

## **10. Public Notice/EPA and Affected States 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 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. Virginia is an affected state for this facility.

Public notice of the DRAFT Title V permit was published in the XX on XX and the public comment period ran from XX through XX.

## **11. Conclusions, Recommendations, and Comments**

The renewal Title V application for Bandag – Oxford Plant has been reviewed by the DAQ to determine compliance with all procedures and requirements under 15A NCAC 2Q .0500 and 40 CFR Part 70. Upon completion of public notice and EPA review periods, the DAQ proposes to issue the Title V permit renewal.

## **12. Miscellaneous Requirements**

PE Seal

Pursuant to 2Q .0112, no PE Seal was required because the permit renewal does not involve the determination of applicability and appropriateness or performance of air pollution capture and control systems [15A NCAC 2Q .0112(b)(2) and (3)].

Zoning

A request for zoning consistency determination is not required for this permit renewal.

Fee Classification

Based on potential to emit, this facility has been classified as **Title V Major**. The facility's current IBEAM status is **Title V Major**. This renewal **will not** change the fee classification.