

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Air Permit Review

Permit Issue Date: XX, 2007

Region: Raleigh Regional Office
County: Wilson
NC Facility ID: 9800043
Inspector's Name: Will Wike
Date of Last Inspection: 04/18/2006
Compliance Code: 3/In Compliance - Inspection

Facility Data			Permit Applicability (this application only)
Applicant (Facility's Name): Bridgestone Firestone North American Tire, LLC Facility Address: Bridgestone Firestone North American Tire, LLC 3001 Firestone Parkway Wilson, NC 27894 SIC: 3011 / Tires And Inner Tubes NAICS: 326211 / Tire Manufacturing (except Retreading) Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V			SIP: NSPS: NESHAP: PSD: PSD Avoidance: NC Toxics: 112(r): Other:
Contact Data			Application Data
Facility Contact	Authorized Contact	Technical Contact	Application Numbers: 9800043.06A, 9800043.04D, and 9800043.04E Date Received: 08/31/2006 Application Type: Renewal and Modification Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 01660/T54 Existing Permit Issue Date: 05/15/2007 Existing Permit Expiration Date: 05/31/2007
Dennis Hargens Environmental Engineer (252) 246-7485 P O Box 1139 Wilson NC, 27894+1139	James Pridgen Plant Manager (252) 246-7266 P. O. Box 1139 Wilson NC, 27894+1139	Dennis Hargens Environmental Engineer (252) 246-7485 P O Box 1139 Wilson NC, 27894+1139	
Review Engineer: Jenny Kelvington Review Engineer's Signature: _____ Date: _____		Comments / Recommendations:	
		Issue 01660/T55 Permit Issue Date: XX, 2007 Permit Expiration Date: XX, 2012	

1. Purpose of Application

This permitting action is a consolidated modification and renewal of an exiting Title V permit pursuant to 2Q .0513. The existing Title V permit (031660T54) was issued to Bridgestone Firestone North American Tire, LLC (BFNT) on May 15, 2007 and was scheduled to expire on May 31, 2007. The renewal application was received on August 31, 2006, or at least nine months prior to the expiration date. 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. The modification applications were received on September 30, 2004 and October 11, 2004 and requested several sources be moved from Part II to Part I of the Title V permit.

As part of the renewal and modification applications, BFNT has requested the following permit changes:

- a. Move the following emission sources from Part II to Part I of the permit:
 - No. 2 natural gas/fuel oil-fired boiler(s) with a heat capacity greater than 10 million BTU per hour each and less than 100 million BTU per hour total (ID No. UA-T1)
 - Fourth of six thread extrusion lines located in the existing tubing area (ID No. TU-1)

- Extrusion line (ID No. TU-2)
- Sidewall cementing operation (ID No. SW-3)
- Green tire doping operation (ID No. GT-9) with settling chamber (ID No. N-13)
- Curing area (ID No. CA-1)
- Green tire doping operation (ID No. GT-10) with settling chamber (ID No. N-9)
- Automated storage and retrieval system No. 5 (ID No. ASRS-5)

These changes have been incorporated into the revised permit

b. Re-identify the following emission sources and control device:

- Banbury 624 remix and final mix charging as ID No. BC-4FM instead of BC-4
- Banbury 624 remix and final mix discharging as ID No. BD-4FM instead of BD-4
- Fabric filter (1300 square feet of filter area) as ID No. DC-9 instead of TB-3
- Banbury 273 rubber mixing and slab cooling system as ID No. RM-6 instead of TK-3.

These changes have been incorporated into the revised permit

c. Remove the following sources and control devices:

- **Green tire doping operation (ID No. GT-2) and associated settling chamber (ID No. N-10)**
- **Settling chamber (ID No. N-6)** which controls particulate emissions from slab dip tank cooling (ID No. RM-2)
- **Settling chamber (ID No. N-7)** which controls particulate emissions from slab dip tank cooling (ID No. RM-3)
- **Settling chamber (ID No. N-8)** which controls particulate emissions from slab dip tank cooling (ID No. RM-6, formerly TK-3)
- **Exhaust gas condensing heat exchanger (ID No. CHX-1)** from the natural gas/No. 2 fuel oil/ No. 6 fuel oil-fired boiler; 121 million Btu per hour maximum heat input (UA-2)

These changes have been incorporated into the revised permit. See discussion of settling chambers in Section 6 of this review.

d. Remove VE observations requirements for the following sources:

- Green tire doping operations (ID Nos. GT-3, GT-4, GT-6, GT-7, GT-8, and GT-9)
- Paint spray booths (ID Nos. PB-1, PB-2, PB-3, PB-4, PB-5, PB-6, and PB-7)

VE monitoring requirements have been relaxed but not eliminated. See discussion in Section 6 of this review.

e. For all other sources currently requiring bi-weekly VE monitoring, reduce observations from once every two weeks to once per month.

This change has been included in the revised permit. See discussion in Section 6 of this review. Note daily VE still applies for the combustion of No. 6 fuel in the boilers.

f. Reduce the reporting frequency from quarterly to twice each year for the following permit conditions:

- PSD avoidance conditions
- BACT limits
- MACT avoidance condition

This change has been included in the revised permit. See discussion in Section 6 of this review.

g. Add the following tanks as insignificant activities:

- Fuel oil storage tank (ID No. IS-7; 6000 gallon capacity)
- Gasoline storage tank (ID No. IS-8; 1000 gallon capacity)
- LPG storage tank (ID No. IS-9, 1000 gallon capacity)

These sources have been added to the list of insignificant activities. Potential emissions from each activity are less than 5 tons per year.

h. Correct the NO_x emission factor for the temporary boilers (ID No. UA-T1). The AP-42 NO_x emission factor is 100 lb/mmscf for small, uncontrolled natural gas-fired boilers.

The existing permit mistakenly shows the NOx emission factor as 2.2 lb/mmescf. The correct factor is 100 lb NOx/mmescf. The permit has been revised accordingly.

- i. Remove the BACT limit for green tire doping operation (ID No. GT-9). This limit applied to GT-5 only and should have been removed from the permit when this source was removed.
A review of the DAQ files shows that BFNT is correct that this BACT limit does not apply to GT-9 and thus, this limit has been removed from the revised permit.
- j. Remove the air toxics requirements for the combustion sources.
The combustion sources are exempt from toxic limitations and requirements as per 2Q .0702(18) and the permit has been revised accordingly.
- k. Reduce the NSPS recordkeeping frequency for boiler(s) (ID No. UA-T1) from daily to once a month.
Since only natural gas and No. 2 fuel oil are fired in the boiler(s), the daily recordkeeping may be relaxed to monthly. The permit has been revised accordingly.

Additionally, Mike Aldridge, DAQ, recommends the following change:

- a. Remove the "greater than 10 million and less the 100 million" description for boiler(s) (ID No. UA-T1).
This source is a temporary source that is brought on site as needed. When on site, the boiler(s) is located in the powerhouse. BFNT last installed a temporary natural gas/No. 2 fuel oil-fired boiler with a maximum heat input cap of 88.3 MMBTU/hr in September 2005 and submitted notification on 9/22/05. The April 2006 facility inspection noted that the temporary boiler was last used January 17, 2006 and was not on site at the time of inspection.

According to Dennis Hargens, Environmental Engineer with BFNT, the facility leases the boiler only when needed and has no guarantee that they will be able to obtain the same boiler each time or if they will be able to find just one boiler to meet their needs. It is possible that BFNT will have to bring two smaller boilers on site to meet site demands. Specifying the boiler capacity will severely limit their options for temporary boilers. Mr. Hargens has requested that the source description remain unchanged. DAQ finds Mr. Hargen's request reasonable and has kept the existing source description in the permit.

2. Facility Description

The facility manufactures passenger steel radial tires. The major steps for producing the tires include (1) carbon black unloading and transfer, (2) dry chemical weighing and handling, (3) mixing/drop milling/slab cooling, (4) milling, (5) calendaring, (6) tubing/extrusion/cementing, (7) tire building, (8) tire doping, (9) curing, (10) painting, (11) grinding for reshaping/uniformity, and (12) tire finishing and inspecting.

3. Application Chronology

September 30, 2004	Application 9800043.04D for permit modification was received and assigned to Dave Willis.
October 11, 2004	Application 9800043.04E for permit modification was received and assigned to Dave Willis.
December 16, 2004	Application 9800043.04E was consolidated with 9800043.04D by Mark Cuilla. with application 9800043.04D.
January 6, 2005	Application was reassigned to Wallace Pitts.
August 31, 2006	Application for renewal 9800043.06A was received and assigned to Wallace Pitts.
September 5, 2006	Acknowledgement letter for renewal was sent to the facility.
January 2, 2007	Both applications were reassigned to Jenny Kelvington
May 15, 2007	TV Permit No. 01660T54 was issued for the addition of ASRS-5.
May 21, 2007	An e-mail was sent to Mr. Dennis Hargens, BFNT Environmental Engineer, requesting information on the process rates fro RM-2, RM-3, and TK-3; verifying

May 23, 2007 and June 4, 2007 June 12, 2007	description for UA-T1, requesting additional information to support easing VE monitoring requirements, and confirming the deletion of GT-2. Permit drafts were e-mailed to Mr. Hargens for comments along with specific information requests to evaluate the elimination of the 3 settling chambers. Mr. Hargens provided the needed information and comments on the proposed permit.
June 14, 2007	An e-mail was sent to Mr. Hargens requesting review and clarification of air toxics limits.
June 15, 2007	Mr. Hargens provided toxics clarification and permit/review corrections by phone.

4. Permit History

Permit No.	Issuance Date	Description of Revision
01660T41	June 10, 2002	Initial TV Permit
01660T42	January 24, 2003	Adjudicated permit
01660T43	January 31, 2003	Administrative Amendment
01660T44	February 24, 2003	Administrative Amendment
01660T45	February 26, 2003	Administrative Amendment
01660T46	June 18, 2003	Permit modification for replacing control devices DC-7, WCC-1, DC-1, and DC-2 and the consolidation of emission sources that make up the 622 Banbury system into one new dust collector, DC-2.
01660T47	October 2, 2003	Permit modification for adding natural gas as an alternative fuel for temporary boiler(s) (ID No. UA-T1), installing three peak shaving generators (ID Nos. EDGG-3, 4 and 5), and installing a fourth tread extrusion line in the existing tubing area (ID No. TU-1)
01660T48	May 4, 2004	Permit modification for adding run flat sidewall cementing (ID No. SW-3), green tire doping operation (ID No. GT-9) controlled by settling chamber (ID No. N-1), and extrusion line (ID No. TU-2) and replacing curing area No. 1 (ID No. CA-1)
01660T49	June 24, 2004	Administrative Amendment
01660T50	February 11, 2005	Permit modification for removing 3 generators (ID Nos. EGDD-3, 4, and 5)
01660T51	June 24, 2005	Permit modification for adding a MACT avoidance condition
01660T52	September 8, 2005	Administrative Amendment
01660T53	December 1, 2005	Permit modification for operating a new green tire doping operation (ID No. GT-10) and replacing up to 60 tire curing presses in curing area 1 (ID No. CA-1)
01660T54	May 15, 2007	Permit modification for adding an automatic storage and retrieval system No. 5 (ID No. ASRS-5)

5. Facility Compliance Status

The facility was last inspected by Mr. Will Wike of the Raleigh Regional Office (RRO) on April 18, 2006 and was found to be in compliance with all applicable air quality requirements. BFNT has been issued two notices of violations (NOVs) since the initial TV permit was issued. On May 6, 2004 and on August 25, 2005, NOVs were issued for failing to perform several monitoring/recordkeeping/reporting and notification (2004 only) requirements. However, since the last NOV, BFNT has performed all required monitoring, recordkeeping and reporting in accordance with the permit.

BFNT 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 has 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. Compliance is expected.

6. Regulatory Review

The facility is currently subject to the following regulations:

- 15A NCAC 2D .0503, Particulates from fuel burning sources
- 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 .0524, New Source Performance Standards [40 CFR 60, Subpart Dc]
- 15A NCAC 2D .0524, New Source Performance Standards [40 CFR 60, Subpart BBB]
- 15A NCAC 2D .0530, Prevention of Significant Deterioration
- 15A NCAC 2D .0958, Work Practices for Sources of Volatile Organic Compounds
- 15A NCAC 2D .1100, Toxic Air Emissions Limitation and Requirement
- 15A NCAC 2Q .0317, Avoidance of 15A NCAC 2D .0530 [PSD]
- 15A NCAC 2Q .0317, Avoidance of 15A NCAC 2D .1111 [MACT]
- 15A NCAC 2Q .0711, Toxic Air Pollutants

The following monitoring, recordkeeping, and reporting conditions for the specific regulations have been modified as a result of the permit renewal:

15A NCAC 2D .0515, Particulates from Miscellaneous Industrial Processes

Allowable particulate emissions shall not exceed the rate prescribed by the process weight equations:

For process rates up to 30 tons per hour:

$$E = 4.10 \times P^{0.67}$$

For process rates greater than 30 tons per hour:

$$E = 55.0 \times P^{0.11} - 40$$

Where: E = allowable emission rate in pounds per hour, and
 P = process weight in tons per hour

The permit application contains the results on stack testing performed in July 1990 on the Banbury 621/622 settling chamber. The tests show particulate levels are higher in the outlet of the settling chamber than in the inlet to this control device. It appears that the settling chamber provides little, if any, control for this application. Settling chambers are currently used to lower particulate emissions from several green tire doping operations and three slab cooling systems. The facility has requested to remove settling chambers (ID Nos. N-6, N-7, and N-8) controlling particulate emissions from the slab cooling systems and allow them to operate without control. Therefore, an evaluation has been made to determine if any of the settling chambers used at the facility are needed to comply with an emission standard. Note, as the process rate increases, the allowable particulates emissions per ton decrease; so compliance with the emission limit is evaluated at the maximum process rate.

Emission Source ID	Maximum Process Rate (tons/hr)	2D .0515 Limit (lb/hr)	Maximum Uncontrolled Emission Rate (pounds per hour)	Is Control Required?
RM-2	28	38.23	0.43	No
RM-3	28	38.23	0.43	No
RM-6	12	21.67	0.43	No
GT-3	3	8.56	1.38	No
GT-4	3	8.56	1.38	No
GT-6	3	8.56	1.38	No
GT-7	3	8.56	1.38	No
GT-8	3	8.56	1.38	No

GT-9	3	8.56	1.38	No
GT-10	3	8.56	1.38	No
ASRS-5	2.81	8.19	1.29	No

The maximum uncontrolled emission rates for RM-2, RM-3, and RM-6 are derived from the July 1990 stack test data contained in Appendix C of the permit application. Table 2 of Appendix C entitled "Clay Dip Particulate Emissions" shows the results of testing performed on the combined exhaust stream for RM-2 and RM-3. The highest particulate emissions measured were in the outlet (after control) from Test No. 4 at 0.43 pounds per hour and are believed to represent the maximum emissions for the slab dip tank and cooling sources. The uncontrolled emission rates measured less at 0.13 pounds per hour. Given that the potential particulate emissions are significantly less than the 2D .0515 particulate limit, no control is needed. Therefore, settling chambers N-6, N-7, and N-8 will no longer be required for emissions control and have been removed from the permit.

From the green tire doping operations, a maximum of 0.46 lbs of PM are emitted per ton of tires processed. At the maximum process rate of 3 tons per hour for each of these operations, allowable PM emissions are 8.56 pounds per hour and maximum emissions are 1.38 pounds per hour. At the maximum process rate for ASRS-5, allowable emissions (8.19 lbs/hr) are much higher than uncontrolled emissions (1.29 lbs/hr). Therefore, control is not required for any of the green tire doping operations to comply with 2D .0515. The inspection and maintenance conditions for the settling chambers are no longer required under 2D .0515 in the permit. The 2005 Emissions Inventory reports a total of 0.89 tons of particulates emitted from the seven green tire dopers in operation in 2005.

15A NCAC 2D .0521, Control of Visible Emissions

The applicant has requested that the frequency of VE observations be reduced or eliminated altogether. Currently, the Permittee is required to perform VE monitoring on all sources every two weeks. According to Mr. Dennis Hargens, BFNT, these biweekly observations have only shown noticeable VE at sources in which bagfilters are used for control. All other sources consistently show 0% opacity.

During the last compliance inspection, Mr. Will Wike (RRO) confirmed the sources at the facility have low visible emissions. The following sources were observed to be operating at 0% opacity:

- chemical bin loading (ID No. RCS-1)
- manual chemical weighing station from chemical bins (ID No. CW-1)
- pigment bin loading and automated weighing system (ID No. RCS-2)
- carbon black transfer from BT-1 to Banbury mixer 624 (ID No. BT-4), Banbury 624 charging (ID No. BC-4), Banbury 624 master batch discharging (ID No. BD-4)
- Banbury 624 rubber mixing and slab forming (ID No. RM-4)
- Banbury 621 charging (ID No. BC-1)
- Banbury 621 discharging (ID No. BD-1)
- Banbury 621 slab dip tank and cooling (ID No. RM-2)
- Banbury 622 slab dip tank and cooling (ID No. RM-3)
- Banbury 273 charging (ID No. BC-3)
- Banbury 273 discharging (ID No. BD-3)
- Banbury 273 rubber mixing and slab cooling (ID No. TK-3)
- 18 rubber mills (ID Nos. RMT1-RMT3; RMT6-RMT11; and RMC1-RMC9)
- three roll calender and four roll calender (ID No. CAL-1)
- No. 1 extrusion line undertread cementing (ID No. UT-1)
- No. 5 extrusion line undertread cementing (ID No. UT-3)
- Sidewall cementing (ID No. SW-3)

The Banbury 621 slab cooling and handling (ID No. RM-1), Banbury 622 slab cooling and handling (ID No. RM-5) controlled by indexing roll filter in series with mist eliminator (ID Nos. N-5A and N-5B) was observed in operation with visible emissions of 5% opacity. Mr. Wike noted all other sources were not operating at the time of inspection.

Reduction in the frequency of VE monitoring is justified based upon DAQ inspections and opacity data maintained by the facility. The revised permit will require monthly VE monitoring for all sources for which a control device is necessary to comply with an emission standard. For the green tire doping operations and paint spray booths, VE observations will be reduced to quarterly, but will not, as requested by the facility, be eliminated. VE monitoring will be required quarterly for all other sources previously monitored biweekly. No VE observations will be required for combusting sources burning only natural gas and/or No. 2 fuel oil.

15A NCAC 2D .0530, PSD Best Available Control Technology

Nitrogen oxide emissions shall be less than 75.72 tons per consecutive 12-month period for the two peak shaving generators (ID Nos. EGDD-1 and EGDD-2) and five air compressors (ID Nos. ACDD-1 through ACDD-5). The 2005 emissions inventory shows total NOx emissions from these sources at 9.73 tons per year. Since actual emissions are well below the allowable emission rate, the facility’s request to reduce the NOx emissions reporting frequency is reasonable. The revised permit requires reporting NOx emissions once every six months with reports due by January 30 and July 30 of each year instead of quarterly.

Volatile organic compound emissions shall not exceed 636 pounds per day and 56.6 tons per consecutive 12-month period for No. 4 extrusion line undertread cementing (ID No. UT-2). The emissions inventory shows actual VOC emissions from this source and the No. 5 extrusion line undertread cementing (ID No. UT-3) were 20.75 tons in 2005. Since actual emissions are well below the allowable emission rate, the facility’s request to reduce the VOC emissions reporting frequency is reasonable. The revised permit requires reporting VOC emissions once every six months with reports due by January 30 and July 30 of each year instead of quarterly.

The BACT limit for green tire doping operation (ID No. GT-9) has been deleted. The limit applied to emission source (ID No. GT-5) and should have been removed from the permit when this source was removed from the facility.

15A NCAC 2Q .0317, Avoidance of 2D .0530 [PSD Avoidance]

To avoid the applicability of PSD, the facility previously requested to take several PSD avoidance limits as follows:

Emission Source(s)	Limited Pollutant	Permit Limit (tons/year)	2005 Actual Emissions
Group 2.2.A Sources Banbury 621 charging (BC-1), Banbury 621 discharging (BD-1), Banbury 621 slab dip tank and cooling (RM-2), Banbury 621 slab cooling and handling (RM-1), Banbury 622 charging (BC-2), Banbury 622 discharging (BD-2), Banbury 622 slab dip tank and cooling (RM-3), Banbury 622 slab cooling and handling (RM-5), Banbury 273 charging (BC-3), Banbury 273 discharging (BD-3), Banbury 273 rubber mixing and slab cooling (RM-6), Five green tire doping ops (GT-3, GT-4, GT-5, GT-8), Seven minor buff paint spray booths (PB-1 to PB-7), 18 rubber mills (RMT1-RMT3, RMT6- RMT11, and RMC1-RMC9), Three roll calender and four roll calender (CAL-1), No. 2 bead cementing operation (BCO-2), Six extrusion lines (TU-1),	VOCs	587.4	<236.1 tons which includes: CA-1,2,3: 58.29 tons BC-1,2,3 53.03 tons* BD-1,2,3 RM-1,2,3,4,5,6 FI-1 37.65 tons PB-1,2,3,4,5,6,7 33.51 tons 18 Rubber Mills 20.86 tons TU-1 13.60 tons TA-1/IS-2 10.13 tons CAL-1 4.38 tons GA-1 1.69 tons PW-1 0.93 tons UA-1 0.60 tons UA-2 0.50 tons EGDD-1,2 0.39 tons RCM-1 0.33 tons

Three curing areas (CA-1, CA-2, and CA-3), Sidewall and tread grinding (GA-1), Miscellaneous solvent usage (PW-1), Tire Assembly (TA-1), Final inspection (FI-1), Rubber Cement mixing (RCM-1), Four solvent storage tanks (ST-1 through ST-4), Two natural gas/No. 2 fuel oil/No. 6 fuel oil-fired boilers (UA-1 and UA-2), Two diesel engine driven peak shaving generators (EGDD1 and EGDD2), and Five diesel engine driven air compressors (ACDD1 through ACDD5)			GT-2,3,4,6,7,8,9 0.11 tons* ACDD-1,2,3,4,5 0.06 tons
Group 2.2.C Sources No. 1 extrusion line undertread cementing operation (UT-1) No. 4 extrusion line undertread cementing operation (UT-2)	VOCs	273	<54.56 tons which includes; UT-1 33.81 tons UT-2,3 20.75 tons*
Group 2.2.B Sources Banbury 624 charging (BC-4), Banbury 624 remix and final mix charging (BC- 4FM) Banbury 624 discharging (BD-4), Banbury 624 remix and final mix discharging (BD- 4FM) Banbury 624 rubber mixing and slab cooling (RM- 4), and No. 5 extrusion line undertread cementing operation (UT-3), and Two green tire doping operations (GT-6 and GT-7)	VOCs	60.9	<52.94 tons which includes: BC-4,4FM 23.25 tons BD-4,4FM IS-1 RM-4 UT-2,3 20.75 tons* GT-2,3,4,6,7,8,9 0.11 tons* RM-4 estimate <8.83 tons*
No. 1 bead cementing operation (BCO-1)	VOCs	40	Not Reported (<i>not physically possible for maximum emissions to exceed limit</i>)
Group 2.2.E Sources Side Wall Cementing Operation (SW-3), Green Tire Doper No. 9 (GT-9), One extrusion line (TU-2)	VOCs	40	< 1.0 tons (<i>Not reported for TU-2 and SW which may have not been installed at the time</i>)
NG/No. 2 fuel oil-fired boiler(s) UA-T1	TSP	25	< 1.0 tons
	PM10	15	< 1.0 tons
	SO2	40	< 1.0 tons
	VOC	40	<1.0 tons
	CO	100	0.40 tons
	NOx	40	0.50 tons

Actual air emissions for 2005 were significantly less than the limits. Therefore, frequency of the criteria pollutant emissions reporting, required to demonstrate PSD avoidance, has been reduced for all affected sources from quarterly to once every six months with reports due by January 30 and July 30 of each year. This change is consistent with the latest DAQ permit conditions.

15A NCAC 2D .1100, Toxic Air Emissions Limitation and Requirement

In 1999, BFNT modeled several NC air toxics at emission rates corresponding to approximately 2.5 times the plant capacity. Since that time, five green tire doping operations, which emit toxic air pollutants, have been added to the facility while three have been removed. Like the modeled green tire doping operations, the new green tire sprays contain about 35 ppm of formaldehyde and 1 ppm each of 1,4-dioxane and ethylene oxide. In the 1999 modeling, the smallest multiplication factor of the baseline emissions for these three toxics was 150.9. Furthermore, the curing presses are a bottleneck to the plant capacity, limiting manufacturing to 300-400 million pounds of rubber per year and keeping the facility operating below the modeled rates. Therefore,

additional modeling is not required at this time. Instead, the 2D .1100 toxic air pollutant permit limits will be applied to the new green tire doping operations as follows:

Modeled Source	Sources for which TAP Limit Applies
Green Tire Doper No. 1/ Tire Assembly	Green Tire Doper No. 8/ Tire Assembly
Green Tire Doper No. 2/Tire Assembly	Green Tire Doper No. 10 and ASRS-5/Tire Assembly
Green Tire Doper No. 5/Tire Assembly	Green Tire Doper No. 9/Tire Assembly
Green Tire Doper No. 6/Tire Assembly	Green Tire Dopers No. 6 and No. 7/Tire Assembly

As requested by the applicant, the combustion sources will no longer be subject to air toxics in the permit as per the exemption in 2Q .0702 (18). All references and limitations pertaining to toxic emissions from the combustion sources have been removed from the permit.

15A NCAC 2Q .0317, Avoidance of 2D .1111 [MACT Avoidance]

BFNT has chosen to take HAP limits of 10 /25 tons per year (individual HAP/total of all HAP) to avoid being subject to the rubber tire and the boiler MACTs. The facility's maximum individual HAP and total HAP emissions for the 2005 were 5.3 tpy and 17.9 tpy, respectively. Since actual emissions are clearly below the limits, the frequency of the HAP emissions reporting, required to demonstrate MACT avoidance, has been eased for all affected sources from quarterly to once every six months with reports due by January 30 and July 30 of each year. This change is consistent with the latest DAQ permit conditions.

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

NSPS

Green tire doping operations (ID Nos. GT-6 through GT-10), the automatic storage and retrieval system (ID No. ASRS-5), and cementing operations (ID Nos. UT-2, UT-3, and SW-3) are all subject to New Source Performance Standards for Rubber Tire Industry Manufacturing, Subpart BBB. The existing NSPS requirements remain in the permit for these sources. The natural gas/No. 2 fuel-fired boiler(s) (ID No. UA-T1) is(are) subject to Subpart Dc. The daily recordkeeping of the amounts of each fuel fired in the boiler(s) is reduced to once a month in the revised permit.

NESHAP/MACT

The facility has taken federally enforceable limits in the current permit to become a minor source for Section 112 of the Clean Air Act (CAA) by limiting HAP emissions below 10/25 thresholds. Hence, MACT standards such as Subpart XXXX "National Emissions Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing" do not apply this facility. The facility's maximum individual HAP and total HAP emissions for the 2005 were 5.3 tpy and 17.9 tpy, respectively.

PSD and Non-Attainment NSR

Wilson County is in attainment for all criteria pollutants.

The facility is a major source for PSD, as implemented through 15A NCAC 2D .0530.

The two peak shaving generators (ID Nos. EGDD-1 and EGDD-2) and five air compressors (ID Nos. ACDD-1 through ACDD-5) are subject to PSD BACT limits. These sources cannot discharge more than 75.72 tons NOx per consecutive 12-month period. The No. 4 extrusion line undertread cementing (ID No. UT-2) cannot exceed 636 pounds of VOC emissions per day and 56.6 tons of VOC emissions per consecutive 12-month period. These existing BACT limits remain unchanged in the permit.

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 this rule.

CAM

The applicant performed a compliance assurance monitoring (CAM) applicability determination for all sources that use a control device to achieve compliance with an emission standard and found that none of their sources have uncontrolled emissions equal to or greater than 100 tons per year. Therefore, CAM does not apply.

8. Facility Wide Air Toxics

Facility-wide toxic emissions are limited in accordance with air dispersion modeling performed in 1999 to ensure ambient air levels (AALs) are not exceeded. As discussed in Section 6 of this review, 2D .1100 TAP limits no longer apply to combustion sources, and some TAP limits that formerly applied to a former green tire doping operation, now apply to one or two dopers added since 1999. The TPER limits in 2Q .0711 remain unchanged. Compliance with all air toxic limits is expected.

9. Facility Emissions Review

The following is an emission summary for the facility wide emissions. Actual emissions have been copied from the 2005 emissions data as included in the I-BEAM, while the potential emissions have been taken from the permit application.

Pollutant	Actual Emissions tons/yr	Potential Emissions tons/yr
PM	109.6	248.7
PM-10	96.1	198.0
PM-2.5	43.0	94.0
SO ₂	959.7	2,387.3
NO _x	174.4	449
CO	21.3	126
VOC	315.1	1011.7
Single HAP (MIBK)	5.3	< 10
Aggregate HAP	17.9	< 25

Because the use of settling chambers to reduce particulate emissions will no longer be required, actual PM emissions may increase by as much as 5 tons per year.

10. Stipulation Review

The following describes the changes to be performed to the current permit 01660T54:

Page(s)	Section	Description of Change(s)
Attachment	Insignificant Activities	-Added three tanks to list (ID Nos. IS-7, IS-8, and IS-9) -Added footnotes that these activities shall comply with all applicable standards and be included in the facility-wide toxics demonstration, when appropriate
Cover	-	-Amended all dates and permit revision numbers -Updated language as per latest shell document
TOC	-	-Removed part II
All	Header	-Amended permit revision number

3 - 5	Equipment Table	-Re-identified BC-4A, BD-4A, TK-3, and TB-3 as BC-4FM, BD-4FM, RM-6, and DC-9, respectively. -Removed green tire doping operation (ID No. GT-2) -Removed settling chambers (ID Nos. N-6, N-7, and N-8) -Noted the other settling chambers “need not be operating” -Removed footnote stating the permit shield in General Condition R does not apply and the compliance certification described in General Condition P is not required
5	2.1 A	-Moved sources not controlled by a fabric filter to Section 2.1.B
7	2.1 A.2.c	-Reduced VE monitoring frequency from bi-weekly to monthly
7 - 8	2.1 B	-Added sources from Section 2.1.A., C, and D -Specified which sources are subject to the PSD avoidance condition.
9	2.1 B.1.c	-Specified monitoring requirements for sources controlled by fabric or cartridge filters
9	2.1 B.1.d	-Specified monitoring requirements for sources controlled by the indexing roll filter followed by a mist eliminator
9	2.1 B.1.e	-Specified monitoring requirements for sources controlled by mist eliminators
9	2.1 B.1.f	-Specified monitoring requirements for sources controlled by paint spray booth filters
10	2.1 B.2.c	-Reduced VE monitoring from bi-weekly to monthly for all sources with control devices
10	2.1 B.2.d	-Reduced VE monitoring from bi-weekly to quarterly for all uncontrolled sources
11	2.1 C	-Formerly listed as Section 2.1 E
13	2.1 D	-Formerly listed as Section 2.1 F
15	2.1 E	-Formerly listed as Section 2.1 G,
17-18	2.1 F	-Formerly listed as Section 2.1 H, 2.1 I, and 2.1 O -Combined the NSPS green tire doping sources into one section -Specified which sources are subject to PSD avoidance -Eliminated BACT limit for GT-9
19	2.1 F.2.c	-Reduced VE monitoring from bi-weekly to quarterly
19-20	2.1 F.3	-Used the NSPS requirements in former 2.1 O.3 for the green tire doping operations.
20	2.1 G	-Formerly listed as Section 2.1 J -Specified which sources are subject to PSD avoidance
21	2.1 H	-Formerly listed as Section 2.1.K -Removed 2D .1100 air toxic limit
23	2.1 I	-Formerly listed as Section 2.1 L -Removed 2D .1100 air toxic limit
24	2.1 I.3.d	-Reduced PSD avoidance reporting from quarterly to twice a year
24-25	2.1 J	-Formerly listed as Section 2.1 M -Removed 2D .1100 air toxic limit -Reduced daily NSPS recordkeeping to once a month.
27	2.1 J.5.c	-Corrected NOx emission factor -Reduced PSD avoidance reporting from quarterly to twice a year
28	2.1 K	-Formerly listed as Section 2.1 P
30	2.1.L	-Formerly listed as Section 2.1.N
33	2.2 A.1.d	-Reduced reporting for PSD avoidance to once every six months
33-34	2.2 A.2.d	-Reduced reporting for PSD avoidance to once every six months
34-35	2.2 B.1.e	-Reduced reporting for PSD avoidance to once every six months
36	2.2 C.1.d	-Reduced reporting for PSD avoidance to once every six months
38-44	2.2 D.4	-Removed sources GT-1, GT-2, and GT-5 and added sources GT-7 through GT-10 and ASRS-5.

46	2.2.E.1.d	-Reduced reporting for PSD avoidance to once every six months
46	2.2.F.1.d.	-Reduced reporting for MACT avoidance to once every six months
N/A	Part II	-Removed part II
46-54	General Conditions	-Updated general conditions as per latest shell language

11. Public Notice / EPA and Affected State 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 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 above. South Carolina is an affected state.

Comments Received on DRAFT Permit –

12. Conclusions, Comments, and Recommendations

- The draft permit was sent to RRO for review and comments on 6/29/2007. RRO (Will Wike) responded on July 2, 2007 via e-mail with a comment about the need to clarify the description of UA-T1 and a recommendation that the permit be issued.
- The draft permit was sent to the Permittee (Dennis Hargens) for review and comments on 6/29/2007.
- Recommend issuing Permit. No. **01660/T55** to Bridgestone.