



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant
DATE: July 21, 2005
RE: BF Goodrich Tire Manufacturing / SSM 003-20073-00008
FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER.dot 1/10/05



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

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Mr. Tom Whalen
BF Goodrich Tire Manufacturing
P.O. Box 277
Woodburn, Indiana 46797

July 21, 2005

Re: 003-20073-00008
Significant Source Modification to:
Part 70 permit No.:T003-5974-00008

Dear Mr. Whalen:

BF Goodrich Tire Manufacturing was issued Part 70 operating permit T003-5974-00008 on October 16, 2000 for a tire manufacturing operation. An application to modify the source was received on December 29, 2004 with additional information received on May 12, 2005, May 17, 2005, May 18, 2005; and May 19, 2005. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

- (a) Twenty-eight (28) tire curing presses: twenty-five (25) 53 inch-type presses, each with a maximum output capacity of 1,428 tons per year; and three (3) 43 inch-type presses, each with a maximum output capacity of 1,110.6 tons per year.

These additional presses will increase the capacity of the tire curing process from 35,400 pounds per hour to 41,332 pounds per hour. These presses will also increase the utilization from the following emission units:

- (1) One (1) carbon black unloading area, from a maximum capacity of 7621 pounds per hour to 16,533 pounds per hour, using a baghouse as control, exhausting at stacks 356 A - D;
- (2) One (1) Banbury mixing area, from a maximum capacity of 27,146 pounds of rubber, carbon black, and chemicals per hour, to 41,057 pounds per hour, using a baghouse as control, exhausting at stacks 200, 208, 210, 231 and 278;
- (3) One (1) component preparation area, which includes milling, extruding, and calendering from a maximum capacity of 35,400 pounds per hour, to 40,064 pounds per hour, using no control, exhausting at stacks 168, 171, 173, 174, 176, 178, 186, 187, 254, 255, 311, 315, 318, 319, 320, 322, 323, 324, 325, 326, 327, 328, 329, 330, and 355;
- (4) One (1) tire building area, from a maximum capacity of 35,400 pound per hour, to 41,332 pounds per hour, using no control, exhausting at stacks 301-309, 312, and 313;

- (5) One (1) WSW grinding and TUO Module Area, from a maximum capacity of 28,378 pounds per hour, to 42,757 pounds per hour using centrifugal separators as control, exhausting at stacks 258-261, and 265-277,
- (6) One (1) tread end cementing process consisting of lines #1 and #2, from a production capacity of 2,081 tires per hour, using particulate baffle filters, exhausting at stacks 158, and 159. VOC emissions will be controlled by either one of the four (4) process boilers once all curing presses in this SSM 003-20073-0008 have been installed. The ducting to the boilers will only be required if all twenty-eight (28) presses are installed.
- (7) Insignificant Activities: One (1) green tire spray operation, from a maximum capacity of 35,400 pound per hour to 41,332 pounds per hour, using particulate baffle filters, exhausting at stacks 130, 132, 145, 262, 263, 264, 279, and 280.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

This significant source modification authorizes construction of the new emission units. Operating conditions shall be incorporated into the Part 70 operating permit as a significant permit modification in accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12. Operation is not approved until the significant permit modification has been issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, press 0 and ask for Aida De Guzman or extension (3-4972), or dial (317) 233-4972.

Sincerely,

Original signed by
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

APD

cc: File – Allen County
Allen County Health Department
Air Compliance Section Inspector – Patrick Burton
Compliance Data Section
Administrative and Development



Mitchell E. Daniels, Jr.
 Governor

Thomas W. Easterly
 Commissioner

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**SIGNIFICANT SOURCE MODIFICATION TO A PART 70
 SOURCE
 OFFICE OF AIR QUALITY**

**BF Goodrich Tire Manufacturing
 US Highway 24 East
 Woodburn, Indiana 46797**

(herein known as the Permittee) is hereby authorized to construct subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Significant Source Modification No.: 003-20073-00008	
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: July 21, 2005

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (d) One (1) component preparation area, which includes milling, extruding, and calendaring with a maximum capacity of 40,064 pounds per hour, using no control, exhausting at stacks 168, 171, 173, 174, 176, 178, 186, 254, 255, 318, 319, 322, 323, 325, 326, 327, 329, 330, 355, 311, 315, 320, 324, and 328;
- (e) One (1) tire building area, with a maximum capacity of 41,332 pound per hour, using no control, exhausting at stacks 301-309, 312, and 313;
- (f) One (1) tire curing process, with a maximum capacity of 41,332 pound per hour, using no control, exhausting at stacks 51-58, 60-66, 68, 69, 71, 73, 75, 77, 79, 80, and 82-88;
- (h) One (1) tread end cementing process, with a maximum capacity of 2,081 tires per hour, using particulate baffles, exhausting at stacks 157, 158, and 159. VOC emissions will be controlled by either one of the four (4) process boilers once all curing presses in this SSM 003-20073-00008 have been installed. The ducting to the boilers will only be required if all twenty-eight (28) presses are installed.
- (i) Miscellaneous solvent usage.

Insignificant Activity

- (a) One (1) green tire spray, with a maximum capacity of 41,332 pound per hour, using particulate baffles, exhausting at stacks 130, 132, 145, 262, 263, 264, 279, and 280.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Minor Modification - Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (a) Pursuant to 326 IAC 2-2, Prevention of Significant Deterioration, the new tire curing presses permitted under SSM 003-20073-00008 and SPM 003-21271-00008 shall not operate until after the old presses are shutdown, using the following time line:

- 17 have already been decommissioned as of July 15, 2005.
- 0 will be decommissioned before the start-up of the 1st of 6 curing presses.
- 1 will be decommissioned before the start-up of the 2nd of 6 curing presses.
- 2 will be decommissioned before the start-up of the 3rd of 6 curing presses.
- 2 will be decommissioned before the start-up of the 4th of 6 curing presses.
- 0 will be decommissioned before the start-up of the last 2 presses.

Removal of these tire curing presses shall reduce the VOC emissions by 13.3 tons per twelve month period. The shutdown of these curing presses shall be permanent.

- (b) VOC emissions from the Tread End Cementers shall be directed to either one of the four (4) process boilers for destruction in order to achieve a reduction in the VOC emissions by 2 tons per twelve month period. The ducting will only be required once all twenty-eight (28) are installed.
- (c) Compliance with both (a) and (b) of this condition shall make this modification to the tire manufacturing operation not subject to the requirements of 326 IAC 2-2, Prevention of Significant Deterioration.

D.3.2 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the facility described in this section except when otherwise

specified in 40 CFR Part 60, Subpart BBB.

D.3.3 Rubber Tire Manufacturing Industry NSPS [326 IAC 12-1-1] [40 CFR 60, Subpart BBB]

This facility is subject to 40 CFR 60, Subpart BBB, which is incorporated by reference in 326 IAC 12-1-1.

- (a) For the tread end cementing operation, the Permittee shall discharge into the atmosphere no more than 10 grams of volatile organic compounds (VOC) per tire (g/tire) cemented for each month.
- (b) For the green tire spraying operation using water-based sprays,
 - (1) the Permittee shall discharge into the atmosphere no more than 1.2 grams of VOC per tire sprayed with an inside green tire spray for each month; and
 - (2) the Permittee shall discharge into the atmosphere no more than 9.3 grams of VOC per tire sprayed with an outside green tire spray for each month.

D.3.4 General Provisions Relating to HAPs [326 IAC 20-1][40 CFR Part 63, Subpart A] [40 CFR Part 63.5980, Subpart XXXX]

The provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the affected source, except when otherwise specified by 40 CFR Part 63, Subpart XXXX. The Permittee must comply with these requirements no later than July 11, 2005.

D.3.5 National Emission Standards for Hazardous Air Pollutants for Rubber Tire Manufacturing [40 CFR Part 63, Subpart XXXX] [40 CFR 63.5980] through [40 CFR 63.6015]

The provisions of 40 CFR Part 63, Subpart XXXX (National Emission Standards for Hazardous Air Pollutants for Rubber Tire Manufacturing) apply to the affected source. A copy of this rule is available on the US EPA Air Toxics Website. Pursuant to 40 CFR 63.5983(b), the Permittee must comply with these requirements no later than July 11, 2005.

D.3.6 HAPs Emissions Limit (National Emission Standards for Hazardous Air Pollutants for Rubber Tire Manufacturing [40 CFR Part 63, Subpart XXXX])

Pursuant to Part 63.5984, the Permittee must comply with the following emission limitations in Subpart XXXX as follows:

	Pollutant	Limitations
Option 1	Selected HAPs in Table 16	1,000 grams per megagram (2 lbs/ton) of the total cements and solvents used
	All other HAPs	10,000 grams per megagram (20 lbs/ton) of the total cements and solvents used

D.3.7 Particulate Matter Limitation (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the green tire spraying and the tread end cementer shall be limited by the following:
 Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and}$$

$$P = \text{process weight rate in tons per hour}$$

D.3.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.3.9 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within sixty day (60) days after achieving maximum production rate at which all twenty-eight (28) tire curing presses permitted under SPM 003-21271-00008 will be operated but no later than 180 days after their initial start up the Permittee shall conduct a performance test to verify the capture system and VOC emission reduction from the Tread End Cementers controlled by either one of the four (4) process boilers utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

D.3.10 Particulate Matter (PM)

Pursuant to 326 IAC 6-3-2(c), the particulate for PM control shall be in operation at all times when the tread end cementing or the green tire spraying is in operation.

D.3.11 Volatile Organic Compounds (VOC)

The Permittee shall operate either one of the four boilers to control the Tread End Cementers at all times once all twenty-eight (28) curing presses have been installed in order to achieve compliance with condition D.3.1.

Compliance Monitoring Requirements

D.3.12 Boilers Operating Temperature

- (a) A continuous monitoring system shall be calibrated, maintained, and operated for measuring operating temperature of either one of the four boilers used to control emissions from the Tread End Cementers once all twenty-eight (28) presses are started. For the purpose of this condition, continuous means no less than once per minute. The output of this system shall be recorded as a three (3) hour average. From the date of initial start-up of the last two (2) curing presses until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Part 70 Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports whenever the three (3) hour average temperature of the boiler used to control emissions from the Tread End Cementers is below 1200 °F until a temperature is established during the latest stack test. A three (3) hour average temperature that is below 1200 °F until a temperature is established during the latest stack test is not a deviation from this permit. Failure to take response steps in accordance with Part 70 Section C – Preparation, Implementation, Records, and Reports shall be considered a deviation from this permit.
- (a) A continuous monitoring system shall be calibrated, maintained, and operated for measuring operating temperature of either one of the four boilers used to control emissions from the Tread End Cementers once the last two presses are started. For the purpose of this condition, continuous means no less than once per minute. The output of this system shall be recorded as a three (3) hour average. From the date of initial start-up of the last two presses until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Part 70 Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports whenever the three (3) hour average temperature of the boiler used to control emissions from the Tread End Cementers is below 1200 °F until a temperature is established during the latest stack test. A three (3) hour average temperature that is below 1200 °F until a temperature is established during the latest stack test is not a deviation from this permit. Failure to take response steps in accordance with Part 70 Section C – Preparation, Implementation,

Records, and Reports shall be considered a deviation from this permit.

- (b) The Permittee shall determine the three (3) hour average temperature from the most recent valid stack test that demonstrates compliance with the VOC emission reduction in Condition D.3.1(a), as approved by IDEM. This temperature shall be used for compliance with D.3.12(a).
- (c) On and after the date the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports whenever the 3-hour average temperature of either of the four boilers used is below the three (3) hour average temperature as observed during the compliant stack test. A three (3) hour average temperature that is below the three (3) hour average temperature as observed during the compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.

D.3.13 Parametric Monitoring

- (a) The Permittee shall determine the appropriate capture system monitoring parameter and value (duct pressure, fan amperage, or air flow) from the most recent performance test that demonstrates compliance with the VOC emission reduction from the Tread End Cementer in Condition D.3.1(a), as approved by IDEM.
- (b) The established capture system monitoring parameter and value (duct pressure, fan amperage, or air flow) shall be observed at least once per day when any of the Tread End Cementers is in operation. On and after the date the approved compliance demonstration results are available, the capture system monitoring parameter shall be maintained within the normal range as established in most recent performance test.

D.3.14 HAPs Emissions Limits (National Emission Standards for Hazardous Air Pollutants for Rubber Tire Manufacturing [40 CFR Part 63, Subpart XXXX])

- (a) Pursuant to Part 63.5985(b), the Permittee shall demonstrate compliance with the HAPs emissions limitation in condition D.3.6 within 30 days of the end of each month using "monthly average alternative without an add-on control device using the following methodologies:
 - (1) Determine the mass percent of HAP in cements and solvents, using EPA Method 311 of appendix A of this part, an approved alternative method, or any other reasonable means for determining the HAP content of the cements and solvents. Other reasonable means include, but are not limited to: a material safety data sheet (MSDS), provided it contains appropriate information; a certified product data sheet (CPDS); or a manufacturer's hazardous air pollutant data sheet. The Permittee is not required to test the materials being used, but the EPA and IDEM may require a test using EPA Method 311 (or an approved alternative method) to confirm the reported HAP content. If the results of an analysis by EPA Method 311 are different from the HAP content determined by another means, the EPA Method 311 results will govern compliance determinations.
 - (2) Using the equation below to demonstrate initial and continuous compliance with the emission limits using the monthly average compliance alternatives described in § 63.5985(b).
 - (A) Determine the mass percent of each HAP in each cement and solvent according to the procedures in section (a)(1) of this condition.
 - (B) Use equation below to calculate the HAP emission rate for each monthly operating period when complying by using cements and solvents without

an add-on control device. This calculated HAP emission rate shall not exceed the HAP emission limits in Condition D.3.6.

$$E_{\text{month}} = \frac{\sum_{i=1}^n (\text{HAP}_i \text{ TMASS}_i)(10^6)}{\sum_{i=1}^n \text{TMASS}_i}$$

Where:

- E_{month} = mass of the specific HAP emitted per total mass cements and solvents from all cements and solvents used in tire production per month, grams per megagram.
- HAP_i = mass percent, expressed as a decimal, of the specific HAP in cement and solvent i , as purchased, determined in accordance with paragraph (a) of this section.
- TMASS_i = total mass of cement and solvent i used in the month, grams.
- N = number of cements and solvents used in the month.

D.3.15 Compliance Provisions NSPS [326 IAC 12-1-1] [40 CFR 60, Subpart BBB]

- (a) To determine compliance with Condition D.3.2, the Permittee shall:
- (1) Determine the density and weight fraction VOC as specified under §60.543(c)(1).
 - (2) Calculate the total mass of VOC used at the affected facility for the month (M_0) as specified under §60.543(c)(2).
 - (3) Determine the total number of tires cemented at the affected facility for the month (T_0) by the following procedure:
 - (A) For a tread end cementing operation, T_0 equals the number of tread or combined tread/sidewall components that receive an application of tread end cement for the month.
 - (4) Calculate the mass of VOC used per tire cemented at the affected facility for the month (G):
 $G = M_0 / T_0$
 - (5) Calculate the mass of VOC emitted per tire cemented at the affected facility for the month (N):
 $N = G$
- (b) To determine compliance with Condition D.3.3 (b), the Permittee shall submit formulation data or the results of Method 24 analysis to verify the VOC content of each green tire spray material, provided the spraying formulation has not changed during the previous 12 months. If the spray material changes, formulation data or Method 24 analysis of the new spray shall be conducted to determine the VOC content of the spray and reported within 30 days as required under §60.546(j).
- (c) In determining compliance of each tread end cementing operation, the Permittee shall include only those tires defined under §60.541(a) when determining T_0 and B_0 .

Record Keeping and Reporting Requirements[326 IAC 2-7-5(3)] [326 IAC 2-7-19] [40 CFR 60, Subpart BBB]

D. 3.16 Record Keeping Requirements

- (a) To document compliance with Conditions D.3.3(a), the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.3.3(a).
 - (1) The amount of VOC content of the cement used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The cleanup solvent usage for each year;
 - (4) The total VOC usage for each month; and
 - (5) The weight of VOC emitted for each compliance period.

- (b) To document compliance with Condition D.3.1, the Permittee shall maintain records in accordance with (1) and (2) below. Records maintained for (1) and (2) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC emissions limit in Condition D.3.1.
 - (1) The continuous temperature records (reduced to a three-hour average basis) from any of the four boilers that controls the VOC emissions from the Tread End Cementers and the three (3) hour average temperature used to demonstrate compliance during the most recent compliant stack test.
 - (2) Daily record of the duct pressure, fan amperage, or air flow.

- (c) To document compliance with Condition D.3.6, as required by 40 CFR Part 63, Subpart XXXX, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the HAP emissions limits in Condition D.3.6.
 - (1) A record of Method 311, or approved alternative method, test results, indicating the mass percent of each HAP for each cement and solvent, as purchased.
 - (2) The mass of each cement and solvent used each monthly operating period.
 - (3) All data and calculations used to determine the monthly average mass percent for each HAP for each monthly operating period.
 - (4) Monthly averages of emissions in grams per megagram (gr/Mg) or pounds per ton (lbs/ton).
 - (5) Record each instance, based on monthly average in which the emission limit was not met.

- (d) To document compliance with D.3.15(b), the Permittee shall maintain an MSDS record or the results of Method 24 analysis conducted to verify the VOC content of the spray on

site.

- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.17 Reporting Requirements

- (a) A semi-annual summary of the information to document compliance with Condition D.3.3 concerning tread end cementing shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) months being reported.
- (b) An annual summary of the information used to document compliance with Condition D.3.15(b) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the year being reported.
- (c) Pursuant to Part 63.6004, the Permittee must also report each instance, based on monthly average in which the emission limit was not met. This report shall be submitted semiannual as required in Part 63.6010(e) to the address listed in Section C - General Reporting Requirements, of this permit within thirty (30) days after the end of the period being reported.

**Indiana Department of Environmental Management
Office of Air Quality**

**Technical Support Document (TSD) for a Part 70 Significant Source
Modification and Significant Permit Modification**

Source Background and Description

Source Name:	BF Goodrich Tire Manufacturing
Source Location:	US Highway 24 East, Woodburn, Indiana 46797
County:	Allen
SIC Code:	3011
Operation Permit No.:	T 003-5974-00008
Operation Permit Issuance Date:	December 28, 1999
Significant Source Modification No.:	003-20073-00008
Significant Permit Modification No.:	003-21271-00008
Permit Reviewer:	Aida De Guzman

The Office of Air Quality (OAQ) has reviewed a modification application from BF Goodrich Tire Manufacturing relating to the construction and operation of the following emission units:

- (a) Twenty-eight (28) tire curing presses: twenty-five (25) 53 inch-type presses, each with a maximum output capacity of 1,428 tons per year; and three (3) 43 inch-type presses, each with a maximum output capacity of 1,110.6 tons per year.

These additional presses will increase the capacity of the tire curing process from 35,400 pounds per hour to 41,332 pounds per hour. These presses will also increase the utilization from the following emission units:

- (1) One (1) carbon black unloading area, from a maximum capacity of 7621 pounds per hour to 16,533 pounds per hour, using a baghouse as control, exhausting at stacks 356 A - D;
- (2) One (1) Banbury mixing area, from a maximum capacity of 27,146 pounds of rubber, carbon black, and chemicals per hour, to 41,057 pounds per hour, using a baghouse as control, exhausting at stacks 200, 208, 210, 231 and 278;
- (3) One (1) component preparation area, which includes milling, extruding, and calendering from a maximum capacity of 35,400 pounds per hour, to 40,064 pounds per hour, using no control, exhausting at stacks 168, 171, 173, 174, 176, 178, 186, 187, 254, 255, 311, 315, 318, 319, 320, 322, 323, 324, 325, 326, 327, 328, 329, 330, and 355;
- (5) One (1) tire building area, from a maximum capacity of 35,400 pound per hour, to 41,332 pounds per hour, using no control, exhausting at stacks 301-309, 312, and 313;

- (6) One (1) WSW grinding and TUO Module Area, from a maximum capacity of 28,378 pounds per hour, to 42,757 pounds per hour using centrifugal separators as control, exhausting at stacks 258-261, and 265-277,
 - (7) One (1) tread end cementing process consisting of lines #1 and #2, from a production capacity of 2,081 tires per hour, using particulate baffle filters, exhausting at stacks 158, and 159. VOC emissions will be controlled by either one of the four (4) process boilers.
 - (8) Insignificant Activities: One (1) green tire spray operation, from a maximum capacity of 35,400 pound per hour to 41,332 pounds per hour, using particulate baffle filters, exhausting at stacks 130, 132, 145, 262, 263, 264, 279, and 280.
- (b) The source also requested a change in the pressure drop range for the banbury mixing, BB dump and pellet feed and banbury mixing carbon black tank as follows:

Operation	Exhaust ID	Current Permit	Amendment Request
Banbury #1 (mixing)	200	4.0-8.0	1.0-5.0
Banbury #2 (dump)	108	4.0-8.0	1.0-5.0
Banbury #3 (pellet feed)	210	2.0-8.0	1.0-5.0
Carbon Black Tank	356A	6.0-8.0	0.0-3.0
	356B	6.0-8.0	0.0-3.0
	356C	6.0-8.0	0.0-3.0
	356D	6.0-8.0	0.0-3.0

History

On May 20, 2004, BF Goodrich Manufacturing submitted an application requesting a change in the monitoring requirements for the carbon black tank and the banbury Mixing, BB dump and pellet feed for banbury mixing. On November 4, 2004, another application for the construction and operation of 28 curing presses was submitted.

Enforcement

- (a) IDEM is aware that nineteen (19) from the twenty-eight (28) tire curing presses were constructed and operated between January 2003 and October 2004 without proper permit. The three (3) from the twenty-eight (28) tire curing presses were constructed and operated between June 2001 and October 2004 without proper permit.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification and Significant Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on May 20, 2004, and November 4, 2004. Additional information was received on May 12, 2005, May 17, 2005, May 18, 2005; and May 19, 2005.

Emission Calculations

Detailed emission calculation was claimed confidential.

Potential to Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	6.7
PM-10	6.1
SO ₂	30.3
VOC	54.3
CO	2.3
NO _x	7.1

HAP's	Potential To Emit (tons/year)
Lead	0.002
TOTAL	0.002

Justification for Modification

- (a) The Part 70 source is being modified through a Part 70 Significant Source Modification, pursuant to 326 IAC 2-7-10.5(f), since the PTE for volatile organic compound (VOC) is greater than or equal to 25 tons per year.
- (b) The Part 70 Operating permit is being modified through a Part 70 Significant Permit Modification, pursuant to 326 IAC 2-7-12(d), as additional applicable requirements will be added in the Part 70 permit which does not qualify as an administrative amendment or minor permit modification.

County Attainment Status

The source is located in Allen County.

Pollutant	Status
PM2.5	Attainment
PM/PM10	Attainment
SO ₂	Attainment
NO ₂	Attainment
8-hour Ozone	Nonattainment
CO	Attainment
Lead	Not determined

- (a) Allen County has been classified as unclassifiable or attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.
- (b) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone standards. Allen County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements of 326 IAC 2-3, Emission Offset.
- (c) Allen County has been classified as attainment for all the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD).

Source Status

Existing Source PSD or Emission Offset Definition (using the PTE information in the Part 70 permit 003-5974-00008. Note: No source modification has been issued to the source since the Part 70 was issued).

Pollutant	Emissions (tons/year)
PM	greater than 250
PM-10	greater than 250
SO ₂	greater than 250
VOC	*329.4
CO	less than 100
NOx	greater than 100, less than 250

* -the sum of 249 tons/yr + 80.4 tons per year from tread end cement

- (a) This existing source is a major stationary source for VOC or NOx under 326 IAC 2-3, Emission Offset rules, as these pollutants are emitted at a rate of 100 tons per year or more each.
- (b) This existing source is a major stationary source for PM, PM10, and SO2 under 326 IAC 2-2, Prevention of Significant Deterioration (PSD) rules, as these pollutants are emitted at a rate of 250 tons per year or more each, and it is not one of the 28 listed source categories.

Potential To Emit After Issuance of Permit

The table below summarizes the potential to emit of emission units involved in this modification project, reflecting all limits of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 source modification and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/facility	Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Modification – 28 curing presses	6.7	6.1	30.3	54.3	2.3	7.1	0.002
Contemporaneous Increases	-	-	-	-	-	-	-
Contemporaneous Decreases	1.7	1.6	20.1	15.2	2.0	4.7	0.001
Net Emission Increase	5.0	4.5	10.2	39.1	0.3	2.4	0.001
PSD Significant Levels	25	15	40	40	250	40	-

(a) Since twenty-two (22) curing tire presses were constructed prior to the New Source Reform rules of September 2004, it has been decided that this modification, which includes six (6) new curing tire presses will be subject to the **PSD rules** in place during the time the twenty-two presses were constructed.

(b) Since the modification is major (>40 tons/year), evaluation of the 5-year contemporaneous emissions increases and decreases will be made. Contemporaneous emission changes (increases and decreases) are based on actual emissions as stated in the New Source Review Manual Chapter III.B.2:

Contemporaneous Period - 5 years before the construction is expected on the proposed modification (between August 2000 to August 2005)

Contemporaneous decreases were from the removal of twenty-two permitted tire curing presses (based on 2003 and 2004 actual production). Fourteen presses were shutdown on January 31, 2005. The remaining eight (8) presses will be removed as the first four (4) of the new six (6) presses are installed.

In addition to the removal of the twenty-two tire curing presses, the Tread End Cementers VOC emissions will be ducted to the process boilers for destruction in order to reduce the VOC emission by 2 tons per year (actual reduction will most likely be much larger than 2 tons/yr. The exact reduction will be validated through stack testing. This ducting will only be required if the last two presses are installed.

The tire manufacturing operation was not limited in the past to avoid PSD review. Therefore, this modification will not violate 326 IAC 2-2-8(3).

(c) This modification to an existing major source is not major under 326 IAC 2-2 because no pollutant has an emission increase at significant level. Therefore, the modification is not subject to major NSR review.

Federal Rule Applicability

(a) New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60).

(1) 40 CFR § 60.540, Subpart BBB – Rubber Tire Manufacturing Industry
 This rule is applicable to each of the following affected facilities in rubber tire manufacturing plants that commenced construction, modification, or

reconstruction after January 20, 1983; each undertread cementing operation, each sidewall cementing operation, each tread end cementing operation, each bead cementing operation, each green tire spraying operation, each Michelin-A operation, each Michelin-B operation, each Michelin-C automatic operation.

The source's tread end cementing operation, green tire spraying operation were already determined to be subject to this rule. However, the twenty-eight tire curing presses are not subject to this rule, as they are not one of the listed operations subject to 40 CFR § 60.540, Subpart BBB.

The source is already subject to this NSPS for the above mentioned operations.

- (2) There are no other New Source Performance Standards included in this permit for this modification.
- (b) National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 40 CFR Part 63). This rule applies to a rubber tire manufacturing facility that is located at, or is a part of a major source of hazardous air pollutant (HAP). BF Goodrich is subject to this rule as it is a rubber tire manufacturing and a major source of HAPs.
- (1) The following are affected sources [40 CFR 63.5982(b)]:
- Tire production affected source – collection of all processes that use or process cements and solvents as defined in 40 CFR 63.6015, located at any rubber tire manufacturing facility. It includes, but is not limited to:
 - Storage and mixing vessels and the transfer equipment containing cements and/or solvents;
 - Wastewater handling and treatment operations;
 - Tread and cement operations;
 - Tire painting operations;
 - Ink and finish operations;
 - Undertread cement operations;
 - Process equipment cleaning materials;
 - Bead cementing operations;
 - Tire building operations;
 - Green tire spray operations;
 - Extruding, to the extent cements and solvents are used;
 - Cement house operations;
 - Marking operations;
 - Calendar operations, to the extent solvents are used;
 - Tire striping operations;
 - Tire repair operations;
 - Slab dip operations;
 - Other tire building operations to the extent that cements and solvents are used; and
 - Balance pad operations.
 - Tire cord production affected source – collection of all processes engaged in the production of tire cord. It includes, but is not limited to:
 - Dipping operations;
 - Drying ovens;
 - Heatset ovens;
 - Bulk storage tanks;
 - Mixing facilities;
 - General facility vents;
 - Air pollution control devices; and
 - Warehouse storage vents.

- Puncture sealant application affected source – the puncture sealant application booth operation used to apply puncture sealant to finished tires.
- Rubber processing affected source – collection of all rubber mixing processes (e.g., banburys and associated drop mills) that either mix compounds or warm rubber compound before the compound is processed into components of rubber tires. The mixed rubber compound itself is also included in the rubber processing affected source [Note: there are no emission limitations or other requirements for the rubber processing affected source].

Cements and solvents – the collection of all organic chemicals, mixtures of chemicals, and compounds used in the production of rubber tires, including cements, solvents, and mixtures used as process aids. They include but are not limited to [40 CFR 63.6015]:

- Tread end cements;
- Undertread cements;
- Bead cements;
- Tire building cements and solvents;
- Green tire spray;
- Blemish repair paints;
- Side wall protective paints;
- Marking inks;
- Materials used to process equipment; and
- Slab dip mixtures.

Cements and solvents do not include coatings or process aids used in tire cord production, puncture sealant application, rubber processing, or materials used to construct, repair or maintain process equipment or chemicals and compounds that are not used in the tire production process.

The compliance date for an existing affected source (BF Goodrich is an affected source), is July 11, 2005.

Emission Limitations:

Pursuant to Part 63.5984 an affected source must comply with the emission limitations in Tables 1 through 3 of Subpart XXXX. BF Goodrich chose to be limited under Option 1 in Table 1 for selected HAPs emissions listed on Table 16 of Subpart XXXX. BF Goodrich will be limited as follows:

	Pollutant	Limitations
Option 1	Selected HAPs in Table 16	1,000 grams per megagram (2 lbs/ton) of the total cements and solvents used
	All other HAPs	10,000 grams per megagram (20 lbs/ton) of the total cements and solvents used

Compliance Requirements:

Pursuant to Part 63.5985(b), to comply with the above limits, BF Goodrich chose “monthly average alternative, without using an add-on control device”. Use cements and solvents in such a way that the monthly average HAP emissions do not exceed the emission limits in Option 1.

- (a) Initial Compliance Demonstration:

The following are the methods for initial compliance with the emission limits:

(1) *Methods to determine the mass percent of HAP in cements and solvents.*

To determine the HAP content in the cements and solvents usage in the tire production, use EPA Method 311 of appendix A of this part, an approved alternative method, or any other reasonable means for determining the HAP content of the cements and solvents. Other reasonable means include, but are not limited to: a material safety data sheet (MSDS), provided it contains appropriate information; a certified product data sheet (CPDS); or a manufacturer's hazardous air pollutant data sheet. The Permittee is not required to test the materials being used, but EPA and IDEM may require a test using EPA Method 311 (or an approved alternative method) to confirm the reported HAP content. If the results of an analysis by EPA Method 311 are different from the HAP content determined by another means, the EPA Method 311 results will govern compliance determinations.

(2) *Methods to demonstrate compliance with the HAP constituent emission limits in Table 1 to this subpart (option 1).*

Using the equation below to demonstrate initial and continuous compliance with the emission limits for tire production affected sources using the monthly average compliance alternatives described in § 63.5985(b).

- (A) Determine the mass percent of each HAP in each cement and solvent according to the procedures in paragraph (1).
- (B) Using the following equation to calculate the HAP emission rate for each monthly operating period when complying by using cements and solvents without an add-on control device so that the monthly average HAP emissions do not exceed the HAP constituent emission limits in Table 1 to this subpart, option 1:

$$E_{\text{month}} = \frac{\sum_{i=1}^n (\text{HAP}_i \text{ TMASS}_i)}{\sum_{i=1}^n \text{TMASS}_i} (10^6) \quad (\text{Eq. 1})$$

Where:

E_{month} = mass of the specific HAP emitted per total mass cements and solvents from all cements and solvents used in tire production per month, grams per megagram.

HAP_i = mass percent, expressed as a decimal, of the specific HAP in cement and solvent i , as purchased, determined in accordance with paragraph (1).

TMASS_i = total mass of cement and solvent i used in the

month, grams.

N = number of cements and solvents used in the month.

- (b) Continuous Compliance Demonstration:
- (1) The Permittee must demonstrate that the monthly average HAP emissions for each monthly operating period do not exceed the emission limits, determined in procedures in Part 63.5994(a) and (b)(2).
 - (2) The Permittee must also report each instance in which an emission limit was not met. These instances are deviations from the emission limits in this subpart. The deviations must be reported in accordance with the requirements in § 63.6010(e).
- (c) Record Keeping Requirements:
The following records must be kept to show continuous compliance with the emission limits:
- (1) A record of Method 311, or approved alternative method, test results, indicating the mass percent of each HAP for each cement and solvent, as purchased.
 - (2) The mass of each cement and solvent used each monthly operating period.
 - (3) All data and calculations used to determine the monthly average mass percent for each HAP for each monthly operating period.
 - (4) Monthly averages of emissions in the appropriate emission limit format.

Pursuant to Part 63.6012, records must be kept for five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

The records must be kept on site for two (2) years after each occurrences, measurements, maintenance corrective action, report, or record. The records can be kept offsite for the remaining 3 years.

- (2) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 40 CFR Part 63) included for this proposed modification.

State Rule Applicability –Entire Source

- (a) 326 IAC 2-3 (Emission Offset)
The existing source is an existing major source, as it emits VOC and NOx greater than 100 tons per year.
- (b) 326 IAC 2-2 (Prevention of Significant Deterioration)
It has been decided that this modification will be reviewed under 326 IAC 2-2, since the curing presses were constructed and operated without proper permit before the new NSR Reform of September 2004 has been promulgated. This modification is not major under 326 IAC 2-2, since the VOC net emission increase is less than 40 tons per year.

- (c) 326 IAC 5-1 (Opacity Limitations)
 Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in the permit:
- (1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

- (a) 326 IAC 8-5-4 (Pneumatic Tire Manufacturing)
 This rule is not applicable to the source, as this rule only applies to sources located in Clark, Elkhart, Floyd, Lake, Marion, porter, and St. Joseph Counties.
- (b) 326 IAC 8-1-6 (New Facilities: General Reduction Requirements)
 This rule applies to new facilities as of January 1, 1980, which have potential VOC emissions of 25 tons per year or more, located anywhere in the state, which are not otherwise regulated by other provisions of article 326 IAC 8.

This rule is not applicable to the twenty-eight tire curing presses, as tire curing press operation is not by itself considered a facility.

- (c) 326 IAC 6-3-2 (Particulate Emission Limitation: Work Practices and Control Technologies)
 On June 12, 2002, revisions to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) became effective; this rule was previously referred to as 326 IAC 6-3 (Process Operations). As of the date this permit is being issued these revisions have not been approved by EPA into the Indiana State Implementation Plan (SIP); therefore, the following requirement from the previous version of 326 IAC 6-3 (Process Operations) which has been approved into the SIP will remain applicable requirement until the revisions to 326 IAC 6-3 are approved into the SIP and the condition is modified in a subsequent permit action.

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the following facilities shall be limited as follows:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

Process	Process Weight Rate		PM Limit (pounds/hour)
	(pounds/hour)	(tons/hour)	
Carbon Black Unloading	16,533	8.27	16.9
Banbury Mixing	41,057	20.5	31.0
WSW Grinding & TUO Module Area	42,757	21.4	31.9

Changes to the Part 70 Permit

The Part 70 Permit will be modified to incorporate the twenty-eight (28) tire curing presses applicable requirements (additions are **bolded** and deletions are ~~struck through~~ for emphasis):

The following General Reporting Condition will be revised since it does not match the reporting schedule in the Report Forms. The Report Form for the "emission limit per tire produced" requires quarterly submittal, Compliance Monitoring Report also requires quarterly submittal and some reports require semiannual.

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a ~~Semiannually~~ **quarterly** Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any semiannual, **quarterly, and monthly** reports shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports. The Emergency/Deviation Occurrence Report does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable

requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a tire manufacturer.

Responsible Official: ~~D. J. Brenner~~ **Tom Whalen**
Source Address: 18906 US Highway 24 East, Woodburn, Indiana 46797
Mailing Address: P.O. Box 277, Woodburn, Indiana 46797-0277
Phone Number: ~~219-493-8117~~ **(260) 493-8100**
SIC Code: 3011
County Location: Allen
County Status: **Nonattainment for 8-Hour Ozone**
Attainment for all other criteria pollutants
Source Status: Part 70 Permit Program
Major Source, under PSD Rules
Major Source, under Emission Offset Rules
Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
[326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) carbon black unloading area, with a maximum capacity of ~~7624~~ **16,533** pounds per hour, using a baghouse as control, exhausting at stacks 356 A - D;
- (b) One (1) Banbury mixing area, with a maximum capacity of ~~27,146~~ **41,057** pounds of rubber, carbon black, and chemicals per hour, using a baghouse as control, exhausting at stacks 200, 208, 210, 231 and 278;

Boiler #4 with a heat input capacity of 105 mmBtu/hr has been removed from operation. Changes on item (c) is as follows:

- (c) ~~Five (5)~~ **Four (4)** natural gas or No. 2/No. 6 fuel oil or fuel oil blend fired boilers, identified as #1 through ~~#5~~ **3 and #5**, with maximum capacities of 52, 52, 52, ~~405~~, and 130 million British thermal units per hour (mmBtu/hr), respectively, using no control, exhausting at stacks 109, 114, 124, and 257;

The following incinerator has been removed from operation. Therefore, it is will be deleted from the permit:

- ~~(d) One (1) natural gas scrap incinerator, with a maximum capacity of 3.0 MM Btu/hr and 2,400 pounds of scrap per hour, using no control, exhausting at stacks 281, 282;~~
- ~~(e)~~ **(d)** One (1) component preparation area, which includes milling, extruding, and calendaring with a maximum capacity of ~~35,400~~ **40,064** pounds per hour, using no control, exhausting at stacks 168, 171, 173, 174, 176, 178, 186, 187, 254, 255, 311, 315, 318, 319, 320, 322, 323, 324, 325, 326, 327, 328, 329, 330, and 355;
- ~~(f)~~ **(e)** One (1) tire building area, with a maximum capacity of ~~35,400~~ **41,332** pound per hour, using no control, exhausting at stacks 301-309, 312, and 313;
- ~~(g)~~ **(f)** One (1) tire curing process, with a maximum capacity of ~~35,400~~ **41,332** pound per hour, using no control, exhausting at stacks 51-58, 60-66, 68, 69, 71, 73, 75, 77, 79, 80, and 82-88;
- ~~(h)~~ **(g)** One (1) WSW grinding and TUO Module Area, with a maximum capacity of ~~28,378~~ **42,757**

pounds per hour, using centrifugal separators as control, exhausting at stacks 258-261, and 265-277,

~~(j)~~ **(h)** One (1) tread end cementing process consisting of lines #1 and #2, with a production capacity of 2,081 tires per hour, using particulate baffle filters, exhausting at stacks 158, and 159. **VOC emissions will be controlled by either one of the four (4) process boilers once all curing presses in this SSM 003-20073-00008 have been installed. The ducting to the boilers will only be required if the last two presses are installed.**

~~(j)~~ **(i)** Miscellaneous solvent usage.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

~~(1)~~ **(a)** Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

~~(2)~~ **(b)** One (1) green tire spray operation, with a maximum capacity of ~~35,400~~ **41,332** pound per hour, using particulate baffle filters, exhausting at stacks 130, 132, 145, 262, 263, 264, 279, and 280.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (a) One (1) carbon black unloading area, with a maximum capacity of ~~7624~~ **16,533** pounds per hour, using a baghouse as control, exhausting at stacks 356 A - D;
- (b) One (1) Banbury mixing area, with a maximum capacity of ~~27,146~~ **41,057** pounds of rubber, carbon black, and chemicals per hour, using a baghouse as control, exhausting at stacks 200, 208, 210, 231, and 278;
- (g) One (1) WSW grinding and TUO Module Area, with a maximum capacity of ~~28,378~~ **42,757** pounds per hour, using centrifugal separators as control, exhausting at stacks 258-261, and 265-277.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter (PM) Limitations [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from:

- (a) Carbon black unloading shall not exceed ~~40.95~~ **16.9** pounds per hour when operating at a process weight rate of ~~7624~~ **16,533** pounds per hour,
- (b) Banbury mixing shall not exceed ~~23.5~~ **31.0** pounds per hour when operating at a process weight rate of ~~27,146~~ **41,057** pounds per hour,
- (c) WSW grinding and TUO Module Area shall not exceed ~~24~~ **31.9** pounds per hour when operating at a process weight rate of ~~28,378~~ **42,757** pounds per hour.

D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for ~~this facility~~ **these facilities** and any control devices.

D.1.3 no change

D.1.4 no change

D.1.5 Monitoring

- (a) The carbon black unloading has applicable compliance monitoring conditions as specified below:
- (1) Daily visible emissions notations of the carbon black unloading stack exhausts, 356A, 356B, 356C, 356D, shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.
 - (2) (Effective June 8, 2001) The Permittee shall perform automatic daily monitoring and recording of the pressure differential readings on the Carbon black tank. This information shall be provided by a PLC/differential pressure transducer based system. The system shall take daily readings of the baghouse pressure drop range and shall be maintained at ~~6.0 to 8.0~~ **1.0 to 3.0** inches of water or a range established during the latest stack test. Any readings outside of this range shall sound an alarm/alert function for immediate response by maintenance personnel to shut the unit down until the situation is remedied.
 - (3) An inspection shall be performed semi-annually of all bags controlling the carbon black unloading operation when venting to the atmosphere. A baghouse inspection shall be performed within six months of redirecting vents to the atmosphere and every six months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.
 - (4) In the event that bag failure has been observed:
 - (A) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
 - (B) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
 - (5) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

- (b) The Banbury mixing, pellet spiraling for Banbury mixing, BB dump and pellet feed for Banbury mixing has applicable compliance monitoring conditions as specified below:
- (1) Daily visible emissions notations of the Banbury mixing, pellet spiraling for Banbury mixing, BB dump and pellet feed for Banbury mixing processes stack exhausts, 200, 208, 210, 231, and 278 shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.
 - (2) (Effective June 8, 2001) The Permittee shall perform automatic daily monitoring and recording of the pressure differential readings on the Banbury mixers ~~and BB dump, and Pellet feed~~. This information shall be provided by a PLC/differential pressure transducer based system. The system shall take daily readings of the baghouses pressure drop ranges and shall be maintained at ~~4.0 to 8.0, and 2.0 to 8.0~~ **1.0 to 5.0** inches of water or ranges established during the latest stack test. Any readings outside of this range will sound an alarm/alert function for immediate response by maintenance personnel to shut the unit down until the situation is remedied.
 - (3) An inspection shall be performed semi-annually of all bags controlling the mixing operation when venting to the atmosphere. A baghouse inspection shall be performed within six months of redirecting vents to the atmosphere and every six months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced
 - (4) In the event that bag failure has been observed:
 - (A) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
 - (B) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
 - (5) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.
- (c) The WSW grinding and TUO Module Area have applicable compliance monitoring conditions as specified below:
- (1) Daily visible emissions notations of the WSW grinding and TUO Module Area and Quality assurance processes stack exhausts, 258-261, and 265-277, and 33 and

37, shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

- (2) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

D.1.6 no change

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

~~Five (5)~~ **Four (4)** natural gas / No. 6/No. 2 fuel oil blend fired boilers, identified as #1 through ~~#5~~ **3 and #5**, with maximum capacities of 52, 52, 52, ~~405~~, and 130 million British thermal units per hour (mmBtu/hr), respectively, using no control, exhausting at stacks 109, 114, 124, and 257.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Sulfur Dioxide (SO₂) Emissions Limitations [326 IAC 7-1.1]

Pursuant to 326 IAC 7-1.1 (SO₂ Emissions Limitations) the SO₂ emissions from the ~~five (5)~~ **four (4)** natural gas or No. 6/No. 2 fuel oil fired boilers, identified as #1 through ~~#5~~ **3 and #5**, with maximum capacities of 52, 52, 52, ~~405~~ and 130 million British thermal units per hour (mmBtu/hr), respectively, using no control, exhausting at stacks 109, 114, 124, and 257 shall each not exceed:

- (a) one and six tenths (1.6) pounds per MMBtu heat input when combusting No. 6 fuel oil, or
- (b) five tenths (0.5) pounds per MMBtu heat input when combusting No. 2 fuel oil.

D.2.2 PM Emissions Limitations [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3, the particulate matter (PM) from the boilers, identified as #1 through ~~#5~~ **3 and #5**, shall be limited by the following:

$Pt = C \times a \times h / 76.5 \times Q^{0.75} \times N^{0.25}$ where Pt = pounds of particulate matter emitted per MMBtu

- (a) Each Boiler #1, #2, or #3, ~~or #4~~ shall not exceed 0.61 pounds of PM per MM Btu, and
- (b) Boiler #5 shall not exceed 0.45 pounds of PM per MM Btu.

Compliance Determination Requirements

D.2.3 no change

D.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

- ~~(a)~~ Within sixty days of the completed rebuild of Boiler #5, stack testing for opacity when burning No. 6 fuel oil shall be performed. Compliance shall be determined by a performance stack test conducted in accordance with Section C - Performance Testing. The Permittee shall perform opacity testing utilizing Method 9 (40 CFR 60, Appendix A),

or other methods as approved by the Commissioner. The opacity testing shall be repeated at least once every two and one half (2 1/2) years from the date of this valid compliance demonstration.

Boiler #4 has been removed from operation. Therefore, applicable requirements for this boiler will be deleted as follows.

- ~~(b) Within thirty days of the completed rebuild of Boiler #4, compliance with the opacity limitation in Condition C.2 shall be determined by a performance stack test conducted in accordance with Section C – Performance Testing. The Permittee shall perform opacity testing utilizing Method 9 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner. The opacity testing shall be repeated at least once every two and one half (2 1/2) years from the date of this valid compliance demonstration.~~

D.2.5 Sulfur Dioxide Emissions and Sulfur Content

Compliance shall be determined utilizing one of the following options:

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the fuel oil sulfur content does not exceed one and five tenths percent (1.5%) by weight by:
- (1) Providing vendor analysis of fuel delivered, if accompanied by a certification;
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the four boilers #1 through #53 and #5, using 40 CFR 60, Appendix A, Method 8 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.6 no change

Record Keeping Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.7 no change

The following incinerator has been removed from operation. Therefore, SECTION D.3 will be deleted from the permit.

~~SECTION D.3 FACILITY OPERATION CONDITIONS~~

~~Facility Description [326 IAC 2-7-5(15)]~~

~~One (1) natural gas scrap incinerator, with a maximum capacity of 3 MM Btu/hr, burning 1,568 pounds of scrap per hour, using no control, exhausting at stacks 281, 282.~~

~~Emission Limitations and Standards [326 IAC 2-7-5(1)]~~

~~D.3.1 Incinerator [326 IAC 4-2-2]~~

~~Pursuant to 326 IAC 4-2-2 (Incinerators), this natural gas incinerator, rated at 3 MM Btu/hr shall:~~

- ~~(a) — Consist of primary and secondary chambers or the equivalent.~~
- ~~(b) — Be equipped with a primary burner unless burning wood products.~~
- ~~(c) — Comply with 326 IAC 5-1 (Opacity Limitations) and 326 IAC 2 (Permit Review Rules).~~
- ~~(d) — Be maintained properly as specified by the manufacturer and approved by IDEM.~~
- ~~(e) — Be operated according to the manufacturer's recommendation and only burn waste approved by the IDEM.~~
- ~~(f) — Comply with other state and/or local rules or ordinances regarding installation and operation of incinerators.~~
- ~~(g) — Be operated so that emissions of hazardous material including, but not limited to, viable pathogenic bacteria, dangerous chemical or gases, or noxious odors are prevented.~~
- ~~(h) — Not create a nuisance or a fire hazard.~~
- ~~(i) — Not emit particulate matter (PM) in excess of 0.3 pounds per 1000 pounds of dry exhaust gas corrected to 50% excess air.~~

The operation of this incinerator shall be terminated immediately upon noncompliance with any of the above mentioned requirements.

Compliance Determination Requirements

~~D.3.2 Testing Requirements [326 IAC 2-7-6(1),(6)]~~

~~The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the particulate matter limit specified in Condition D.3.1 (i) shall be determined by a performance test conducted in accordance with Section C — Performance Testing.~~

SECTION D.4 and SECTION D.5 will be combined as one section and be re-numbered to SECTION D.3 since applicable requirements for modifications (SSM 003-20073-00008 & SPM 003-21271-00008) applies for the emissions units of both sections.

~~SECTION D.4~~ D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- ~~(a)~~ **(d)** One (1) component preparation area, which includes milling, extruding, and calendering with a maximum capacity of ~~35,400~~ **40,064** pounds per hour, using no control, exhausting at stacks 168, 171, 173, 174, 176, 178, 186, 254, 255, 318, 319, 322, 323, 325, 326, 327, 329, 330, 355, 311, 315, 320, 324, and 328;
- ~~(b)~~ **(e)** One (1) tire building area, with a maximum capacity of ~~35,400~~ **41,332** pound per hour, using no control, exhausting at stacks 301-309, 312, and 313;
- ~~(d)~~ **(f)** One (1) tire curing process, with a maximum capacity of ~~35,400~~ **41,332** pound per hour, using no control, exhausting at stacks 51-58, 60-66, 68, 69, 71, 73, 75, 77, 79, 80, and 82-88;
- ~~(a)~~ **(h)** One (1) tread end cementing process, with a maximum capacity of 2,081 tires per hour, using particulate baffles, exhausting at stacks 157, 158, and 159. **VOC emissions will be controlled by either one of the four (4) process boilers once all curing presses in this SSM 003-20073-00008 have been installed.**

~~(j)~~ (i) Miscellaneous solvent usage.

Insignificant Activity

(b) One (1) green tire spray, with a maximum capacity of ~~35,400~~ **41,332** pound per hour, using particulate baffles, exhausting at stacks 130, 132, 145, 262, 263, 264, 279, and 280.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

~~D.4.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR Part 60, Subpart A]
The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 60, Subpart BBB.~~

D.3.1 Minor Modification - Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (a) Pursuant to 326 IAC 2-2, Prevention of Significant Deterioration, twenty-two tire curing presses shall be removed from operation once this modification permitted under SSM 003-20073-00008 has been constructed. Removal of these tire curing presses shall reduced the VOC emissions by 13.3 tons per twelve month period. The shutdown of these curing presses shall be permanent.
- (b) VOC emissions from the Tread End Cementers shall be directed to either one of the four (4) process boilers for destruction in order to achieve a reduction in the VOC emissions by 2 tons per twelve month period. This ducting will only be required if the last two presses are installed.
- (c) Compliance with both (a) and (b) of this condition shall make this modification to the tire manufacturing operation not subject to the requirements of 326 IAC 2-2, Prevention of Significant Deterioration.

~~D.4.4 3.2~~ General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR Part 60, Subpart A]

~~The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 60, Subpart BBB.~~

The statements in Condition D.3.3 “(The source complies by using a cement with 4 grams of VOC per tire), (the source complies by using an inside green tire spray containing 0 grams of VOC per tire.); and (The source complies by using a outside green tire spray containing 0 grams of VOC per tire.)” will be deleted from this condition, as they are not required by the NSPS. The limits are calculated on a monthly basis using equation in Condition D.3.14.

~~D.4.2 3.3~~ Rubber Tire Manufacturing Industry NSPS [326 IAC 12-1-1] [40 CFR 60, Subpart BBB]

~~This facility is subject to 40 CFR 60, Subpart BBB, which is incorporated by reference in 326 IAC 12-1-1. A copy of the rule is attached.~~

- (a) For the tread end cementing operation, the Permittee shall discharge into the atmosphere no more than 10 grams of volatile organic compounds (VOC) per tire (g/tire) cemented for each month. ~~(The source complies by using a cement with 4 grams of VOC per tire.)~~
- (b) For the green tire spraying operation using water-based sprays,
(1) the Permittee shall discharge into the atmosphere no more than 1.2 grams of VOC per tire sprayed with an inside green tire spray for each month ~~(the source complies by using an inside green tire spray containing 0 grams of VOC per tire.);~~ and
(2) the Permittee shall discharge into the atmosphere no more than 9.3 grams of VOC per tire sprayed with an outside green tire spray for each month. ~~(The source complies by using a outside green tire spray containing 0 grams of VOC per tire.)~~

D.3.4 General Provisions Relating to HAPs [326 IAC 20-1][40 CFR Part 63, Subpart A] [40 CFR Part 63.5980, Subpart XXXX]

The provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the affected source, except when otherwise specified by 40 CFR Part 63, Subpart XXXX. The Permittee must comply with these requirements no later than July 11, 2005.

D.3.5 National Emission Standards for Hazardous Air Pollutants for Rubber Tire Manufacturing [40 CFR Part 63, Subpart XXXX] [40 CFR 63.5980] through [40 CFR 63.6015]

The provisions of 40 CFR Part 63, Subpart XXXX (National Emission Standards for Hazardous Air Pollutants for Rubber Tire Manufacturing) apply to the affected source. A copy of this rule is available on the US EPA Air Toxics Website. Pursuant to 40 CFR 63.5983(b), the Permittee must comply with these requirements no later than July 11, 2005.

D.3.6 HAPs Emissions Limit (National Emission Standards for Hazardous Air Pollutants for Rubber Tire Manufacturing [40 CFR Part 63, Subpart XXXX])

Pursuant to Part 63.5984, the Permittee must comply with the following emission limitations in Subpart XXXX as follows:

Option 1	Pollutant	Limitations
	Selected HAPs in Table 16	1,000 grams per megagram (2 lbs/ton) of the total cements and solvents used
All other HAPs	10,000 grams per megagram (20 lbs/ton) of the total cements and solvents used	

D.4.3 3.7 Particulate Matter Limitation (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the green tire spraying and the tread end cementer shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

D.4.4 3.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for ~~this~~ **these facilities** and ~~its~~ **their** control devices.

Compliance Determination Requirements

D.4.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance shall be determined by a performance test conducted in accordance with Section C – Performance Testing.

D.4.5 3.9 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within sixty day (60) days after achieving maximum production rate at which these emission units permitted under SPM 003-21271-00008 will be operated but no later than 180 days after their initial start up the Permittee shall conduct a performance test to verify the capture system and VOC emission reduction from the Tread End Cementers controlled by either one of the four (4) process boilers utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in

accordance with Section C - Performance Testing.

D.3.10 Boilers Operating Temperature

- (a) A continuous monitoring system shall be calibrated, maintained, and operated for measuring operating temperature of either one of the four boilers used to control emissions from the Tread End Cementers. For the purpose of this condition, continuous means no less than once per minute. The output of this system shall be recorded as a three (3) hour average. From the date of issuance of this Significant Permit Modification 003-21271-00008 until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Part 70 Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports whenever the three (3) hour average temperature of the boiler used to control emissions from the Tread End Cementers is below 1200 °F until a temperature is established during the latest stack test. A three (3) hour average temperature that is below 1200 °F until a temperature is established during the latest stack test is not a deviation from this permit. Failure to take response steps in accordance with Part 70 Section C – Preparation, Implementation, Records, and Reports shall be considered a deviation from this permit.
- (b) The Permittee shall determine the three (3) hour average temperature from the most recent valid stack test that demonstrates compliance with the VOC emission reduction in Condition D.3.1(a), as approved by IDEM. This temperature shall be used for compliance with condition D.3.10(a).
- (c) On and after the date the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports whenever the 3-hour average temperature of either of the four boilers used is below the three (3) hour average temperature as observed during the compliant stack test. A three (3) hour average temperature that is below the three (3) hour average temperature as observed during the compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.

D.3.11 Parametric Monitoring

- (a) The Permittee shall determine the appropriate capture system monitoring parameter and value (duct pressure, fan amperage or air flow) from the most recent performance test that demonstrates compliance with the VOC emission reduction from the Tread End Cementer in Condition D.3.1(a), as approved by IDEM.
- (b) The established capture system monitoring parameter and value (duct pressure, fan amperage or air flow) shall be observed at least once per day when any of the Tread End Cementers is in operation. On and after the date the approved compliance demonstration results are available, the capture system monitoring parameter shall be maintained within the normal range as established in most recent performance test.

D.3.12 HAPs Emissions Limits (National Emission Standards for Hazardous Air Pollutants for Rubber Tire Manufacturing [40 CFR Part 63, Subpart XXXX])

- (a) Pursuant to Part 63.5985(b), the Permittee shall demonstrate compliance with the HAPs emissions limitation in condition D.3.6 within 30 days of the end of each month using “monthly average alternative without an add-on control device using the following methodologies:
 - (1) *Determine the mass percent of HAP in cements and solvents, using EPA Method 311 of appendix A of this part, an approved alternative method, or*

any other reasonable means for determining the HAP content of the cements and solvents. Other reasonable means include, but are not limited to: a material safety data sheet (MSDS), provided it contains appropriate information; a certified product data sheet (CPDS); or a manufacturer's hazardous air pollutant data sheet. The Permittee is not required to test the materials being used, but the EPA and IDEM may require a test using EPA Method 311 (or an approved alternative method) to confirm the reported HAP content. If the results of an analysis by EPA Method 311 are different from the HAP content determined by another means, the EPA Method 311 results will govern compliance determinations.

(2) Using the equation below to demonstrate initial and continuous compliance with the emission limits using the monthly average compliance alternatives described in § 63.5985(b).

(A) Determine the mass percent of each HAP in each cement and solvent according to the procedures in section (a)(1) of this condition.

(B) Use equation below to calculate the HAP emission rate for each monthly operating period when complying by using cements and solvents without an add-on control device. This calculated HAP emission rate shall not exceed the HAP emission limits in Condition D.3.6.

$$E_{\text{month}} = \frac{\sum_{i=1}^n (\text{HAP}_i \text{ TMASS}_i)}{\sum_{i=1}^n \text{ TMASS}_i} (10^6)$$

Where:

E_{month} = mass of the specific HAP emitted per total mass cements and solvents from all cements and solvents used in tire production per month, grams per megagram.

HAP_i = mass percent, expressed as a decimal, of the specific HAP in cement and solvent i , as purchased, determined in accordance with paragraph (a) of this section.

TMASS_i = total mass of cement and solvent i used in the month, grams.

N = number of cements and solvents used in the month.

D.4.6-3.13 Particulate Matter (PM)

Pursuant to 326 IAC 6-3-2(c), the particulate for PM control shall be in operation at all times when the tread end cementing or the green tire spraying is in operation.

D.4.7-3.14 Compliance Provisions NSPS [326 IAC 12-1-1] [40 CFR 60, Subpart BBB]

- (a) To determine compliance with Condition D.4.3.2, the Permittee shall:
- (1) Determine the density and weight fraction VOC as specified under §60.543(c)(1).
 - (2) Calculate the total mass of VOC used at the affected facility for the month (M_0) as specified under §60.543(c)(2).
 - (3) Determine the total number of tires cemented at the affected facility for the month

- (T₀) by the following procedure:
- (A) For a tread end cementing operation, T₀ equals the number of tread or combined tread/sidewall components that receive an application of tread end cement for the month.
- (4) Calculate the mass of VOC used per tire cemented at the affected facility for the month (G):
 $G = M_0 / T_0$
- (5) Calculate the mass of VOC emitted per tire cemented at the affected facility for the month (N):
 $N = G$
- (b) To determine compliance with Condition D.3.1 (b), the Permittee shall submit formulation data or the results of Method 24 analysis to verify the VOC content of each green tire spray material, provided the spraying formulation has not changed during the previous 12 months. If the spray material changes, formulation data or Method 24 analysis of the new spray shall be conducted to determine the VOC content of the spray and reported within 30 days as required under §60.546(j).
- (c) In determining compliance of each tread end cementing operation, the Permittee shall include only those tires defined under §60.541(a) when determining T₀ and B₀.

Record Keeping and Reporting Requirements[326 IAC 2-7-5(3)] [326 IAC 2-7-19] [40 CFR 60, Subpart BBB]

D.4.8 3.15 Record Keeping Requirements

- (a) To document compliance with Conditions D.4.2 **3.3(a)**, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.4.2 **3.3(a)**, and ~~D.4.3~~.
- (1) The amount of VOC content of the cement used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
- (2) A log of the dates of use;
- (3) The cleanup solvent usage for each year;
- (4) The total VOC usage for each month; and
- (5) The weight of VOC emitted for each compliance period.
- (b) **To document compliance with Condition D.3.1, the Permittee shall maintain records in accordance with (1) and (2) below. Records maintained for (1) and (2) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC emissions limit in Condition D.3.1.**
- (1) **The continuous temperature records (reduced to a three-hour average basis) from any of the four boilers that controls the VOC emissions from the Tread End Cementers and the three (3) hour average temperature used to demonstrate compliance during the most recent compliant stack test.**
- (2) **Daily record of the duct pressure, or fan amperage.**

- (c) **To document compliance with Condition D.3.6, as required by 40 CFR Part 63, Subpart XXXX, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the HAP emissions limits in Condition D.3.6.**
- (1) **A record of Method 311, or approved alternative method, test results, indicating the mass percent of each HAP for each cement and solvent, as purchased.**
 - (2) **The mass of each cement and solvent used each monthly operating period.**
 - (3) **All data and calculations used to determine the monthly average mass percent for each HAP for each monthly operating period.**
 - (4) **Monthly averages of emissions in grams per megagram (gr/Mg) or pounds per ton (lbs/ton).**
 - (5) **Record each instance, based on monthly average in which the emission limit was not met.**
- (b) (d) To document compliance with D.4.5 3.14(b), the Permittee shall maintain an MSDS record or the results of Method 24 analysis conducted to verify the VOC content of the spray on site.
- (e) (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.4.9 16 Reporting Requirements

- (a) A semi-annual summary of the information to document compliance with Condition D.4.4 3.3 concerning tread end cementing shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) months being reported.
- (b) An annual summary of the information used to document compliance with Condition D.4.5 3.14(b) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the year being reported.
- (c) Pursuant to Part 63.6004, the Permittee must also report each instance, based on monthly average in which the emission limit was not met. This report shall be submitted semiannual as required in Part 63.6010(e) to the address listed in Section C - General Reporting Requirements, of this permit within thirty (30) days after the end of the period being reported.

SECTION D.5 FACILITY CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (a) ~~One (1) component preparation area, which includes milling, extruding, and calendaring with a maximum capacity of 35,400 pounds per hour, using no control, exhausting at stacks 168, 171, 173, 174, 176, 178, 186, 254, 255, 318, 319, 322, 323, 325, 326, 327, 329, 330, 355, 311, 315, 320, 324, and 328;~~
- (b) ~~One (1) tire building area, with a maximum capacity of 35,400 pound per hour, using no control, exhausting at stacks 301-309, 312, and 313;~~
- (c) ~~Miscellaneous solvent usage.~~

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 VOC or PM Limitations

There are no VOC or PM limitations based on the potential emissions in these areas, but any change or modification which may increase the potential emissions from the equipment covered in this permit must be approved by the Office of Air Quality (OAQ) before such change may occur.

Compliance Determination Requirements

D.5.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Condition D.5.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

SECTION D.6 D.4

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Insignificant Activity

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.4.1 Degreaser [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator of the cold cleaning facility shall:

- (a) equip the cleaner with a cover;
- (b) equip the cleaner with a facility for draining cleaned parts;
- (c) close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) provide a permanent, conspicuous label summarizing the operation requirements;
- (f) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

Compliance Determination Requirement

D.6.3 4.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if a facility is in compliance. If testing is required by IDEM, compliance shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate

compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action.

However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Conclusion

The construction and operation of these tire curing presses shall be subject to the conditions of the attached **Part 70 Significant Source Modification No. 003-20073-00008 and Significant Permit Modification No. 003-21271-00008.**

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Part 70 Significant Source Modification and Significant Permit Modification

Source Name: BF Goodrich Tire Manufacturing
Source Location: US Highway 24 East, Woodburn, Indiana 46797
County: Allen
SIC Code: 3011
Operation Permit No.: T 003-5974-00008
Operation Permit Issuance Date: December 28, 1999
Significant Source Modification No: 003-20073-00008
Significant Permit Modification No.: 003-21271-00008
Permit Reviewer: Aida De Guzman

On June 5, 2005, the Office of Air Quality (OAQ) had a notice published in the Fort Wayne Journal Gazette, Fort Wayne, Indiana, stating that BF Goodrich Tire Manufacturing had applied for a Part 70 Significant Source Modification and Significant Permit Modification for the construction of new tire curing presses with twenty-two (22) of these tire curing presses already constructed and operated. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On June 24, 2005, BF Goodrich Tire Manufacturing made the following comments to the proposed Significant Source Modification and Significant Permit Modification (additions are **bolded** and deletions are ~~struck through~~ for emphasis):

Significant Permit Modification #003-21271-00008 comments:

Comment 1: Page 26 of 45 of OP No. T003-5974-00008, item (d):
As written: "(d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance."

Issue Discussion:

The record keeping requirements listed in section D.3.15 (b) cannot be accomplished until the equipment associated with the records has been installed and placed into operation. It will take more than 90 days after the issuance of the permit to install and start-up this equipment.

Proposed Modification:

"(d) All record keeping requirements not already legally required shall be implemented within ninety (90) days **of installation and initial start-up of all equipment included in this permit modification.**"

Response 1: It has been determined that new emissions units required to do record keeping must begin record keeping upon start-up and for existing emission units record keeping must begin within ninety (90) days after permit issuance. Change is as follows:

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

(a) through (c) no change

(d) All record keeping requirements not already legally required shall be implemented **upon installation and initial startup for the new emission units and** within ninety (90) days **of Permit Modification No.:**

**003-21271-00008 issuance for existing emission units of permit
issuance.**

Comment 2: Page 36 of 45 of OP No. T003-5974-00008, item D.3.10(a):
As written: "(a) A continuous monitoring system shall be calibrated, maintained, and operated for measuring operating temperature of either one of the four boilers used to control emissions from the Tread End Cementers. For the purpose of this condition, continuous means no less than once per minute. The output of this system shall be recorded as a three (3) hour average. From the date of issuance of this Significant Permit Modification 003-21271-00008 until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Part 70 Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports whenever the three (3) hour average temperature of the boiler used to control emissions from the Tread End Cementers is below 1200°F until a temperature is established during the latest stack test..."

Issue Discussion:

The continuous monitoring equipment referred to in this paragraph currently does not exist. It will be installed and placed into operation concurrently with the last two curing presses in accordance with Section A.2 (g) second paragraph of the draft permit, page 6 of 45.

Proposed Modification:

"(a) A continuous monitoring system shall be calibrated, maintained, and operated for measuring operating temperature of either one of the four boilers used to control emissions from the Tread End Cementers **once the last two presses are started**. For the purpose of this condition, continuous means no less than once per minute. The output of this system shall be recorded as a three (3) hour average. From the date of ~~issuance of this Significant Permit Modification 003-21271-00008~~ **initial start-up of the last two presses** until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Part 70 Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports whenever the three (3) hour average temperature of the boiler used to control emissions from the Tread End Cementers is below 1200°F until a temperature is established during the latest stack test..."

Response 2: The potential VOC emissions of 54.3 tons/yr from this modification (28 curing presses) and taking into account the reduction of 13.2 tons/yr from the removal of the twenty-two curing presses will be significant at 41.1 tons/yr, when all twenty-eight (28) curing presses are installed and in operation. Once all 28 presses are installed either one of the four (4) existing boilers will reduce the VOC emissions from the Tread End Cementing process by 2 tons per year, in order that this modification will remain a minor modification at 39.1 tons per year VOC emissions. Therefore, it is acceptable to only start implementing Condition D.3.10(a), now D.3.12(a) when the last 2 curing presses are installed, since the boiler will not control the Tread End Cementing process until all 28 curing presses are installed. This condition will be changed as follows:

D.3.10-12 Boilers Operating Temperature

-
- (a) A continuous monitoring system shall be calibrated, maintained, and operated for measuring operating temperature of either one of the four boilers used to control emissions from the Tread End Cementers **once all twenty-eight (28) presses are started**. For the purpose of this condition, continuous means no less than once per minute. The output of this system shall be recorded as a three (3) hour average. From

~~the date of issuance of this Significant Permit Modification 003-21271-00008~~ **initial start-up of the last two (2) curing presses until the approved** stack test results are available, the Permittee shall take appropriate response steps in accordance with Part 70 Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports whenever the three (3) hour average temperature of the boiler used to control emissions from the Tread End Cementers is below 1200 °F until a temperature is established during the latest stack test. A three (3) hour average temperature that is below 1200 °F until a temperature is established during the latest stack test is not a deviation from this permit. Failure to take response steps in accordance with Part 70 Section C – Preparation, Implementation, Records, and Reports shall be considered a deviation from this permit.

- (b) The Permittee shall determine the three (3) hour average temperature from the most recent valid stack test that demonstrates compliance with the VOC emission reduction in Condition D.3.1(a), as approved by IDEM. This temperature shall be used for compliance with D.310(a).
- (c) On and after the date the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports whenever the 3-hour average temperature of either of the four boilers used is below the three (3) hour average temperature as observed during the compliant stack test. A three (3) hour average temperature that is below the three (3) hour average temperature as observed during the compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.

Comment 3: Page 6 of 45 of OP No. T003-5974-00008, first paragraph:
As written: One (1) tread end cementing process consisting of lines #1 and #2, with....”

Issue Discussion:

This paragraph does not have a letter designation and should as it describes a separate pollution control device.

Proposed Modification:

(i) One (1) tread end cementing process consisting of lines #1 and #2, with....”

Response 3: This is a typographical error, Section D.3 in the source and permit modifications and the TSD identified it as item (h). Therefore, the source modification and the permit modification will be corrected as follows:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
[326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(a) through (f) no change

(h) One (1) tread end cementing process consisting of lines #1 and #2, with a production capacity of 2,081 tires per hour, using particulate baffle filters, exhausting at stacks 158, and 159. VOC emissions will be controlled by either one of the four (4) process boilers once all curing presses in this SSM 003-20073 have been installed. This ducting will only be required if **all twenty-eight (28) presses** are installed.

~~(h)~~ **(i)** Miscellaneous solvent usage.

Comment 4: Page 11 of 26 of TSD for 003-20073-00008 & 003-21272-000080008, item C.20(d):
As written: "(d) Unless otherwise specified in this permit, any semiannual, quarterly, and monthly reports shall be submitted within 30 days of the end of the reporting period...."

Issue Discussion:

There are no monthly reporting requirements.

Response 4: This TSD Addendum is part of the TSD. It serves to address the changes made in the permit as a result of the submitted comments. IDEM, OAQ prefers not to change the TSD in order to preserve the original information from the issued permit. IDEM, OAQ agrees that no monthly reporting was required in the Part 70 permit, therefore, it will be deleted in the Part 70 instead, as follows:

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) through (c) no change

(d) Unless otherwise specified in this permit, any semiannual and quarterly, ~~and monthly~~ reports shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) through (g) no change

Comment 5: Page 28 of 45 of OP No. T003-5974-00008, item D.1.5(a)(2):
As written: "(2) (Effective June 8, 2001) The permittee shall perform automatic daily monitoring and recording of the pressure differential readings on the Carbon black tank. This information shall be provided by a PLC/differential pressure transducer based system. The system shall take daily readings of the baghouse pressure drop range and shall be maintained at 1.0 to 3.0 inches of water or a range established during the latest stack test. Any readings outside of this range shall sound an alarm/alert function for immediate response by maintenance personnel to shut the unit down until the situation is remedied."

Issue Discussion:

The filters associated with the carbon black pneumatic transfer system are inherent to the process and are not pollution control devices. The determination that these filters are inherent to the process was made after careful analysis of the system and investigating the answers to the three questions promulgated by the EPA in a memorandum dated November 27, 1995. The answers to all three questions show the filters are inherent to the process and should not be regulated. A review of the analysis follows:

- (1) "Is the primary purpose of the equipment to control air pollution?" – answer: no for the following reasons.
 - (A) As indicated by descriptions in Perry's Chemical Engineer's Handbook (6th edition) on pneumatic conveyors, air filters are used to help separate the product from the transporting air stream. No where in the descriptions for any of the pneumatic systems does it mention the purpose of the filter being for emission control.
 - (B) According to Nol-Tec Systems Inc., manufacturer of this system, the pneumatic conveyor systems since the initial conception have always

had some type of air separation unit. If there was no separation, then the product would escape with the transporting air. Original separation consisted of using cyclonic separator or the storage tank itself as a settling chamber. Now the list of standard industry separators includes high efficiency filters.

- (C) The type of product being transported can dictate the type of system used to bleed off the transport air. For example, large particles with high settling velocities like plastic pellets can use metallic screens verses high efficiency filters. The lumber mills since they are transporting heavy wood chips at high velocities use a cyclonic separator to separate out the transporting air. However, since BF Goodrich is transporting a lighter product at much lower velocities, a high efficiency filter is used to bleed off the transport air. The carbon black pellets are very fragile and prone to break-up during transport. This is the reason the velocity, which is proportional to the volume of transport air, is kept at the absolute minimum to accomplish the transfer of material. Increasing the

air pressure to maintain a minimum differential pressure across the filter would result in the destruction of up to 25% of the carbon black pellets being conveyed.

- (2) “Where the equipment is recovering product, how do the cost savings from the product recovery compare to the cost of the equipment?” – answer: significant cost savings compared to the cost of the equipment. See analysis below:

- (A) According to discussions with Nol-Tec Systems Inc., if the air filter was not in place an estimated product loss of 10-20% would result. The cost analysis below shows an estimated loss of between \$4,000,000 and \$8,000,000 annually. The estimated cost of the four filter units is \$60,000. Therefore, the unit would be eligible for designation as inherent under this criterion.

Cost of Loss/year = Average Cost X % loss X Transfer rate/hr X Hours/year		
Carbon Black Type	Cost/#	
N660	\$0.2550	
N234	\$0.3232	
N351	\$0.3645	
N343	\$0.2292	
Average Cost.#	\$0.2930	
Transfer rate/hr	16533	
hours/year	8760	
Percent loss	10%	20%
Cost of loss/year	\$4,243,129.97	\$8,486,259.94

- (3) “Would the equipment be installed if no air quality regulations are in place?” – answer: yes for the following reasons.

- (A) As discussed in question #1 above, the filters allow the separation of the transport air from the product at the end of the transport cycle. This is a requirement of a pneumatic transfer system and cannot be eliminated.
- (B) The purpose of a conveyor system is to transport a product from one place to another specific place. If the filters were not included in the system design, 10-20% of the carbon black would not reach the desired final destination. The conveyor system would be too inefficient to operate under these conditions. The cost of the product loss would dictate the need to recover more product and improve the overall efficiency of the system resulting in the installation of filters.

Proposed Modification:

~~“(2) (Effective June 8, 2001) The permittee shall perform automatic daily monitoring and recording of the pressure differential readings on the Carbon black tank. This information shall be provided by a PLC/differential pressure transducer based system. The system shall take daily readings of the baghouse pressure drop range and shall be maintained at 1.0 to 3.0 inches of water or a range established during the latest stack test. Any readings outside of this range shall sound an alarm/alert function for immediate response by maintenance personnel to shut the unit down until the situation is remedied.”~~

Response 5: The following criteria from the EPA's memo for "Determining Whether Equipment is Air Pollution Control Equipment or Process Equipment" have been considered to determine if the filters are inherent to the process (carbon black tank):

- (1) Is the primary purpose of the equipment to control air pollution?
- (2) Where the equipment is recovering product, how do the cost savings from the product recovery compare to the cost of the equipment?
- (3) Would the equipment be installed if no air quality regulations are in place?

For pneumatic conveying process, filters and baghouses are essential where they are used to separate the product or material from the transporting air stream, Therefore, the filters in this case are not considered control equipment. This determination that these filters are not control equipment but are inherent parts of the tanks was also determined in BF Goodrich TV 003-5974-00008 permit, page 14 of 16 TSD Addendum, however, pressure drop monitoring requirement was still required in the TV permit. Therefore, these filters meet Criteria 1 in this EPA's memo.

BF Goodrich would incur a loss of between \$4,000,000 to \$8,000,000 annually if the filters are not installed. The estimated cost of the filters is \$60,000, which includes;

- (1) Direct capital cost direct capital cost - equipment costs, instrumentation, sales tax, freight; direct installation costs (foundation & supports, duct work/fittings/piping, insulation & painting, electrical, site prep, etc.).
- (2) Indirect installation costs - engineering and supervision cost associated with the installation activities, field expenses; lost production resulting from shutting down a process (if applicable) to complete the filters installation; start-up and performance tests to verify that the system is properly installed; overall contingencies (cost estimate project delays, increased expenses); working capital (cost of fuel, chemicals, other materials, labor and maintenance).

- (3) Direct annual costs in operating the filters - operating & maintenance labor, utility costs, waste & treatment disposal (if applicable), annual cost for replacement parts.
- (4) Indirect annual costs: overhead, property taxes, insurance, and administrative charges.

Based on this analysis the savings in installing the filters to collect the product is substantial and meets the second criteria in the EPA's memo.

Therefore, based upon the review of the information presented, the filters for the Carbon Black Tank are considered inherent to the process. Condition D.1.5 will be changed as follows:

D.1.5 Monitoring

- (a) The carbon black unloading has applicable compliance monitoring conditions as specified below:
 - (1) Daily visible emissions notations of the carbon black unloading stack exhausts, 356A, 356B, 356C, 356D, shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.
 - ~~(2) (Effective June 8, 2001) The Permittee shall perform automatic daily monitoring and recording of the pressure differential readings on the Carbon black tank. This information shall be provided by a PLC/differential pressure transducer based system. The system shall take daily readings of the baghouse pressure drop range and shall be maintained at 1.0 to 3.0 inches of water or a range established during the latest stack test. Any readings outside of this range shall sound an alarm/alert function for immediate response by maintenance personnel to shut the unit down until the situation is remedied.~~
 - ~~(3)~~ (2) An inspection shall be performed semi-annually of all bags controlling the carbon black unloading operation when venting to the atmosphere. A baghouse inspection shall be performed within six months of redirecting vents to the atmosphere and every six months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.
 - ~~(4)~~ (3) In the event that bag failure has been observed:
 - (A) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for

completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

- (B) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

~~(5)~~(4) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

- (b) The Banbury mixing, pellet spiraling for Banbury mixing, BB dump and pellet feed for Banbury mixing has applicable compliance monitoring conditions as specified below:
- (1) Daily visible emissions notations of the Banbury mixing, pellet spiraling for Banbury mixing, BB dump and pellet feed for Banbury mixing processes stack exhausts, 200, 208, 210,231, and 278 shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.
 - (2) (Effective June 8, 2001) The Permittee shall perform automatic daily monitoring and recording of the pressure differential readings on the Banbury mixers, BB dump, and Pellet feed. This information shall be provided by a PLC/differential pressure transducer based system. The system shall take daily readings of the baghouses pressure drop ranges and shall be maintained at 1.0 to 5.0 inches of water or ranges established during the latest stack test. Any readings outside of this range will sound an alarm/alert function for immediate response by maintenance personnel to shut the unit down until the situation is remedied.
 - (3) An inspection shall be performed semi-annually of all bags controlling the mixing operation when venting to the atmosphere. A baghouse inspection shall be performed within six months of redirecting vents to the atmosphere and every six months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.
 - (4) In the event that bag failure has been observed:
 - (A) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an

emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

- (B) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (5) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.
- (c) The WSW grinding and TUO Module Area have applicable compliance monitoring conditions as specified below:
 - (1) Daily visible emissions notations of the WSW grinding and TUO Module Area and Quality assurance processes stack exhausts, 258-261, and 265-277, and 33 and 37, shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.
 - (2) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Significant Permit Modification #003-20073-00008 comments:

Comment 6: Page 4 of 7 of Significant Source Modification No. T003-20073-00008, D.3.10(a):
As written: "(a) A continuous monitoring system shall be calibrated, maintained, and operated for measuring operating temperature of either one of the four boilers used to control emissions from the Tread End Cementers. For the purpose of this condition, continuous means no less than once per minute. The output of this system shall be recorded as a three (3) hour average. From the date of issuance of this Significant Permit Modification 003-21271-00008 until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Part 70 Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports whenever the three (3) hour average temperature of the boiler used to control emissions from the Tread End Cementers is below 1200°F until a temperature is established during the latest stack test..."

Issue Discussion:

The continuous monitoring equipment referred to in this paragraph currently does not exist. It will be installed and placed into operation concurrently with the last two curing presses in accordance with paragraph D.3 Facility Operation Condition (h), page 2 of 7.

Proposed Modification:

"(a) A continuous monitoring system shall be calibrated, maintained, and operated for

measuring operating temperature of either one of the four boilers used to control emissions from the Tread End Cementers **once the last two presses are started**. For the purpose of this condition, continuous means no less than once per minute. The output of this system shall be recorded as a three (3) hour average. From the date of ~~issuance of this Significant Permit Modification 003-21271-00008~~ **initial start-up of the last two presses** until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Part 70 Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports whenever the three (3) hour average temperature of the boiler used to control emissions from the Tread End Cementers is below 1200°F until a temperature is established during the latest stack test...”

Response 6: Please see Response 2 for similar comment.

IDEM, OAQ has made the following changes to the proposed permit:

The associated record keeping requirement for Condition D.1.5 will be deleted from the following condition as follows:

D.1.6 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1 and D.1.5, the Permittee shall maintain records of daily visible emission notations of the carbon black unloading, Banbury mixing, pellet spiraling for Banbury mixing, BB dump and pellet feed for Banbury mixing, WSW grinding and TUO Module Area stack exhausts.
- (b) To document compliance with Condition D.1.5, the Permittee shall maintain the following:
 - (1) Monthly records of trip checks of the failsafe pressure switches monitoring the ~~carbon black and the~~ Banbury mixing, BB dump and pellet feed for Banbury mixing baghouses differential pressure.
 - (2) Documentation of all response steps implemented, per event.
 - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
 - (4) Quality Assurance/Quality Control (QA/QC) procedures.
 - (5) Operator standard operating procedures (SOP).
 - (6) Manufacturer's specifications or its equivalent.
 - (7) Equipment "troubleshooting" contingency plan.
 - (8) Documentation of the dates vents are redirected.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Since the six (6) remaining presses from the twenty-eight (28) presses will not be installed at one time, Condition D.3.1 will be revised to clarify the timing on the removal of the five (5) remaining presses to be removed, for a total of twenty-two (22) curing presses removed and to show that 326 IAC 2-3 will not be triggered when no shutdown occurs at the time of new presses are installed.

The 22 presses will be decommissioned in place at the following rate:

- | | | |
|--|-------|--------------------|
| - 17 have already been decommissioned as of July 15, 2005. | ----- | (32.2 tons VOC/yr) |
| - 0 will be decommissioned before the start-up of the 1st of 6 curing presses: scheduled for initial start-up September 1, 2005. | ----- | (34.1 tons VOC/yr) |
| - 1 will be decommissioned before the start-up of the 2nd of 6 curing presses: scheduled for initial start-up September 15, 2005. | ----- | (35.5 tons VOC/yr) |
| - 2 will be decommissioned before the start-up of the 3rd of 6 curing presses: scheduled for initial start-up October 1, 2005. | ----- | (36.6 tons VOC/yr) |
| - 2 will be decommissioned before the start-up of the 4th of 6 curing presses: scheduled for initial start-up October 15, 2005. | ----- | (37.1 tons VOC/yr) |
| - 0 will be decommissioned before the start-up of the last 2 presses January 31, 2006. Reduction of 2 tons/yr will be from controlling the Tread End Cementers by one of the boilers (2.0 tons VOC/yr) | ----- | (41.0 tons VOC/yr) |
| Net Increase | ----- | 39.0 tons VOC/yr |

D.3.1 Minor Modification - Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (a) Pursuant to 326 IAC 2-2, Prevention of Significant Deterioration, **the new tire curing presses** permitted under SSM 003-20073-00008 and SPM 003-21271-00008 **shall not operate until after the old presses are shutdown**, using the following time line:

- **17 have already been decommissioned as of July 15, 2005.**
- **0 will be decommissioned before the start-up of the 1st of 6 curing presses.**
- **1 will be decommissioned before the start-up of the 2nd of 6 curing presses.**
- **2 will be decommissioned before the start-up of the 3rd of 6 curing presses.**
- **2 will be decommissioned before the start-up of the 4th of 6 curing presses.**
- **0 will be decommissioned before the start-up of the last 2 presses.**

~~twenty two tire curing presses shall be removed from operation once this modification has been constructed.~~

Removal of these tire curing presses shall reduce the VOC emissions by 13.3 tons per twelve month period. The shutdown of these curing presses shall be permanent.

- (b) VOC emissions from the Tread End Cementers shall be directed to either one of the four (4) process boilers for destruction in order to achieve a reduction in the VOC emissions by 2 tons per twelve month period. The ducting will only be required ~~if the last two presses~~ **once all twenty-eight (28)** are installed.

- (c) Compliance with both (a) and (b) of this condition shall make this modification to the tire manufacturing operation not subject to the requirements of 326 IAC 2-2, Prevention of Significant Deterioration.

The following condition will be revised to remove the word "extrapolation":

D.3.7 Particulate Matter Limitation (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the green tire spraying and the tread end cementer shall be limited by the following:
Interpolation ~~and extrapolation~~ of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

Condition D.3.9 will be revised to clarify that testing is only required once all twenty-eight (28) presses are installed and ducted into one of the four boilers. Revision is as follows:

D.3.9 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within sixty day (60) days after achieving maximum production rate at which ~~these emission units~~ **all twenty-eight (28) tire curing presses** the permitted under SPM 003-21271-00008 will be operated but no later than 180 days after their initial start up the Permittee shall conduct a performance test to verify the capture system and VOC emission reduction from the Tread End Cementers controlled by either one of the four (4) process boilers utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

Condition D.3.13 will be renumbered to D.3.10 and be moved under Compliance Determination Requirements.

D.3.13 10 Particulate Matter (PM)

Pursuant to 326 IAC 6-3-2(c), the particulate for PM control shall be in operation at all times when the tread end cementing or the green tire spraying is in operation.

The following condition will be added as D.3.11 under Compliance Determination Requirements:

D.3.11 Volatile Organic Compounds (VOC)

The Permittee shall operate either one of the four boilers to control the Tread End Cementers at all times once all twenty-eight (28) curing presses have been installed in order to achieve compliance with condition D.3.1.

Subsequent conditions will be renumbered accordingly.