

**OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION**

**MEMORANDUM**

**April 19, 2004**

**TO:** Dawson F. Lasseter, P.E., Chief Engineer, Air Quality Division

**THROUGH:** John Howell, E.I., Existing Source Permits Section

**THROUGH:** Herb Neumann, P.E., Tulsa Regional Office

**THROUGH:** Peer Review

**FROM:** David Schutz, P.E., New Source Permits Section

**SUBJECT:** Evaluation of Permit Application **No. 2001-100-C (M-1) (PSD)**  
Bridgestone/Firestone North American Tire, LLC  
Dayton Tire and Rubber Company  
Oklahoma City Tire Manufacturing Facility  
Oklahoma City, Oklahoma County, Oklahoma  
2500 South Council Road  
SW ¼ of Section 8 – T 11N – R 4W  
From downtown Oklahoma City, proceed west on I-40 to Council Road,  
proceed 1.5 miles south to Facility

**SECTION I. INTRODUCTION**

Dayton Tire and Rubber Company (Dayton) has submitted a construction permit application to allow production of “silica rubber.” “Silica rubber” replaces some of the volume of carbon black in tread rubber with finely-ground silica. The process requires a proprietary coupling agent which bonds silica to rubber; the coupling agent releases significant amounts of VOC (ethanol). No equipment will be added or physical changes made. The proposed project will be a major modification to an existing major source under Prevention of Significant Deterioration (PSD) criteria.

A Title V operating permit application for their facility was submitted on March 3, 1999. This facility manufactures rubber tires (SIC 3011) and was built in 1969. The facility is currently operating under Permit No. 073-101-O, 079-062-O (1) (REV), 079-065-O (1) (REV), 88-023-O, 95-480-O (M-1), 96-141-O (M-1), 96-142-O (M-1), 96-143-O, 96-461-O, 1999-096-C, and 2001-100-C. The current facility encloses 65 acres under roof. Since the facility emits more than 100 TPY of NO<sub>x</sub>, CO, and VOCs, it is subject to Title V permitting requirements. The requirements of this PSD permit will be incorporated into the Title V operating permit when it is issued.

The project is subject to PSD because the added potential emissions of VOC are greater than the PSD levels of significance for an existing PSD-major source. Full PSD review is required for VOC. Full PSD review of emissions consists of the following: a determination of best available control technology (BACT); an evaluation of existing air quality and determination of monitoring requirements; an evaluation of PSD increment consumption; an analysis of compliance with National Ambient Air Quality Standards (NAAQS); an evaluation of source-related impacts on growth, soils, vegetation, visibility; and a Class I area impact evaluation.

In a PSD situation, the “net emissions increase” must be quantified. EPA policy is stated in a memorandum from John S. Calcagni (Air Quality Management Division), “Request for Clarification of Policy Regarding the ‘Net Emissions Increase’” (September 18, 1989).

The comparison of prior “actual” to future “potential” emissions is made on a unit-by-unit basis for all emissions units at the source that will be affected by the change. It is done for the emissions unit(s) undergoing the physical change or change in the method of operation and also for any other units at which normal operations could be affected by the change at the source. This, for example, includes a review for possible emissions increase at process-related emission units due to a physical change which removed a bottleneck at only one of the units.

The “method of operation” changes will occur at the rubber mixing, milling, and curing operations. Various other process units involved in tire manufacturing will not be affected by this project, units including grinding, uniformity boilers, green tire spraying, and bulk solids handling. Since the silica replaces an identical volume of carbon black, no change in PM emissions will occur.

The specific conditions of this permit will include only those requirements directly associated with the requested change in operations (production of silica rubber). The requirements of this permit will be incorporated into the Title V operating permit for this facility, when it is issued.

## **SECTION II. PROCESS DESCRIPTION**

Dayton Tire (Dayton) manufactures rubber tires from raw materials that are received by truck and railcar. The facility is divided into five major production and operation areas:

- Area 100 — Raw Material and Rubber Preparation (Carbon Black Transfer, Banbury Mixers, Mills, Extruders, Cementers),
- Area 200 — Tire Assembly,
- Area 300 — Tire Curing,
- Area 400 — Final Inspection, and
- Area 500 — Boilers and Utilities.

Conceptually, the tire manufacturing process consists of:

1. compounding and mixing raw materials;
2. extruding the rubber mixture between pairs of large rollers to prepare it for the feed mill, where it is slit into pieces to take the shape of the tread and sidewall materials;
3. processing fabrics and coating them with rubber in a calendering operation;
4. processing bead wires and coating them with rubber in an extruding process;
5. cutting and cooling the various extruded and calendered outputs;
6. assembling all of the components (bead wires, coated fabrics, treads, etc.) on a tire-building machine;
7. lubricating the green tire (green tire spraying);
8. vulcanizing and molding the tire with heat and pressure; and
9. finishing the product.

Primary raw materials used to make tires at this plant include natural rubber, synthetic rubber, carbon black, pigments, process oil, vulcanizing agent, and other chemicals. Liquid materials are stored in above ground storage vessels. Silane is used as a coupling agent in selected tread compounds.

Raw materials enter the facility and are mixed in one of three Banbury mixers, designated "271," "272," and "273." Mixing may take the form of master batches which are initial mixes without vulcanizing chemicals, final batches which include the vulcanizing agents, and remill batches for additional mixing and working of the stocks. Dust collectors are used to control particulate emissions of carbon black and dry chemicals. Pressure drop readings are taken and used to initiate filtering replacements and cleaning along with planned maintenance actions.

From the mixers, the rubber material is sheeted and identified with an impressed code indicating the type of rubber compound and the date of mix. The continuous sheet is then cooled in a cooling emulsion, and "wigwagged." Wigwagging is folding and bedding stock on metal skids. From here, the stock is dispersed to other processes for use in production of tire materials or components.

Treads and sidewalls are extruded from the mixed rubber and rolled into coils with reusable liners or cut to length and placed in metal trays. Tread ends are cemented for adhesion during tire assembly. A portion of the production involves what is known in the trade as "silica treads." The mixed rubber tread compound for silica treads includes the addition of silane, which when heated (mixed, milled, and cured), emits the VOC ethanol.

There are three calendering operations at Dayton Tire: innerliner and gum calendering for production of the inner-most layer of tubeless tires and special rubber components; textile fabric calendering for coating body ply cord with a skim rubber compound; and creel calendering where steel cords are coated with rubber to make steel belt materials. Body ply and steel belt stabilizer ply materials must be cut to specific dimensions for specific tires.

Beads are the metal "hoops" that hold a tire to the rim. Plated steel wire is insulated through a pressure head and wound into the hoop configuration. Another extruded component (bead filler) is applied to the top of the bead bundle (the top of the wound bead) in a wrapping operation.

In tire assembly, tire builders and associated equipment assemble each tire part in sequence onto building equipment (chucks, drums, etc.) where each tire is built. Once built, each tire is placed on a rack for transport to a doper machine for further processing prior to curing or vulcanization. At the doper, the surface of the innerliner is sprayed with a water-based lubricant so the curing press bladder will not stick to the tire. The doper also applies a water-based black sidewall paint to the sidewalls and a release agent mixture (water-based) on the tread. This process is subject to NESHAP Subpart BBB, but very little VOC emissions actually come from the process due to the use of water-based products. Dayton uses fixed, permanent dopers for this process for the most part but has in the past made use of small portable dopers (mini dopers). Particulates are controlled and captured with filters and gravity collection.

Once doped, tires are taken to storage or directly to a curing press. Each curing press has the potential to cure two tires at a time. Tires are placed on staging fixtures and automatically picked up and loaded into the press by the press loaders. Once in the mold, the tire is subjected to heat and pressure to push the tire into the mold in all directions. The lettering and designs are molded onto the tire by the engraving in the mold. After completion of the cure cycles, the tires are ejected to a conveyor for transport to the final inspection and finish area. The pin vents are automatically trimmed from the tire tread area and each tire is visually inspected for anomalies. Tires that pass inspection are transported directly to an area for sorting by man or machine. Tires are grouped into homogeneous collections on pallets. Tires that do not meet inspection requirements are transported by conveyor to an area for repair or scrap disposition.

Tires that have been sorted and grouped onto pallets are taken to Tire Uniformity Optimizer (TUO), machines for quality grading and white sidewall grinding, as appropriate. Dust collectors (cartridge or centrifugal) are utilized to capture grinding dust. Upon completion of TUO/WSW (white sidewall) processing, tires are tested for balance as required and dispositioned, as appropriate. Finished tires are then re-palletized and placed into storage in the warehouse or taken to the shipping dock for loading.

### **SECTION III. ADDED AIR EMISSIONS**

Upon heating, each pound of coupling agent releases 0.193 lb ethanol (VOC). Total added emissions of VOC will be 180 TPY based on usage of 934 TPY coupling agent.

Based on performance testing conducted at the Bridgestone-Firestone Akron (Ohio) Technical Facility, it is expected that 72.0% of the ethanol will be emitted from the mixing operation (EUG 3), 8.0% will be emitted from the milling operation (EUG 4), and 20.0% from the curing operation (EUG 4).

Added emissions of 180 TPY VOC are equivalent to 41 lb/hr. For modeling purposes, a 100% safety factor was applied to account for short-term operations that may exceed average process rates.

**Added Emissions**

<b>Point ID</b>	<b>EU Name</b>	<b>Pollutant</b>	<b>lb/hr</b>	<b>TPY</b>
EU-108	#271 Banbury Drop Chute	VOC (Ethanol )		
EU-108A	#272 Banbury Drop Chute			
EU-110	#273 Banbury Drop Chute			
EU-151	#2 Tread Line Mills			
EU-161	#3 Tread Line Mills			
EU-300	Curing Presses			
<b>Totals</b>			<b>82.2</b>	<b>180.0</b>

**SECTION IV. PSD ANALYSIS**

A. BEST AVAILABLE CONTROL TECHNOLOGY

BACT was analyzed using the "top-down" approach. In those cases where a control strategy was deemed technologically infeasible or sufficient justification was provided for rejection by energy or environmental impacts, economic costs were not calculated. Control economics were evaluated using equipment lifespan, contingency costs, indirect costs, a discount interest rate, an interest rate on capital, utilities, and labor costs (including benefits, overhead, etc.).

There are three operations subject to BACT for VOC: rubber mixing, rubber milling, and tire curing. The majority of added VOC emissions are anticipated from rubber mixing, with milling and curing less significant.

VOC emissions controls fall into two categories: process changes and discharge controls. The former category relies on reducing VOC content in raw materials and the most efficient usage of those raw materials. Outlet VOC control is accomplished by recovery or by combustion. Recovery methods include condensation and adsorption. Combustion may be conducted in a unit designed only to provide combustion (incinerator, etc.), in process equipment (e.g., a boiler), or utilizing microorganisms to achieve the oxidation. Although biofiltration is technically feasible, it is not a demonstrated technology for this type of process.

The application ranked the following emissions control technologies:

- Recuperative thermal oxidizer
- Regenerative thermal oxidizer
- Regenerative catalytic oxidizer
- wet scrubbing
- condensation

The BACT analysis is heavily dependent on predicted stack flows. High ventilation rates are often required by fire prevention codes and/or occupational safety regulations. The size of control equipment and the operating costs of that equipment are proportional to the air flow to be processed. There is also a technological limitation of being able to control a VOC stream to no lower than 20 ppm VOC. (The 20 ppm threshold is incorporated into regulations such as 40 CFR Part 63 Subpart CC for petroleum refineries; since the MACT is theoretically more stringent than BACT, the assertion of a 20 ppm feasibility threshold is acceptable). The higher an air flow is, the more dilute the VOC concentration is, and the more difficult it is to reach 20 ppm. An EPA reference was cited for the BACT analysis, "Survey of Control Technologies for Organic Vapor Gas Streams" (EPA-456, May, 1995).

Operation	Added VOC Emissions (lb/hr)	Flows (ACFM)	Temperatures (°F)	Ethanol Concentrations (ppm)
Mixing	59.18	34,800	70	242
Milling	6.58	247,300	70	3.8
Curing	16.44	1,873,300	70	1.2

**RECENT BACT DETERMINATIONS FOR VOC FROM TIRE MANUFACTURING**

Source	Location	Date	Process	BACT
Bridgestone-Firestone	Louisiana	7/20/90	rubber finishing	no add-on controls
Capital Tire	Connecticut	1/10/90	retreading	no add-on controls
Copolymer Rubber & Chemical	Louisiana	10/12/90	rubber finishing	no add-on controls
Cumming-Henderson	California	7/16/96	retreading	no add-on controls
Michelin	South Carolina	8/14/96	tire manufacturing	no add-on controls
Pirreli-Armstrong	California	9/25/96	steel belt manufacturing	no add-on controls
Uniroyal	Louisiana	12/13/90	rubber production	no add-on controls
Goodyear	Oklahoma	In public review	silica rubber	RTO *

\* Use of an RTO at this facility was in partial resolution to an enforcement action.

1. Rubber Mixing

The rubber mills processing silica rubber are predicted to have the highest VOC emissions. Air flows are 34,800 ACFM. A VOC emission rate of 59.18 lb/hr is expected from the lines blending the silane rubber, and using a molecular weight of 46 (ethanol), the anticipated maximum VOC concentration is 242 ppm.

Several of the above control technologies were rejected for technological reasons. Alternative raw materials are not practical. Condensation also is not practical given the high exhaust volume and low temperature needed to achieve any significant reduction. (One potential condensation method would be wet scrubbing; although ethanol is water-soluble, the remaining VOCs emitted have low solubilities in water.) Solid adsorption media are susceptible to plugging by the PM given off by the process. None of these are demonstrated technologies for tire manufacturing.

Of the oxidative controls, regenerative thermal oxidizers (RTOs) provide the most efficient VOC control with the lowest operating costs. The EPA publications, "Control Technologies for Hazardous Air Pollutants" (EPA-625/6-91-014) "Survey of Control Technologies for Low Concentration Organic Vapor Gas Streams" (EPA-456), both recommend RTOs for streams with 50 ppm or more organic vapors. The former publication is geared to MACT determinations which are more stringent than BACT determinations. The latter publication also addresses concentrator-type systems, where VOC is adsorbed from the stream then stripped to a lower-volume stream with higher concentrations prior to destruction.

The application estimated costs of RTOs, the most cost-effective method of VOC control from the rubber compounding operations. An initial capital cost of \$1,159,000 was provided by a potential vendor for a 35,000 SCFM unit. Operating costs and other costs were estimated in accordance with the EPA publication, "OAQPS Cost Control Manual" (5<sup>th</sup> edition, February 1996, EPA-453/B-96-001). Along with operating costs, total annualized costs were estimated at \$770,000. Although mixer VOC emissions are calculated at 129.6 TPY, a capture efficiency of only 60% is anticipated from the Banbury. A control efficiency of 95% was stated for the added 77.8 TPY ethanol emissions, or a reduction in VOC of 73.9 TPY. Total annualized control costs of \$10,422 per ton were calculated for control of 73.9 TPY. These costs are excessive. If 100% capture could be achieved, control costs of \$770,000 for controlling 129.6 TPY is equal to \$5,941 per ton, which also is excessive. Since RTOs are the most cost-effective means of controlling VOC emissions, all other technologies would have higher costs. It is concurred that add-on control costs would be excessive.

BACT for these units is acceptable as no add-on controls. The permit will require stack testing to verify the flow rates upon which the analysis was based, and ambient ozone monitoring will be required to ensure the facility remains an attainment area.

VOC emissions are a function of both rubber processing and silane usage. The permit will limit total silane usage, and rubber usage will be part of a plant-wide limitation.

## 2. Rubber Milling

The rubber milling line is expected to have an air flow of 247,300 ACFM and added VOC emissions of 14.4 TPY (6.58 lb/hr). VOC concentrations are calculated at 3.8 ppm. VOC concentrations will be below the 20 ppm threshold at which add-on controls are feasible.

BACT is acceptable as no add-on controls for this operation. Emissions will be limited by an overall plant-wide limit on silane coupling agent usage.

3. Tire Curing

The tire curing area is expected to have an air flow of 1,873,300 ACFM and added VOC emissions of 36 TPY (16.44 lb/hr). VOC concentrations are calculated at 1.2 ppm. VOC concentrations will be below the 20 ppm threshold at which add-on controls are feasible.

BACT is acceptable as no add-on controls for this operation. Emissions will be limited by an overall plant-wide limit on silane usage.

B. AIR QUALITY IMPACTS

For an area which is affected by emissions from a new major source or modification, an analysis of the existing air quality is required for those pollutants which are emitted in significant quantities. The facility must demonstrate that the project does not cause nor contribute to a violation of the National Ambient Air Quality Standards (NAAQS) nor violate the increments of PSD. In addition, state-only standards affect ambient impacts of toxic air pollutants and sulfur dioxide.

VOC is not limited directly by NAAQS. Rather, it is regulated as an ozone precursor. EPA developed a method for predicting ozone concentrations based on VOC and NOx concentrations in an area. The ambient impacts analysis utilized these tables from "VOC/NOx Point Source Screening Tables" (Richard Scheffe, OAQPS, September, 1988). The Scheffe tables utilize increases in NOx and VOC emissions to predict increases in ozone concentrations. Total added VOC emissions were utilized (180 TPY) along with 2001-2002 average NOx emissions of 12.7 TPY.

The following tables show maximum impacts from the project compared to the ambient levels of significance for ozone. As shown, ambient impacts are below NAAQS; there is no increment standard for ozone. Thus, it has been demonstrated that the plant does not cause nor contribute to an air quality standards violation.

**NAAQS COMPLIANCE**

<b>Pollutant</b>	<b>Modeled Impacts, ug/m<sup>3</sup></b>	<b>Background Concentration, ug/m<sup>3</sup></b>	<b>Total Impacts, ug/m<sup>3</sup></b>	<b>NAAQS, ug/m<sup>3</sup></b>
<b>Ozone</b>	27	192	219	235

**COMPARISON OF INCREMENT TO AMBIENT MONITORING LEVELS OF SIGNIFICANCE**

<b>Pollutant</b>	<b>Modeled Incremental Impacts, ug/m<sup>3</sup></b>	<b>Monitoring Levels of Significance, ug/m<sup>3</sup></b>	<b>Ambient Monitoring Required?</b>
Ozone (VOC)	180 TPY VOC	100 TPY VOC	yes



AQD operates an ozone monitor 6.4 miles from the location in Yukon, Oklahoma. Data from that site are sufficient for pre- and post-construction ozone monitoring.

Compliance with the Maximum Acceptable Ambient Concentration for ethanol is discussed in Section VII: Oklahoma Air Pollution Control Rules.

### C. OTHER PSD ANALYSES

#### **1. Growth Impacts**

No significant industrial or commercial secondary growth will occur as a result of the project. Few if any new jobs will be created at the new facility and these will be filled by the local work force in the immediate area. No significant population growth will occur. Only a minimal air quality impact is expected as a result of associated secondary growth.

#### **2. Soils, Vegetation, and Visibility**

There are two portions to a visibility analysis: impacts near the facility and impacts on Class I areas. The applicant has conducted a visibility impact analysis in accordance with guidelines in the Workbook for Estimating Visibility Impairment (EPA-450/ 4-80-031) using EPA's software VISCREEN. A Level 1 screening analysis was performed for the facility's impact on the nearest Class I area, the Wichita Mountains Wildlife Refuge, 152 km (95 miles) away. The analysis used a 160 km visual range as requested by the U.S. Department of the Interior. Since contrast parameters were all computed to be less than the specified level where additional analysis would be required, the Level 1 analysis indicated that it is highly unlikely that the source would cause any adverse visibility impairment in the nearest Class I area. There are no scenic vistas near the vicinity of the project. There will be minimal impairment of visibility resulting from the facility's emissions.

Operation of the facility is not expected to produce any perceptible visibility impacts in the vicinity of the plant. The applicant has attempted to utilize EPA computer software for visibility impacts analyses. The software was intended to predict distant impacts. Attempts to utilize the EPA methods for close-in impacts have resulted in the program prematurely terminating operation. Given the limitation of 20% opacity of discharges, and a reasonable expectation that normal operation will result in 0% opacity, no local visibility impairment is anticipated.

No effect on soils is anticipated from the facility. Particulate matter emitted from the facility is primarily silicon dioxide and inert organic material. These are already among the primary constituents of the local soils. No deposition of acids or nutrients is anticipated downwind. Since the ambient impacts are already below the primary NAAQS standards (set to protect public health), no effects are anticipated on soils and vegetation.

### 3. Impact On Class I Areas

The nearest Class I area is the Wichita Mountains Wildlife Refuge, about 152 km (95 miles) from the facility at nearly a 70° angle to the prevailing winds. The two important tests for impaction on a Class I area are visibility impairment and ambient air quality effect. A visibility analysis in the previous section indicated no impairment of visibility for this area. The extended transport distance to the nearest Class I area precludes any significant air quality impact from the facility.

## SECTION V. OKLAHOMA AIR POLLUTION CONTROL RULES

OAC 252:100-1 (General Provisions) [Applicable]  
Subchapter 1 includes definitions but there are no regulatory requirements.

OAC 252:100-3 (Air Quality Standards and Increments) [Applicable]  
Primary Standards are in Appendix E and Secondary Standards are in Appendix F of the Air Pollution Control Rules. At this time, all of Oklahoma is in attainment of these standards.

OAC 252:100-4 (New Source Performance Standards) [Not Applicable to this Project]  
Federal regulations in 40 CFR Part 60 are incorporated by reference as they exist on July 1, 2002, except for the following: Subpart A (Sections 60.4, 60.9, 60.10, and 60.16), Subpart B, Subpart C, Subpart Ca, Subpart Cb, Subpart Cc, Subpart Cd, Subpart Ce, Subpart AAA, and Appendix G. NSPS regulations are addressed in the “Federal Regulations” section.

OAC 252:100-5 (Registration, Emissions Inventory and Annual Operating Fees) [Applicable]  
Subchapter 5 requires sources of air contaminants to register with Air Quality, file emission inventories annually, and pay annual operating fees based upon total annual emissions of regulated pollutants. Emission inventories have been submitted and fees paid for the past years.

OAC 252:100-8 (Permits for Part 70 Sources) [Applicable]  
Part 5 includes the general administrative requirements for part 70 permits. Any planned changes in the operation of the facility which result in emissions not authorized in the permit and which exceed the “Insignificant Activities” or “Trivial Activities” thresholds require prior notification to AQD and may require a permit modification. Insignificant activities mean individual emission units that either are on the list in Appendix I (OAC 252:100) or whose actual calendar year emissions do not exceed the following limits:

- 5 TPY of any one criteria pollutant
- 2 TPY of any one hazardous air pollutant (HAP) or 5 TPY of multiple HAPs or 20% of any threshold less than 10 TPY for a HAP that the EPA may establish by rule
- 0.6 TPY of any one Category A toxic substance
- 1.2 TPY of any one Category B toxic substance
- 6.0 TPY of any one Category C toxic substance

Emission limits for the facility are based on information in the permit application.

OAC 252:100-9 (Excess Emission Reporting Requirements) [Applicable]

In the event of any release which results in excess emissions, the owner or operator of such facility shall notify the Air Quality Division as soon as the owner or operator of the facility has knowledge of such emissions, but no later than 4:30 p.m. the next working day. Within ten (10) working days after the immediate notice is given, the owner operator shall submit a written report describing the extent of the excess emissions and response actions taken by the facility. Part 70/Title V sources must report any exceedance that poses an imminent and substantial danger to public health, safety, or the environment as soon as is practicable. Under no circumstances shall notification be more than 24 hours after the exceedance.

OAC 252:100-13 (Prohibition of Open Burning) [Applicable]

Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in this subchapter.

OAC 252:100-19 (Particulate Matter) [Applicable]

This subchapter limits emissions of industrial processes based upon their process weight rates. The emission rate in pounds per hour (E) is not to exceed the rate calculated using the process weight rate in tons per hour (P), for process rates up to 60,000 lb/hr using the formula in Appendix G ( $E = 4.10 * P^{(0.67)}$ ). The following table lists the process weight rates and the allowable emissions for each process.

Unit	Process Weight Rate (lbs/hr)	PM Emissions (lb/hr)	PM Allowable (lb/hr)
Banbury Drop Chute - 273	60,000	1.93	40.00
Banbury Charging Door - 273	60,000	1.84	40.00

The facility maintains process and/or particulate control devices such that the PM emissions are well within the allowable for the process weight of materials.

OAC 252:100-25 (Visible Emissions and Particulates) [Applicable]

No discharge of greater than 20% opacity is allowed except for short-term occurrences which consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity. Since ethanol is colorless, there is little possibility of violating this rule.

OAC 252:100-29 (Fugitive Dust) [Applicable]

No person shall cause or permit the discharge of any visible fugitive dust emissions beyond the property line on which the emissions originate in such a manner as to damage or to interfere with the use of adjacent properties, or cause air quality standards to be exceeded, or interfere with the maintenance of air quality standards. Solids handling operations are conducted in enclosed operations, with most discharges vented to baghouses. Under normal operating conditions, this facility will not cause a problem in this area, therefore it is not necessary to require additional precautions to be taken.

OAC 252:100-31 (Sulfur Compounds) [Not Applicable to this Project]

Part 2 limits the impact of sulfur dioxide (SO<sub>2</sub>) emissions from existing equipment and any new petroleum and natural gas processing source subject to OAC 252:100-31-26(a)(1), which are required to demonstrate compliance with the ambient air limits of OAC 252:100-31-7(a). SO<sub>2</sub> impacts modeling will be included in the facility Title V operating permit.

Part 5 limits sulfur dioxide emissions from new equipment constructed after July 1, 1972. Compliance with the limitations of Part 5 will be discussed in the Title V operating permit.

OAC 252:100-33 (Nitrogen Oxides) [Not Applicable to this Project]

No person shall cause, suffer, or allow emissions of nitrogen oxides calculated as nitrogen dioxide from any gas-fired or liquid-fired fuel-burning equipment constructed or modified after February 14, 1972 with a rated heat input of 50 MMBTUH or more, in excess of 0.20 lb/MMBTU (gas-fired) or 0.30 lb/MMBTU (liquid-fired). The plant boilers (three of which are already subject to Subchapter 33) will not be modified in this project.

OAC 252:100-35 (Carbon Monoxide) [Not Applicable]

None of the following affected processes are located at this facility: gray iron cupola, blast furnace, basic oxygen furnace, petroleum catalytic cracking unit, or petroleum catalytic reforming unit.

OAC 252:100-37 (Volatile Organic Compounds) [Not Applicable to this Project]

Part 3 affects new (constructed after December 28, 1974) storage tanks with a capacity between 400 and 40,000 gallons holding an organic liquid with a true vapor pressure greater than 1.5 psia (77.57 mmHg). The rubber solvent tank, EU-515 and the unleaded gasoline tank, EU-529 have vapor pressures above the 1.5 psia threshold. Both tanks are equipped with a permanent submerged fill pipe.

Part 5 limits the VOC content of paints and coatings. Organic materials used as rubber additives are not regulated by Subchapter 37.

Part 7 requires fuel-burning and refuse-burning equipment to be operated to minimize emissions of VOC. The equipment at this location is subject to this requirement.

Part 7 also affects effluent-water separators which receive more than 200 gallons per day of VOC which have a vapor pressure of 1.5 psia or greater. The facility operates effluent water separators for stormwater clean-up and process oil separation. These separators receive less than 200 gallons per day of VOC and the organic materials have vapor pressures below 1.5 psia.

OAC 252:100-39 (VOC Emissions in Former Non-attainment Areas)

[Not Applicable to this Project]

Part 7 OAC 252:100-39-44 applies to VOC Emissions from A) under tread cementing (Dayton Tire Area 100 – EU 143); B) automatic tread end cementing (Dayton Tire Area 100 – EU 160, EU 180); and C) green tire spraying (Dayton Tire Area 200 – EU 252-254, EU 258-259, EU 261-268, EU 270-276) at all major source pneumatic rubber tire manufacturing facilities located in Tulsa and Oklahoma counties. Rubber mixing, milling, and curing operations are not among the types of operations affected by Subchapter 39.

OAC 252:100-41 (Hazardous Air Pollutants and Toxic Air Contaminants) [Applicable]  
 Part 3 addresses hazardous air contaminants. NESHAP, as found in 40 CFR Part 61, are adopted by reference as they exist on July 31, 2002, with the exception of Subparts B, H, I, K, Q, R, T, W and Appendices D and E, all of which address radionuclides. In addition, General Provisions as found in 40 CFR Part 63, Subpart A, and the Maximum Achievable Control Technology (MACT) standards as found in 40 CFR Part 63, Subparts F, G, H, I, J, L, M, N, O, Q, R, S, T, U, W, X, Y, AA, BB, CC, DD, EE, GG, HH, II, JJ, LL, KK, MM, OO, PP, QQ, RR, SS, TT, UU, VV, WW, XX, YY, CCC, DDD, EEE, GGG, HHH, III, JJJ, LLL, MMM, NNN, OOO, PPP, QQQ, RRR, TTT, UUU, VVV, XXX, CCCC, GGGG, HHHH, NNNN, SSSS, TTTT, UUUU, VVVV, and XXXX are hereby adopted by reference as they exist on July 31, 2002. These standards apply to both existing and new sources of HAPs. These requirements are covered in the “Federal Regulations” section.

Part 5 is a state only requirement governing air toxic contaminants. New sources (constructed after March 9, 1987) emitting a category “A” pollutant above the de minimis level must perform a BACT analysis. All sources must demonstrate that emissions that exceed the de minimis level do not cause or contribute to a violation of the MAAC. SCREEN3 was used to determine compliance with the MAAC for ethanol. The results indicate that all the toxics are in compliance with OAC 252:100-41.

**MAAC Compliance**

Air Toxics	CAS #	Tox. Cat.	Emission Rate		ug/m <sup>3</sup>		In Compliance
			lb/hr	TPY	Impact (24 hr)	MAAC (24 hr)	
Ethanol	64175	B	82.2	180.00	3,335	38,000	Yes

OAC 252:100-43 (Testing, Monitoring, and Recordkeeping) [Applicable]  
 This subchapter provides general requirements for testing, monitoring and recordkeeping and applies to any testing, monitoring or recordkeeping activity conducted at any stationary source. To determine compliance with emissions limitations or standards, the Air Quality Director may require the owner or operator of any source in the state of Oklahoma to install, maintain and operate monitoring equipment or to conduct tests, including stack tests, of the air contaminant source. All required testing must be conducted by methods approved by the Air Quality Director and under the direction of qualified personnel. A notice-of-intent to test and a testing protocol shall be submitted to Air Quality at least 30 days prior to any EPA Reference Method stack tests. Emissions and other data required to demonstrate compliance with any federal or state emission limit or standard, or any requirement set forth in a valid permit shall be recorded, maintained, and submitted as required by this subchapter, an applicable rule, or permit requirement. Data from any required testing or monitoring not conducted in accordance with the provisions of this subchapter shall be considered invalid. Nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

The following Oklahoma Air Pollution Control Rules are not applicable to this facility or project:

OAC 252:100-11	Alternative Emissions Reduction	not requested
OAC 252:100-15	Mobile Sources	not in source category
OAC 252:100-17	Incinerators	not type of emission unit
OAC 252:100-23	Cotton Gins	not type of emission unit
OAC 252:100-24	Grain Elevators	not in source category
OAC 252:100-47	Municipal Solid Waste Landfills	not in source category

**SECTION VI. FEDERAL REGULATIONS**

PSD, 40 CFR Part 52 [Applicable]  
 Final total facility emissions are greater than the PSD major source threshold of 250 TPY for regulated pollutants NOx and VOC. Compliance with PSD requirements is described in Section IV.

NSPS, 40 CFR Part 60 [Not Applicable to this Project]  
Subpart BBB, Rubber Tire Manufacturing Industry. This subpart applies to each undertread cementing operation, each sidewall cementing operation, each tread end cementing operation, each bead cementing operation, each green tire spraying operation (dopers, mini-dopers), each Michelin-A operation, each Michelin-B operation, and each Michelin-C automatic operation in rubber tire manufacturing plants that commence construction, modification, or reconstruction after January 20, 1983. Rubber mixing, milling, and curing operations are not among the types of operations affected by Subpart BBB.

NESHAP, 40 CFR Part 61 [Not Applicable]  
 The project involves no emissions of any of the pollutants subject to regulation under 40 CFR 61 except benzene. Subpart J affects process streams with 10% or more by weight benzene; Subpart BB affects transfer and loading of streams with 70% or more by weight benzene; and Subpart FF affects benzene-contaminated waste water handling at petroleum refineries and chemical plants. None of these subparts affects benzene emitted from rubber decomposition during heating.

NESHAP, 40 CFR Part 63 [Not Applicable to this Project]  
Subpart B for “Case by Case MACT” is not applicable to the project. Subpart B affects modifications and new sources of HAPs with emissions greater than 10 TPY of any one HAP or more than 25 TPY HAPs. Ethanol is not a HAP.  
Subpart XXXX for “Tire Production” was issued on July 9, 2002. The facility will have three years in which to comply with the applicable requirements. This project will not change the status of any unit from “existing” to “new.”  
Subpart DDDDD for “Industrial, Commercial, and Institutional Boilers and Process Heaters” was proposed on January 13, 2003. Air Quality reserves the right to re-open this permit if any new standards become applicable.

CAM, 40 CFR Part 64 [Not Applicable to this Project]  
Compliance Assurance Monitoring (CAM), as published in the Federal Register on October 22, 1997, applies to any pollutant specific emission unit at a major source, that is required to obtain a Title V permit, if it meets all of the following criteria:

- It is subject to an emission limit or standard for an applicable regulated air pollutant
- It uses a control device to achieve compliance with the applicable emission limit or standard
- It has potential emissions, prior to the control device, of the applicable regulated air pollutant of 100 TPY

There are no “large” pollutant-specific emission units utilizing emissions control devices. CAM plans are required as part of the renewal of the facility’s Title V operating permit.

Chemical Accident Prevention Provisions, 40 CFR Part 68 [Not Applicable]  
Toxic and flammable substances subject to this regulation not stored on-site in quantities greater than the threshold quantities. More information on this federal program is available on the web page: [www.epa.gov/ceppo](http://www.epa.gov/ceppo).

Stratospheric Ozone Protection, 40 CFR Part 82 [Applicable]  
This facility does not produce, consume, recycle, import, or export any controlled substances or controlled products as defined in this part, nor does this facility perform service on motor (fleet) vehicles, which involves ozone-depleting substances. Therefore, as currently operated, this facility is not subject to these requirements. To the extent that the facility has numerous units (i.e., chillers, transformers, and air driers) that apply, the permit requires compliance with Part 82.

## SECTION VII. COMPLIANCE

### Tier Classification and Public Review

This application has been determined to be a **Tier II** based on the request for a construction permit for a significant modification to an existing major source.

The permittee has submitted an affidavit that they are not seeking a permit for land use or for any operation upon land owned by others without their knowledge. The affidavit certifies that the applicant owns the land/real property.

The applicant published the “Notice of Filing a Tier II Application” in *The Daily Oklahoman*, a daily newspaper published in Oklahoma County, on January 31, 2004. The notice stated that the application was available for public review at the Bethany Public Library (no address listed) or at the DEQ Air Quality Division’s Main Office in Oklahoma City, 707 N Robinson, Oklahoma City, Oklahoma 73101. A draft of this permit was also made available for public review for a period of 30 days as stated in another announcement in *The Daily Oklahoman* on March 6, 2004, and was available on the AQD Section of the DEQ Web site. This facility is not located within 50 miles of the border of Oklahoma. Information on all permit actions is available for review by the public in the Air Quality section of the DEQ Web Page: <http://www.deq.state.ok.us>.

EPA Region VI consented to doing concurrent review with the public. No comments were received from EPA Region VI.

**Fees Paid**

Part 70 source construction permit fee of \$1,500.

**SECTION X. SUMMARY**

The facility has demonstrated the ability to achieve compliance with applicable air pollution control rules and regulations. Ambient air quality standards are not threatened at this site. There are no active Air Quality compliance or enforcement issues concerning this facility. Issuance of the construction permit is recommended.



**PERMIT TO CONSTRUCT  
AIR POLLUTION CONTROL FACILITY  
SPECIFIC CONDITIONS**

**Bridgestone/Firestone North American Tire, LLC      Permit No. 2001-100-C (M-1) (PSD)  
Dayton Tire and Rubber Company  
Oklahoma City Manufacturing Facility**

The permittee is authorized to construct in conformity with the specifications submitted to Air Quality on January 21, 2004, with additional information received on February 12, 2004. The Evaluation Memorandum dated April 19, 2004, explains the derivation of applicable permit requirements and estimates of emissions; however, it does not contain operating limitations or permit requirements. Commencing construction or operations under this permit constitutes acceptance of, and consent to, the conditions contained herein.

1. Points of emissions, emissions limitations, and requirements for each point:  
[OAC 252:100-8-6(a)]

<b>Point ID</b>	<b>EU Name</b>	<b>Pollutant</b>	<b>lbs/hr</b>	<b>tons/year</b>
EUG-3				
EU-108	#271 Banbury Drop Chute	VOC (Ethanol)		
EU-108A	#272 Banbury Drop Chute	VOC (Ethanol)		
EU-110	#273 Banbury Drop Chute	VOC (Ethanol)		
EU-151	#2 Tread Line Mills	VOC (Ethanol)		
EU-161	#3 Tread Line Mills	VOC (Ethanol)		
EUG-4				
EU-300	Curing Presses	VOC (Ethanol)		
Totals			82.2	180.0

Emissions and materials usage are calculated monthly. Hourly figures (lbs/hr) are calculated by dividing the monthly total by the number of operating hours in the month. Annual numbers (twelve month rolling totals) are calculated by adding the current month to the previous eleven months.

2. Upon issuance of an operating permit, the permittee shall be authorized to operate this facility continuously (24 hours per day, every day of the year). [OAC 252:100-8-6(a)]
3. Silane coupling agent usage shall not exceed 430 lbs/hr and 934 TPY.

4. Compliance with TPY emissions limitations shall be based on a 12-month rolling total and demonstrated by means of monthly records maintained on-site. The permittee shall maintain monthly records of EPP coupling agent usage. The records shall be updated within thirty (30) days after the end of each month. The records shall be maintained on site for at least five years after the date of recording and shall be provided to regulatory personnel upon request.
5. The permittee shall incorporate these permit conditions into the Title V permit application by submitting appropriate revisions no later than 60 days after the issuance of this permit.
6. Permit No. 2001-100-C is now null and void.
7. In the event of a conflict between this permit and a previous current permit, this permit takes precedence.

**TITLE V (PART 70) PERMIT TO OPERATE / CONSTRUCT  
STANDARD CONDITIONS  
(October 15, 2003)**

**SECTION I. DUTY TO COMPLY**

A. This is a permit to operate / construct this specific facility in accordance with Title V of the federal Clean Air Act (42 U.S.C. 7401, et seq.) and under the authority of the Oklahoma Clean Air Act and the rules promulgated there under. [Oklahoma Clean Air Act, 27A O.S. § 2-5-112]

B. The issuing Authority for the permit is the Air Quality Division (AQD) of the Oklahoma Department of Environmental Quality (DEQ). The permit does not relieve the holder of the obligation to comply with other applicable federal, state, or local statutes, regulations, rules, or ordinances. [Oklahoma Clean Air Act, 27A O.S. § 2-5-112]

C. The permittee shall comply with all conditions of this permit. Any permit noncompliance shall constitute a violation of the Oklahoma Clean Air Act and shall be grounds for enforcement action, for revocation of the approval to operate under the terms of this permit, or for denial of an application to renew this permit. All applicable requirements (excluding state-only requirements) are enforceable by the DEQ, by EPA, and by citizens under section 304 of the Clean Air Act. This permit is valid for operations only at the specific location listed. [OAC 252:100-8-1.3 and 8-6 (a)(7)(A) and (b)(1)]

D. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [OAC 252:100-8-6 (a)(7)(B)]

**SECTION II. REPORTING OF DEVIATIONS FROM PERMIT TERMS**

A. Any exceedance resulting from emergency conditions and/or posing an imminent and substantial danger to public health, safety, or the environment shall be reported in accordance with Section XIV. [OAC 252:100-8-6 (a)(3)(C)(iii)]

B. Deviations that result in emissions exceeding those allowed in this permit shall be reported consistent with the requirements of OAC 252:100-9, Excess Emission Reporting Requirements. [OAC 252:100-8-6 (a)(3)(C)(iv)]

C. Oral notifications (fax is also acceptable) shall be made to the AQD central office as soon as the owner or operator of the facility has knowledge of such emissions but no later than 4:30 p.m. the next working day the permittee becomes aware of the exceedance. Within ten (10) working days after the immediate notice is given, the owner operator shall submit a written report describing the extent of the excess emissions and response actions taken by the facility. Every written report submitted under this section shall be certified by a responsible official. [OAC 252:100-8-6 (a)(3)(C)(iii)(I) and (iv)]

**SECTION III. MONITORING, TESTING, RECORDKEEPING & REPORTING**

A. The permittee shall keep records as specified in this permit. These records, including monitoring data and necessary support information, shall be retained on-site or at a nearby field office for a period of at least five years from the date of the monitoring sample, measurement, report, or application, and shall be made available for inspection by regulatory personnel upon request. Support information includes all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Where appropriate, the permit may specify that records may be maintained in computerized form.

[OAC 252:100-8-6 (a)(3)(B)(ii), 8-6 (c)(1), and 8-6 (c)(2)(B)]

B. Records of required monitoring shall include:

- (1) the date, place and time of sampling or measurement;
- (2) the date or dates analyses were performed;
- (3) the company or entity which performed the analyses;
- (4) the analytical techniques or methods used;
- (5) the results of such analyses; and
- (6) the operating conditions as existing at the time of sampling or measurement.

[OAC 252:100-8-6 (a)(3)(B)(i)]

C. No later than 30 days after each six (6) month period, after the date of the issuance of the original Part 70 operating permit, the permittee shall submit to AQD a report of the results of any required monitoring. All instances of deviations from permit requirements since the previous report shall be clearly identified in the report.

[OAC 252:100-8-6 (a)(3)(C)(i) and (ii)]

D. If any testing shows emissions in excess of limitations specified in this permit, the owner or operator shall comply with the provisions of Section II of these standard conditions.

[OAC 252:100-8-6 (a)(3)(C)(iii)]

E. In addition to any monitoring, recordkeeping or reporting requirement specified in this permit, monitoring and reporting may be required under the provisions of OAC 252:100-43, Testing, Monitoring, and Recordkeeping, or as required by any provision of the Federal Clean Air Act or Oklahoma Clean Air Act.

F. Submission of quarterly or semi-annual reports required by any applicable requirement that are duplicative of the reporting required in the previous paragraph will satisfy the reporting requirements of the previous paragraph if noted on the submitted report.

G. Every report submitted under this section shall be certified by a responsible official.

[OAC 252:100-8-6 (a)(3)(C)(iv)]

H. Any owner or operator subject to the provisions of NSPS shall maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of an affected facility or any malfunction of the air pollution control equipment.

[40 CFR 60.7 (b)]

## STANDARD CONDITIONS

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I. Any owner or operator subject to the provisions of NSPS shall maintain a file of all measurements and other information required by the subpart recorded in a permanent file suitable for inspection. This file shall be retained for at least two years following the date of such measurements, maintenance, and records. [40 CFR 60.7 (d)]

J. The permittee of a facility that is operating subject to a schedule of compliance shall submit to the DEQ a progress report at least semi-annually. The progress reports shall contain dates for achieving the activities, milestones or compliance required in the schedule of compliance and the dates when such activities, milestones or compliance was achieved. The progress reports shall also contain an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted. [OAC 252:100-8-6 (c)(4)]

K. All testing must be conducted by methods approved by the Division Director under the direction of qualified personnel. All tests shall be made and the results calculated in accordance with standard test procedures. The permittee may request the use of alternative test methods or analysis procedures. The AQD shall approve or disapprove the request within 60 days. When a portable analyzer is used to measure emissions it shall be setup, calibrated, and operated in accordance with the manufacturer's instructions and in accordance with a protocol meeting the requirements of the "AQD Portable Analyzer Guidance" document or an equivalent method approved by Air Quality. [OAC 252:100-8-6 (a)(3)(A)(iv) and OAC 252:100-43]

L. The permittee shall submit to the AQD a copy of all reports submitted to the EPA as required by 40 CFR Part 60, 61, and 63, for all equipment constructed or operated under this permit subject to such standards. [OAC 252:100-4-5 and OAC 252:100-41-15]

## SECTION IV. COMPLIANCE CERTIFICATIONS

A. No later than 30 days after each anniversary date of the issuance of the original Part 70 operating permit, the permittee shall submit to the AQD, with a copy to the US EPA, Region 6, a certification of compliance with the terms and conditions of this permit and of any other applicable requirements which have become effective since the issuance of this permit. The compliance certification shall also include such other facts as the permitting authority may require to determine the compliance status of the source.

[OAC 252:100-8-6 (c)(5)(A), (C)(v), and (D)]

B. The certification shall describe the operating permit term or condition that is the basis of the certification; the current compliance status; whether compliance was continuous or intermittent; the methods used for determining compliance, currently and over the reporting period; and a statement that the facility will continue to comply with all applicable requirements.

[OAC 252:100-8-6 (c)(5)(C)(i)-(iv)]

C. Any document required to be submitted in accordance with this permit shall be certified as being true, accurate, and complete by a responsible official. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete.

[OAC 252:100-8-5 (f) and OAC 252:100-8-6 (c)(1)]

D. Any facility reporting noncompliance shall submit a schedule of compliance for emissions units or stationary sources that are not in compliance with all applicable requirements. This schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirements for which the emissions unit or stationary source is in noncompliance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the emissions unit or stationary source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. Except that a compliance plan shall not be required for any noncompliance condition which is corrected within 24 hours of discovery.

[OAC 252:100-8-5 (e)(8)(B) and OAC 252:100-8-6 (c)(3)]

#### **SECTION V. REQUIREMENTS THAT BECOME APPLICABLE DURING THE PERMIT TERM**

The permittee shall comply with any additional requirements that become effective during the permit term and that are applicable to the facility. Compliance with all new requirements shall be certified in the next annual certification.

[OAC 252:100-8-6 (c)(6)]

#### **SECTION VI. PERMIT SHIELD**

A. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC 252:100-8) shall be deemed compliance with the applicable requirements identified and included in this permit.

[OAC 252:100-8-6 (d)(1)]

B. Those requirements that are applicable are listed in the Standard Conditions and the Specific Conditions of this permit. Those requirements that the applicant requested be determined as not applicable are listed in the Evaluation Memorandum and are summarized in the Specific Conditions of this permit.

[OAC 252:100-8-6 (d)(2)]

#### **SECTION VII. ANNUAL EMISSIONS INVENTORY & FEE PAYMENT**

The permittee shall file with the AQD an annual emission inventory and shall pay annual fees based on emissions inventories. The methods used to calculate emissions for inventory purposes shall be based on the best available information accepted by AQD.

[OAC 252:100-5-2.1, -5-2.2, and OAC 252:100-8-6 (a)(8)]

**SECTION VIII. TERM OF PERMIT**

- A. Unless specified otherwise, the term of an operating permit shall be five years from the date of issuance. [OAC 252:100-8-6 (a)(2)(A)]
  
- B. A source's right to operate shall terminate upon the expiration of its permit unless a timely and complete renewal application has been submitted at least 180 days before the date of expiration. [OAC 252:100-8-7.1 (d)(1)]
  
- C. A duly issued construction permit or authorization to construct or modify will terminate and become null and void (unless extended as provided in OAC 252:100-8-1.4(b)) if the construction is not commenced within 18 months after the date the permit or authorization was issued, or if work is suspended for more than 18 months after it is commenced. [OAC 252:100-8-1.4(a)]
  
- D. The recipient of a construction permit shall apply for a permit to operate (or modified operating permit) within 180 days following the first day of operation. [OAC 252:100-8-4(b)(5)]

**SECTION IX. SEVERABILITY**

The provisions of this permit are severable and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby. [OAC 252:100-8-6 (a)(6)]

**SECTION X. PROPERTY RIGHTS**

- A. This permit does not convey any property rights of any sort, or any exclusive privilege. [OAC 252:100-8-6 (a)(7)(D)]
  
- B. This permit shall not be considered in any manner affecting the title of the premises upon which the equipment is located and does not release the permittee from any liability for damage to persons or property caused by or resulting from the maintenance or operation of the equipment for which the permit is issued. [OAC 252:100-8-6 (c)(6)]

**SECTION XI. DUTY TO PROVIDE INFORMATION**

- A. The permittee shall furnish to the DEQ, upon receipt of a written request and within sixty (60) days of the request unless the DEQ specifies another time period, any information that the DEQ may request to determine whether cause exists for modifying, reopening, revoking, reissuing, terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit. [OAC 252:100-8-6 (a)(7)(E)]

B. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 27A O.S. 2-5-105(18). Confidential information shall be clearly labeled as such and shall be separable from the main body of the document such as in an attachment.

[OAC 252:100-8-6 (a)(7)(E)]

C. Notification to the AQD of the sale or transfer of ownership of this facility is required and shall be made in writing within 10 days after such date.

[Oklahoma Clean Air Act, 27A O.S. § 2-5-112 (G)]

**SECTION XII. REOPENING, MODIFICATION & REVOCATION**

A. The permit may be modified, revoked, reopened and reissued, or terminated for cause. Except as provided for minor permit modifications, the filing of a request by the permittee for a permit modification, revocation, reissuance, termination, notification of planned changes, or anticipated noncompliance does not stay any permit condition.

[OAC 252:100-8-6 (a)(7)(C) and OAC 252:100-8-7.2 (b)]

B. The DEQ will reopen and revise or revoke this permit as necessary to remedy deficiencies in the following circumstances:

[OAC 252:100-8-7.3 and OAC 252:100-8-7.4(a)(2)]

- (1) Additional requirements under the Clean Air Act become applicable to a major source category three or more years prior to the expiration date of this permit. No such reopening is required if the effective date of the requirement is later than the expiration date of this permit.
- (2) The DEQ or the EPA determines that this permit contains a material mistake or that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (3) The DEQ determines that inaccurate information was used in establishing the emission standards, limitations, or other conditions of this permit. The DEQ may revoke and not reissue this permit if it determines that the permittee has submitted false or misleading information to the DEQ.

C. If “grandfathered” status is claimed and granted for any equipment covered by this permit, it shall only apply under the following circumstances:

[OAC 252:100-5-1.1]

- (1) It only applies to that specific item by serial number or some other permanent identification.
- (2) Grandfathered status is lost if the item is significantly modified or if it is relocated outside the boundaries of the facility.

D. To make changes other than (1) those described in Section XVIII (Operational Flexibility), (2) administrative permit amendments, and (3) those not defined as an Insignificant Activity (Section XVI) or Trivial Activity (Section XVII), the permittee shall notify AQD. Such changes may require a permit modification.

[OAC 252:100-8-7.2 (b)]



E. Activities that will result in air emissions that exceed the trivial/insignificant levels and that are not specifically approved by this permit are prohibited. [OAC 252:100-8-6 (c)(6)]

**SECTION XIII. INSPECTION & ENTRY**

A. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized regulatory officials to perform the following (subject to the permittee's right to seek confidential treatment pursuant to 27A O.S. Supp. 1998, § 2-5-105(18) for confidential information submitted to or obtained by the DEQ under this section):

- (1) enter upon the permittee's premises during reasonable/normal working hours where a source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- (2) have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- (3) inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- (4) as authorized by the Oklahoma Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit.

[OAC 252:100-8-6 (c)(2)]

**SECTION XIV. EMERGENCIES**

A. Any emergency and/or exceedance that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to AQD as soon as is practicable; but under no circumstance shall notification be more than 24 hours after the exceedance. [The degree of promptness in reporting shall be proportional to the degree of danger.]

[OAC 252:100-8-6 (a)(3)(C)(iii)(II)]

B. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. [OAC 252:100-8-2]

C. An emergency shall constitute an affirmative defense to an action brought for noncompliance with such technology-based emission limitation if the conditions of paragraph D below are met.

[OAC 252:100-8-6 (e)(1)]

D. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that:

- (1) an emergency occurred and the permittee can identify the cause or causes of the emergency;
- (2) the permitted facility was at the time being properly operated;

- (3) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) the permittee submitted notice of the emergency to AQD within 24 hours of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, the probable cause of the exceedance, any steps taken to mitigate emissions, and corrective actions taken; and
- (5) the permittee submitted a follow up written report within 10 working days of first becoming aware of the exceedance.

[OAC 252:100-8-6 (e)(2), (a)(3)(C)(iii)(I) and (IV)]

E. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [OAC 252:100-8-6 (e)(3)]

### **SECTION XV. RISK MANAGEMENT PLAN**

The permittee, if subject to the provision of Section 112(r) of the Clean Air Act, shall develop and register with the appropriate agency a risk management plan by June 20, 1999, or the applicable effective date. [OAC 252:100-8-6 (a)(4)]

### **SECTION XVI. INSIGNIFICANT ACTIVITIES**

Except as otherwise prohibited or limited by this permit, the permittee is hereby authorized to operate individual emissions units that are either on the list in Appendix I, or whose actual calendar year emissions do not exceed any of the limits below. Any activity to which a State or federal applicable requirement applies is not insignificant even if it meets the criteria below or is included on the insignificant activities list. [OAC 252:100-8-2]

- (1) 5 tons per year of any one criteria pollutant.
- (2) 2 tons per year for any one hazardous air pollutant (HAP) or 5 tons per year for an aggregate of two or more HAP's, or 20 percent of any threshold less than 10 tons per year for single HAP that the EPA may establish by rule.
- (3) 0.6 tons per year for any one category A substance, 1.2 tons per year for any one category B substance or 6 tons per year for any one category C substance as defined in 252:100-41-40.

### **SECTION XVII. TRIVIAL ACTIVITIES**

Except as otherwise prohibited or limited by this permit, the permittee is hereby authorized to operate any individual or combination of air emissions units that are considered inconsequential and are on the list in Appendix J. Any activity to which a State or federal applicable requirement applies is not trivial even if included on the trivial activities list. [OAC 252:100-8-2]

**SECTION XVIII. OPERATIONAL FLEXIBILITY**

A. A facility may implement any operating scenario allowed for in its Part 70 permit without the need for any permit revision or any notification to the DEQ (unless specified otherwise in the permit). When an operating scenario is changed, the permittee shall record in a log at the facility the scenario under which it is operating. [OAC 252:100-8-6 (a)(10) and (f)(1)]

B. The permittee may make changes within the facility that:

- (1) result in no net emissions increases,
- (2) are not modifications under any provision of Title I of the federal Clean Air Act, and
- (3) do not cause any hourly or annual permitted emission rate of any existing emissions unit to be exceeded;

provided that the facility provides the EPA and the DEQ with written notification as required below in advance of the proposed changes, which shall be a minimum of 7 days, or 24 hours for emergencies as defined in OAC 252:100-8-6 (e). The permittee, the DEQ, and the EPA shall attach each such notice to their copy of the permit. For each such change, the written notification required above shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change. The permit shield provided by this permit does not apply to any change made pursuant to this subsection.[OAC 252:100-8-6 (f)(2)]

**SECTION XIX. OTHER APPLICABLE & STATE-ONLY REQUIREMENTS**

A. The following applicable requirements and state-only requirements apply to the facility unless elsewhere covered by a more restrictive requirement:

- (1) No person shall cause or permit the discharge of emissions such that National Ambient Air Quality Standards (NAAQS) are exceeded on land outside the permitted facility. [OAC 252:100-3]
- (2) Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in the Open Burning Subchapter. [OAC 252:100-13]
- (3) No particulate emissions from any fuel-burning equipment with a rated heat input of 10 MMBTUH or less shall exceed 0.6 lb/MMBTU. [OAC 252:100-19]
- (4) For all emissions units not subject to an opacity limit promulgated under 40 CFR, Part 60, NSPS, no discharge of greater than 20% opacity is allowed except for short-term occurrences which consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity. [OAC 252:100-25]
- (5) No visible fugitive dust emissions shall be discharged beyond the property line on which the emissions originate in such a manner as to damage or to interfere with the use of adjacent properties, or cause air quality standards to be exceeded, or interfere with the maintenance of air quality standards. [OAC 252:100-29]

- (6) No sulfur oxide emissions from new gas-fired fuel-burning equipment shall exceed 0.2 lb/MMBTU. No existing source shall exceed the listed ambient air standards for sulfur dioxide. [OAC 252:100-31]
- (7) Volatile Organic Compound (VOC) storage tanks built after December 24, 1974, and with a capacity of 400 gallons or more storing a liquid with a vapor pressure of 1.5 psia or greater under actual conditions shall be equipped with a permanent submerged fill pipe or with a vapor-recovery system. [OAC 252:100-37-15(b)]
- (8) All fuel-burning equipment shall at all times be properly operated and maintained in a manner that will minimize emissions of VOCs. [OAC 252:100-37-36]
- (9) Except as otherwise provided, no person shall cause or permit the emissions of any toxic air contaminant in such concentration as to cause or to contribute to a violation of the MAAC. (State only) [OAC 252:100-41]

## SECTION XX. STRATOSPHERIC OZONE PROTECTION

A. The permittee shall comply with the following standards for production and consumption of ozone-depleting substances. [40 CFR 82, Subpart A]

1. Persons producing, importing, or placing an order for production or importation of certain class I and class II substances, HCFC-22, or HCFC-141b shall be subject to the requirements of §82.4.
2. Producers, importers, exporters, purchasers, and persons who transform or destroy certain class I and class II substances, HCFC-22, or HCFC-141b are subject to the recordkeeping requirements at §82.13.
3. Class I substances (listed at Appendix A to Subpart A) include certain CFCs, Halons, HBFCs, carbon tetrachloride, trichloroethane (methyl chloroform), and bromomethane (Methyl Bromide). Class II substances (listed at Appendix B to Subpart A) include HCFCs.

B. If the permittee performs a service on motor (fleet) vehicles when this service involves an ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all applicable requirements. Note: The term “motor vehicle” as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term “MVAC” as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC-22 refrigerant. [40 CFR 82, Subpart B]

C. The permittee shall comply with the following standards for recycling and emissions reduction except as provided for MVACs in Subpart B. [40 CFR 82, Subpart F]

- (1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
- (2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
- (3) Persons performing maintenance, service, repair, or disposal of appliances must be

certified by an approved technician certification program pursuant to § 82.161.

- (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record-keeping requirements pursuant to § 82.166.
- (5) Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to § 82.158.
- (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

## **SECTION XXI. TITLE V APPROVAL LANGUAGE**

A. DEQ wishes to reduce the time and work associated with permit review and, wherever it is not inconsistent with Federal requirements, to provide for incorporation of requirements established through construction permitting into the Sources' Title V permit without causing redundant review. Requirements from construction permits may be incorporated into the Title V permit through the administrative amendment process set forth in Oklahoma Administrative Code 252:100-8-7.2(a) only if the following procedures are followed:

- (1) The construction permit goes out for a 30-day public notice and comment using the procedures set forth in 40 Code of Federal Regulations (CFR) § 70.7 (h)(1). This public notice shall include notice to the public that this permit is subject to Environmental Protection Agency (EPA) review, EPA objection, and petition to EPA, as provided by 40 CFR § 70.8; that the requirements of the construction permit will be incorporated into the Title V permit through the administrative amendment process; that the public will not receive another opportunity to provide comments when the requirements are incorporated into the Title V permit; and that EPA review, EPA objection, and petitions to EPA will not be available to the public when requirements from the construction permit are incorporated into the Title V permit.
- (2) A copy of the construction permit application is sent to EPA, as provided by 40 CFR § 70.8(a)(1).
- (3) A copy of the draft construction permit is sent to any affected State, as provided by 40 CFR § 70.8(b).
- (4) A copy of the proposed construction permit is sent to EPA for a 45-day review period as provided by 40 CFR § 70.8(a) and (c).
- (5) The DEQ complies with 40 CFR § 70.8 (c) upon the written receipt within the 45-day comment period of any EPA objection to the construction permit. The DEQ shall not issue the permit until EPA's objections are resolved to the satisfaction of EPA.
- (6) The DEQ complies with 40 CFR § 70.8 (d).
- (7) A copy of the final construction permit is sent to EPA as provided by 40 CFR § 70.8 (a).
- (8) The DEQ shall not issue the proposed construction permit until any affected State and EPA have had an opportunity to review the proposed permit, as provided by these permit conditions.

- (9) Any requirements of the construction permit may be reopened for cause after incorporation into the Title V permit by the administrative amendment process, by DEQ as provided in OAC 252:100-8-7.3 (a), (b), and (c), and by EPA as provided in 40 CFR § 70.7 (f) and (g).
- (10) The DEQ shall not issue the administrative permit amendment if performance tests fail to demonstrate that the source is operating in substantial compliance with all permit requirements.

B. To the extent that these conditions are not followed, the Title V permit must go through the Title V review process.

**SECTION XXII. CREDIBLE EVIDENCE**

For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any provision of the Oklahoma implementation plan, nothing shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

[OAC 252:100-43-6]





# PART 70 PERMIT

AIR QUALITY DIVISION  
STATE OF OKLAHOMA  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
707 N. ROBINSON STREET, SUITE 4100  
P.O. BOX 1677  
OKLAHOMA CITY, OKLAHOMA 73101-1677

Issuance Date: \_\_\_\_\_

Permit Number: 2000-100-C (PSD)(M-1)

Bridgestone/Firestone North American Tire LLC, having complied with the requirements of the law, is hereby granted permission to convert some rubber production to silica rubber at their tire manufacturing plant, 2500 S. Council Road, Oklahoma City, Oklahoma County

subject to the following conditions, attached:

Standard Conditions dated October 15, 2003

Specific Conditions

In the absence of construction commencement, this permit shall expire 18 months from the issuance date, except as authorized under Section VIII of the Standard Conditions.

\_\_\_\_\_  
Director, Air Quality Division



Dayton Tire & Rubber  
Attn: Mr. Phil McCowan  
2500 S. Council Road  
Oklahoma City, OK 73124

Re: Permit Application No. 2001-100-C (PSD) (M-1)  
Rubber Tire Manufacturing Plant  
Section 8 – T11N – R4W  
Oklahoma County, Oklahoma

Dear Mr. McCowan:

Enclosed is the permit authorizing construction of the referenced facility. Please note that this permit is issued subject to standard and specific conditions, which are attached. These conditions must be carefully followed since they define the limits of the permit and will be confirmed by periodic inspections.

Also note that you are required to annually submit an emissions inventory for this facility. An emissions inventory must be completed on approved AQD forms and submitted (hardcopy or electronically) by March 1<sup>st</sup> of every year. Any questions concerning the form or submittal process should be referred to the Emissions Inventory Staff at 405-702-4100.

Thank you for your cooperation in this matter. If we may be of further service, please contact our office at (405)702-4100.

Sincerely,

David S. Schutz, P.E.  
AIR QUALITY DIVISION  
Enclosure