

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

MEMORANDUM

October 8, 2012

TO: Phillip Fielder, P.E., Permits and Engineering Group Manager

THROUGH: Kendal Stegmann, Sr. Environmental Mgr., Compliance & Enforcement

THROUGH: David Schutz, P.E., New Source Permits Section

THROUGH: Peer Review

FROM: Phillip Martin, P.E., Existing Source Permits Section Manager

SUBJECT: Evaluation of Permit Application No. **99-103-C (M-10) PSD**
Goodyear Tire & Rubber Company
Banbury Mixers #3, 4, 5, and 8 Modification
#1 Goodyear Boulevard (Lat. 34.599°; Long. - 98.510°)
Lawton, Comanche County, OK 73505

SECTION I. INTRODUCTION

The Goodyear Tire & Rubber Company operates a tire manufacturing plant (SIC 3011) in Lawton, Oklahoma (Goodyear Lawton). The facility is currently operating under Permit No. 99-103-TV (M-9), issued June 22, 2011. Goodyear is proposing to modify two existing Banbury Mixers #3 & 4 (BB03 & BB04) to allow the mixing of High Dispersion Silica (HDS) rubber compound resulting in volatile organic compound (VOC) emissions in the form of ethanol. An additional RTO (RTO #2) will be installed for VOC control of the ethanol emissions. Additionally, Banbury Mixer #8 (BB08) is currently authorized as a white sidewall Banbury (WSWBB) and Goodyear proposes to authorize this mixer as a black rubber compound Banbury. BB08 will only be mixing productive rubber. The VOC emission increase from the proposed modification exceeds the PSD significant emission rate (SER). Therefore, the project will be subject to PSD review. It is important to note that the proposed Banbury Mixers modification will require PSD review for VOC alone (i.e., remaining criteria pollutant emissions are less than their respective SERs). There will be no increase in permitted levels for any criteria pollutant.

Goodyear submitted permit applications for the following changes to the Title V permit, which were all incorporated into Permit No. 99-103-TV (M-9). These were determined by DEQ to be Tier I applications which allow construction to proceed without waiting for issuance of an air permit.

- (M-2) submitted March 2007 (Change Banbury #7 from 4 to 6 wing rotor)
- (M-3) submitted July 2007 (Replace 15 tire curing presses)
- (M-4) submitted November 2007 (Upgrade conveyor system for GTS 3, 4, 5, 6)

- (M-6) submitted April 13, 2010 (Addition of two G-3 Tire Building Machines and two Force Variation Machine (FVM) grinding machines)
- (M-8) submitted June 8, 2010 (Addition of 19 G-3 Tire Building Machines and 5 Force Variation Machine (FVM) grinding machines)
- (M-9) submitted October 18, 2010 (Various Installations and Replacements: Install a new Steelastic Spiral Overlay (SOL) Calendar/Slitter with extruder, replace 32 existing 42-inch Curing Presses with 52-inch Curing Presses, install one new Green Tire Spray (GTS) Booth and replace one GTS Booth (Booth #3), and install a new Hexaplex Extruder)

In addition, there was one PSD tier II application:

- (M-7) submitted May 17, 2010 (PSD modification of Banbury #5 Mixer)

In order to confirm that each of these projects can be permitted separately without circumventing any New Source Review (NSR) permitting requirements, Goodyear is providing the following information about the recently proposed projects:

- Each proposed project is capable of surviving economically at the plant without the support of an additional proposed project, and none of the proposed projects are dependent on any other proposed project to be economically viable.
- None of the proposed projects are dependent on any other proposed project to be technically viable. Specifically, and without limitation:
 - None of the proposed projects rely exclusively or are dependent on any other proposed project to provide raw materials as a necessary input.
 - None of the proposed projects rely exclusively or are dependent on any other proposed project to release an intermediate project.

The PSD application for the modification to Banbury Mixers is a separate project and is being conducted by Goodyear to allow the mixing of a new family of rubber polymers. Whereas, the projects noted above will be conducted to assist in modernizing the Lawton Facility. The timing of the projects is a result of the cyclical economies of the tire industry and in no way represents an effort or intention by Goodyear to avoid NSR requirements through individual permitting.

SECTION II. PROCESS DESCRIPTION

Manufacturing tires requires the use of various types and formulations of rubber compounds. The formulation of ingredients depends on a number of factors including the desired rubber properties and performance characteristics. Formulation differences and changes are driven by the specific function of the compound being evaluated within the tire (tread, belt, ply, sidewall, bead, inner liner, etc.). Production of a tire is a dynamic trade-off between formulation issues and construction techniques. These items impact desired properties such as tire wear, cornering traction, heat build up, rolling resistance, fuel economy, stopping distance, and wet traction. The production of a tire involves the following basic steps:

- A compounder determines desired rubber formulations for various tire components based on customer requirements.

- Various raw materials needed to produce the required compounds are combined in a process known as “Banbury mixing.”
- The mixed rubber is then extruded or calendered into components, which will be used to build a “green,” or uncured, tire. Tread striping and end cementing can occur at the Extruder Line.
- Uncured rubber components are assembled at a tire building machine.
- Assembled uncured (“green”) tires are transported to the curing area, where the inside of the “green” tire is sprayed with a release compound in the Green Tire Spray Booth (GTSB) and then cured in a curing press under heat and pressure.
- Grinding for uniformity by Force Variation Machines (FVMs). White sidewall grinding may also occur.
- Final inspection of the cured tire prior to customer release.

SECTION III. PROJECT DESCRIPTION

Previously Banbury mixers #3 & 4 were only allowed to produce conventional rubber. This modification is to allow Banbury mixers #3 & 4 to produce HDS rubber. The VOC emissions from Banbury mixers #3 & 4 will be routed to a regenerative thermal oxidizer (RTO #2) for VOC control. Additionally Banbury Mixer #8 (BB08) is currently authorized as a white sidewall Banbury (WSWBB) and Goodyear proposed to authorize this mixer as a black rubber compound Banbury.

With the modification to Banbury mixers #3, 4, & 8, a small increase in potential rubber throughput will occur from Banbury mixers #3, 4, & 8. As a result, throughput from the other associated equipment common to all the Banbury mixers (such as the carbon black handling system) will increase as a result of the increased throughput of Banbury mixers #3, 4, & 8. Throughput usage for the associated equipment used in the emission calculations for this project account only for the portion of throughput attributable to the Banbury mixers #3, 4, & 8 throughput.

Banbury #5 will have flexibility to run to either RTO #1 or RTO #2. RTO #1 has the capability to control emissions from two Banbury mixers simultaneously and RTO #2 will have the capability to control emissions from three Banbury mixers simultaneously.

SECTION IV. EMISSIONS

Emissions from rubber mixing processes consist of VOC, hazardous air pollutants (HAP), and PM. Each Banbury is equipped with a dust collector to control PM emissions. Emissions from Banbury Mixers #3, 4, 5, & 8 were calculated using throughput of the mixer, Rubber Manufacturer Association (RMA) emission factors (per compound in the rubber), and the PM control efficiency of the dust collector. Emissions factors take into account the various compounds made in the tires using a percentage of each compound per pound of rubber produced. Non-productive rubber mixing comprises 90% of the total rubber emissions. Therefore, Banbury Mixers #3, 4, & 5 (non-productive mixers) apply a 90% factor.

The proposed coupling agent produces ethanol, a VOC, through a series of chemical reactions. The evolution of ethanol is dependent on the processing temperature and rubber formulation. VOC emissions are split between mixing (75%) and curing (25%), which is the standard approach for distributing ethanol emission releases used at all Goodyear plants. VOC emissions from mixing are collected by and routed to a Regenerative Thermal Oxidizer (RTO). The capture efficiency for mixing emissions is 84.4%. The destruction efficiency of RTO #1, as demonstrated during a stack test, is 95% and RTO #2 is 98%.

PROJECT EMISSIONS INCREASE CALCULATIONS

Baseline actual emissions are the average emission rates for the 2009 and 2010 calendar years for the Banbury Mixers #3, 4, 5, & 8 and associated equipment. Projected actual emissions for the Banbury Mixers #3, 4, 5, & 8 were calculated using the maximum capacity of the Banbury Mixers after the project. The associated units throughput attributed to Banbury Mixers #3, 4, 5, & 8 was derived from the total unit throughput, multiplied by the ratio of Banbury Mixers #3, 4, 5, & 8 rubber throughput to total mixing rubber throughput. The associated emissions increases with the exception of the particulate emissions from the carbon black towers and surge bins were calculated by multiplying the average past actual 2009/2010 emissions by the calculated percentage increase in rubber.

Particulate emissions from the carbon black towers and surge bins were calculated using throughput, fly loss percentage, and control efficiency of the dust collectors. Facility calculations assume a 1% fly loss percentage and a 99% control device efficiency. The throughput attributed to Banbury Mixer #5 was derived from the total unit throughput, multiplied by the ratio of Banbury Mixers #3, 4, 5, & 8 rubber throughput to total mixing rubber throughput. All PM is assumed to be PM₁₀ and PM_{2.5}. Greenhouse gas emissions were also calculated based on the increase in boiler demand.

PROJECT EMISSIONS SUMMARY

The table below shows the total project and associated emissions increases compared to the PSD SERs. Only VOC emission increases are above the PSD SERs for the proposed project.

BANBURY MIXERS AND ASSOCIATED EMISSIONS SUMMARY

| Emissions Unit | VOC (TPY) | PM₁₀* (TPY) | NO_x (TPY) | SO₂ (TPY) | CO (TPY) | CO₂e (TPY) |
|--|----------------------|-----------------------------------|---------------------------------|---------------------------------|---------------------|----------------------------------|
| Banbury Mixer #3 Emissions | 33.53 | 0.07 | - | - | - | - |
| Banbury Mixer #4 Emissions | 33.26 | 0.05 | - | - | - | - |
| Banbury Mixer #5 Emissions | 38.28 | 0.07 | - | - | - | - |
| Banbury Mixer #8 Emissions | 5.32 | 0.09 | - | - | - | - |
| Curing - Banbury Mixer #3 Emissions | 63.44 | - | - | - | - | - |
| Curing - Banbury Mixer #4 Emissions | 63.22 | - | - | - | - | - |
| Curing - Banbury Mixer #5 Emissions | 63.44 | - | - | - | - | - |
| Curing - Banbury Mixer #8 Emissions | 2.04 | - | - | - | - | - |
| Carbon Black Tower Emissions assoc. with BB #3 | - | 0.25 | - | - | - | - |
| Surge Bins Emissions assoc. with BB #3 | - | 0.25 | - | - | - | - |
| Carbon Black Tower Emissions assoc. with BB #4 | - | 0.19 | - | - | - | - |
| Surge Bins Emissions assoc. with BB #4 | - | 0.19 | - | - | - | - |
| Carbon Black Tower Emissions assoc. with BB #5 RTO #1 | - | 0.25 | - | - | - | - |
| Surge Bins Emissions assoc. with BB #5 RTO #1 | - | 0.25 | - | - | - | - |
| Carbon Black Tower Emissions assoc. with BB #5 RTO #2 | - | 0.25 | - | - | - | - |
| Surge Bins Emissions assoc. with BB #5 RTO #2 | - | 0.25 | - | - | - | - |
| Extruding | 9.26 | 0.002 | - | - | - | - |
| Milling – Extruding | 7.03 | - | - | - | - | - |
| Tread End Cementing/Marking Ink | 3.68 | - | - | - | - | - |
| Calendering | 3.69 | - | - | - | - | - |
| Green Tire Spray Booths | 0.19 | 0.06 | - | - | - | - |
| Green Tire Stripping | 1.96 | - | - | - | - | - |
| Grinding Emissions | 0.09 | 0.48 | - | - | - | - |
| Boiler Demand | 0.43 | 0.60 | 12.31 | 0.05 | 6.91 | 8,613 |
| RTO #2 Emissions | 0.35 | 0.48 | 6.44 | 0.04 | 5.43 | 7,028 |
| Total Project and Associated Emission Increases | 329.20 | 3.76 | 18.75 | 0.09 | 12.34 | 15,641 |
| PSD Significant Emission Rate | 40 | 15/10 | 40 | 40 | 100 | 75,000 |
| Trigger PSD Review | Yes | No | No | No | No | No |

*All PM₁₀ is assumed to be PM_{2.5}

Site-Wide Emissions Cap

Goodyear Lawton requested that the site-wide emissions CAP for VOC, ethanol, and PM₁₀ remain unchanged from the previous permit. The table below shows the current site-wide emissions CAP.

SITE-WIDE EMISSIONS CAP

| EUG | EU Name / Model | VOC Emissions (TPY) (Not Including Ethanol) | Ethanol Emissions (TPY) | PM ₁₀ Emissions (TPY) |
|------------------|---|---|-------------------------|----------------------------------|
| EUG-BB | Banbury Mixers | ↑ | ↑ | ↑ |
| EUG-EXT | Extruders 2, 3, 5, and 6 | | | |
| EUG-EXTNSPS | Extruders 1, 4, and 7 | | | |
| EUG-GC | Gum Calender 2 and 3 | | | |
| EUG-FWC | Fabric & Wire Calenders | | | |
| EG-GTS | Non-NSPS Green Tire Spray Booths | | | |
| EG-GTSNSPS | NSPS Green Tire Spray Booths | | | |
| EUG-HF | Hot Former | | | |
| EUG-STRIPP | Green Tire Stripping | | | |
| EUG-CP | Curing Presses | | | |
| EUG-GRFVM | Force Variation Machine & Radial Run-out Grinders | | | |
| EUG-GRWSW | White Sidewall Grinders | | | |
| EUG-BLUE | White Sidewall Machines | | | |
| EUG-RECYCLE | Recycling Mills | ↓ | ↓ | ↓ |
| CAP Total | | 744.34 | 657.08 | 82.73 |

GHG Emissions Impact

The greenhouse gas emissions increases from this project were due to increased steam demand from the boilers and the new burner associated with the proposed RTO #2. The GHG emission increases of 15,641 TPY were found to be less than the PSD SER of 75,000 tons CO₂e.

SECTION V. PREVENTION OF SIGNIFICANT DETERIORATION

Goodyear Lawton is classified as an existing major source under the PSD regulations. Therefore, the emission increases from all modifications to the facility must be compared against the PSD Significant Emission Rates (SERs) in order to determine if PSD permitting is required. As summarized previously, projected VOC emission increases are above the 40 TPY PSD SER. Therefore, the proposed project is a major modification, as defined in 40 CFR 52.21(r)(4), and subject to PSD permitting requirements.

A full PSD review of the project emissions of VOCs consists of the following areas:

- determination of best available control technology (BACT),
- evaluation of existing air quality and determination of monitoring requirements,
- evaluation of PSD increment consumption,
- analysis of compliance with National Ambient Air Quality Standards (NAAQS),
- evaluation of source-related impacts on growth, soils, vegetation, visibility, and
- evaluation of Class I area impact.

A. BEST AVAILABLE CONTROL TECHNOLOGY ANALYSIS (BACT)

The BACT determination performed for the proposed coupling agent use on Banbury Mixers #3, 4, and 5 is limited to VOC, the only pollutant involved in this PSD application. The proposed project to Banbury Mixers #3, 4, and 5 will not result in a significant increase in any other criteria pollutants. The proposed change to Banbury Mixer #8 from a white sidewall Banbury to a black sidewall Banbury will result in an emissions increase of 2.04 tpy of VOC. There is no economically viable method to control an emissions increase this small. Therefore, a BACT analysis is not performed for Banbury Mixer #8.

As part of the PSD review, a BACT analysis for VOCs is required. The first step in this approach is to determine, for each emission unit in question, the most stringent control available for a similar or identical source or source category. If it can be shown that this level of control is technically or economically infeasible for the unit in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental, or economic objections. Presented below are the five basic steps of a top-down BACT review procedure.

1. Identify all potentially applicable control technologies,
2. Eliminate technically infeasible options,
3. Rank remaining control technologies by control effectiveness,
4. Evaluate most effective controls and document results, and
5. Select BACT.

The BACT definition contains two core requirements that must be met by any BACT analysis, irrespective of whether it is conducted in a top-down manner. First, the BACT analysis must include consideration of the most stringent available technologies (i.e., those which provide the “maximum degree of emissions reduction”). Second, any decision to require a lesser degree of emissions reduction must be justified by an objective analysis of “technical feasibility, and energy, environmental, and economic impacts.”

If the source is subject to a New Source Performance Standard (NSPS), the minimum control efficiency to be considered in a BACT analysis must result in an emission rate less than or equal to the NSPS emission rate. In other words, NSPS represents the maximum allowable emission rate from an emission source. Also, BACT requirements only apply to pollutants that are subject

to PSD review and the emission units that are newly installed, physically modified or have incurred a change in the method of operation if the change was prohibited by a permit condition established after August 7, 1980.

1. Identify Potentially Applicable Control Technologies

The first step in the BACT analysis is to identify the possible control technologies for each applicable pollutant for comparable emissions sources. For most source types, the EPA's RACT/BACT/LAER Clearinghouse (RBLC) is the preferred reference. The table below lists commercially available controls, regardless of the industrial sector or process to be controlled. The control technologies for each pollutant were considered in order of decreasing emission reduction potential.

RBLC LISTED CONTROL TECHNOLOGIES

| Pollutant | Listed Control Technologies |
|-----------|---|
| VOC | Regenerative Thermal Oxidation (RTO) Regenerative Catalytic Oxidation (RCO) Condensers/Absorbers Good Design/Operation |

2. Rank Control Technologies By Effectiveness

The table below lists the remaining technically feasible controls and their efficiencies. Goodyear Lawton currently operates an RTO for the control of VOC emissions from existing Banbury mixers (#5, 6, and 7) with a required destruction efficiency of 95%.

REMAINING CONTROL TECHNOLOGIES RANKED BY EFFECTIVENESS

| Pollutant | Listed Control Technologies | Potential Control Effectiveness (%) |
|-----------|---------------------------------------|-------------------------------------|
| VOC | Regenerative Thermal Oxidizer (RTO) | 98% |
| | Regenerative Catalytic Oxidizer (RCO) | 95% |
| | Condensers/Absorbers | 75% |
| | Good Design/Operation | Base Case |

3. Select BACT For Mixing Process

As noted in the previous table, an RTO has the greatest control effectiveness of all listed control technologies. Therefore, Goodyear will install a new RTO, with a required destruction efficiency of 98%, to control the increased VOC emissions from the Banbury Mixers #3, 4, and 5. The new RTO (RTO #2) will have the ability to control emissions from three mixers, so Goodyear proposes that Banbury Mixers #3, 4, and 5 all be routed to the new RTO when using coupling agent. Goodyear also proposes that BB05 maintain the ability to be routed to the current RTO (RTO#1) so it can be used as a swing mixer if BB06 or BB07 are not operating. The existing RTO will still maintain the limitation of only controlling emissions from two mixers at a time. Goodyear considers the rubber throughput and the coupling content of the HDS rubber to be confidential so a VOC lb/T of rubber limit was excluded from the BACT determination. BACT

for VOC emissions from Mixers #3, 4, and 5 when mixing HDS non-productive rubber is selected as combustion in an RTO with a required destruction efficiency of 98 weight percent.

B. AMBIENT IMPACTS

Ozone is a form of oxygen with three atoms (O₃), instead of the usual two atoms (O₂). It is a photochemical oxidant and at ground level is a main component of smog. Ozone is not emitted directly into the air, but is formed through chemical reactions between natural and anthropogenic emissions of VOCs and NO_x in the presence of sunlight. These gaseous compounds mix in the ambient, or outdoor, air, and when they interact with sunlight, ozone is formed. Ozone pollution is the periodic increase in the concentration of ozone in the ambient air. It is mainly a daytime problem during summer months because warm temperatures play a role in its formation. When temperatures are high, sunshine is strong, and winds are weak, ozone can accumulate to unhealthy levels.

For any criteria pollutant that an applicant proposes to permit in significant amounts, continuous ambient monitoring data may be required as part of the applicant’s air quality analysis. The U.S. EPA’s monitoring *de minimis* concentrations establish the levels at which a facility would need to conduct pre-construction ambient air quality monitoring to demonstrate compliance with the NAAQS and PSD increments for criteria pollutants. U.S. EPA has established an ambient monitoring *de minimis* level for ozone which is also unique from the other criteria pollutants because it is based on a mass emission rate (i.e., 100 tpy of VOC) instead of an ambient concentration (i.e., µg/m³ or ppm_v). VOC emission increases are greater than 100 TPY but the requirement for pre-construction monitoring is satisfied by the nearby existing Lawton North ozone monitor.

A State & Local Ambient Monitoring System (SLAMS) monitor is located approximately 8.35 kilometers NE of Goodyear Lawton. The SLAMS monitor is part of a network of ambient monitors established by the EPA in cooperation with local and state environmental regulatory agencies. This monitor is sited at 2211 NW 25th Lawton, OK. Ozone readings at the monitor (SLAMS Monitor ID # 400310651) continue to meet the 8-hour standard of 0.075 ppm for the fourth highest monitored concentration averaged over a three-year period.

| Year | 8-hour Ozone Concentration (ppm) | | | |
|------|----------------------------------|-------------------------|-------------------------|-------------------------|
| | 1 st highest | 2 nd highest | 3 rd highest | 4 th highest |
| 2009 | 0.075 | 0.073 | 0.070 | 0.070 |
| 2010 | 0.081 | 0.075 | 0.069 | 0.067 |
| 2011 | 0.083 | 0.079 | 0.079 | 0.079 |

The fourth highest monitored concentration averaged over a three-year period (2009-2011) was 0.072 ppm. This is below the primary 8-hour ozone standard of 0.075 ppm.

PSD Ozone Modeling

VOCs are regulated by the U.S. EPA as precursors to tropospheric ozone formation. Ozone is unique among other criteria pollutants because the U.S. EPA has not established a PSD modeling

significance level (i.e., an ambient concentration expressed in $\mu\text{g}/\text{m}^3$ or ppm_v). OAC 252:100-8-35 requires an air quality impact evaluation for each regulated pollutant for which a major modification would result in a significant net emissions increase. No de minimis air quality level is provided for ozone; rather, any net increase of 100 tons per year or more of volatile organic compounds subject to PSD is required to perform an ambient impact analysis.

As modeled, the potential increase in emissions of NO_x from the project is approximately 18.75 TPY and potential increase in emissions of VOC is 329.2 TPY. OAC 252:100-8-35 requires an air quality impact evaluation for each regulated pollutant for which a major modification would result in a significant net emissions increase. No de minimis air quality level is provided for ozone. However, any net increase of 100 tons per year or more of volatile organic compounds subject to PSD is required to perform an ambient impact analysis. Methods for evaluating single source impacts on ozone concentrations are not consistent, due to the lack of availability of data at a refined level, readily available tools and EPA guidance. DEQ has evaluated the impact of the proposed modification to the Goodyear facility using an existing air quality database generated for a SIP evaluation and the CAMx photochemical modeling system.

Modeling for Goodyear was conducted using the Early Action Compact 2007 control case. Emissions to be modeled were calculated by adding the future potential increases identified in the application to the 2007 grown emissions. VOC emissions were further speciated by Source Classification Code, SCC, using speciation tables generated by EPA and SCCs for Goodyear processes.

Maximum impacts from the proposed increases occur in Comanche, Caddo, and Kiowa Counties. Maximum 8-hour increases of as much as 0.2 ppb were predicted for the three counties. Maximum downwind impacts in Tulsa and Oklahoma City were negligible. The combination of the monitored background concentration and the maximum impacts is 0.0722 ppm which is below the primary 8-hour ozone standard of 0.075 ppm.

C. CLASS I AREA ANALYSIS - FEDERAL LAND MANAGER (FLM) REVIEW

Sections 160-169 of The Clean Air Act (CAA), as amended in August 1977, establish a detailed policy and regulatory program to protect the quality of the air in regions of the United States in which the air is cleaner than required by the NAAQS to protect public health and welfare. One of the purposes of the PSD program is “to preserve, protect, and enhance the air quality in national parks, national wilderness areas, national monuments, national seashores, and other areas of special national or regional natural, recreational, scenic, or historic value.”

Under the PSD program, Congress established a land classification scheme for those areas of the country with air quality better than the NAAQS – Class I allows very little deterioration of air quality, Class II allows moderate deterioration, and Class III allows more deterioration - but in all cases, the pollutant concentrations should not violate any of the NAAQS. Certain existing areas were designated as mandatory Class I which preclude redesignation to a less restrictive class, in order to acknowledge the value of maintaining these areas in relatively pristine condition. These Class I areas include:

- International Parks,
- National Wilderness Areas and National Memorial Parks in excess of 5,000 acres, and
- National Parks in excess of 6,000 acres.

The nearest mandatory Class I area is the 59,000 acre Wichita Mountains National Wildlife Refuge (WMNWR). Goodyear Lawton is located approximately 14.4 kilometers (8.94 miles) from the closest boundary and approximately 37.7 kilometers (23.4 miles) from the farthest boundary of the WMNWR. The WMNWR is managed by The United States Fish and Wildlife Service (U.S. FWS), which is the Federal Land Manager (FLM). This mandatory Class I Federal Area consists of North Mountain and Garden Wilderness Areas within the WMNWR. There is no significant impact level or PSD increment for VOC. Ozone modeling was performed and demonstrated compliance with the ozone NAAQS. The ambient impact is expected to be negligible from the project.

D. ADDITIONAL IMPACTS ANALYSIS

Mobile Sources

No additional mobile source emissions are expected from the proposed coupling agent usage in Banbury Mixers #3, 4, & 5.

Growth Impacts

A growth analysis is intended to quantify the amount of new growth that is likely to occur in support of the facility and to estimate emissions resulting from that associated growth. Associated growth includes residential and commercial/industrial growth resulting from the new facility. Residential growth depends on the number of new employees and the availability of housing in the area, while associated commercial and industrial growth consists of new sources providing services to the new employees and the facility. Goodyear does not anticipate that additional personnel will be employed to aid the coupling agent usage in Banbury Mixers #3, 4, & 5. Therefore, additional growth from this project is expected to be minimal.

Soil and Vegetation Analysis

The following discussion will review the project's potential to impact its agricultural surroundings based on the facility's allowable emission rates and resulting ground level concentrations of VOC.

The effects of gaseous air pollutants on vegetation may be classified into three rather broad categories: acute, chronic, and long-term. Acute effects are those that result from relatively short (less than 1 month) exposures to high concentrations of pollutants. Chronic effects occur when organisms are exposed for months or even years to certain threshold levels of pollutants. Long-term effects include abnormal changes in ecosystems and subtle physiological alterations in organisms. Acute and chronic effects are caused by the gaseous pollutant acting directly on the organism, whereas long-term effects may be indirectly caused by secondary agents such as changes in soil pH.

VOCs are regulated by the U.S. EPA as precursors to tropospheric ozone. Elevated ground-level ozone concentrations can damage plant life and reduce crop production. VOCs interfere with the ability of plants to produce and store food, making them more susceptible to disease, insects, other pollutants, and harsh weather. The plant is located in an area with naturally high VOC emissions due to the pine trees in the area. Therefore, the formation of ozone as a result of the plant's emissions of precursors is NO_x limited. Since the NO_x emissions change will be minimal as a result of the associated increase in boiler demand and the RTO #2 as a result of this project, no significant impact on soil and vegetation is expected due to VOC emissions from the project.

Visibility Impairment Analysis

The U.S. EPA's "Workbook for Plume Visual Impact Screening and Analysis" (EPA-454/R-92-023, October 1992) provides guidance for conducting a visibility impairments analysis through the use of VISCREEN, a plume visibility impact model. The pollutants evaluated in a visibility analysis are NO₂, PM₁₀, soot (organic aerosols) and sulfate (SO₄²⁻). The VISCREEN model does not include VOC emissions as an input for the model. Emissions of PM and NO_x from the proposed project are 3.76 TPY and 18.75 TPY, respectively, which are expected to have a negligible effect on visibility. Since the proposed project under consideration does not generate pollutants at levels that may significantly impact visibility, no further visibility analysis is required in support of this PSD application. The proposed project is not expected to significantly impact visibility since the emissions increase above the SER is limited to VOC.

SECTION VI. OKLAHOMA AIR POLLUTION CONTROL RULES

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

OAC 252:100-2 (Incorporation by Reference) [Applicable]
This subchapter incorporates by reference applicable provisions of Title 40 of the Code of Federal Regulations. These requirements are addressed in the "Federal Regulations" section.

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. The air impacts of this project are evaluated in the Air Modeling section.

OAC 252:100-5 (Registration, Emission Inventory, and Annual Fees) [Applicable]
The owner or operator of any facility that is a source of air emissions shall submit a complete emission inventory annually on forms obtained from the Air Quality Division. An emission inventory was submitted and fees paid for previous years as required.

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.

Part 7 includes the requirements for PSD projects in attainment areas. This project is classified as a significant modification to a major facility. Since this is a physical change that requires a significant modification, a construction permit is required. The Title V permit application for this facility will be updated as required to reflect the modifications associated with this project.

OAC 252:100-9 (Excess Emission Reporting Requirements) [Applicable]
Except as provided in OAC 252:100-9-7(a)(1), the owner or operator of a source of excess emissions shall notify the Director as soon as possible but no later than 4:30 p.m. the following working day of the first occurrence of excess emissions in each excess emission event. No later than thirty (30) calendar days after the start of any excess emission event, the owner or operator of an air contaminant source from which excess emissions have occurred shall submit a report for each excess emission event describing the extent of the event and the actions taken by the owner or operator of the facility in response to this event. Request for affirmative defense, as described in OAC 252:100-9-8, shall be included in the excess emissions event report. Additional reporting may be required in the case of ongoing emission events and in the case of excess emissions reporting required by 40 CFR Parts 60, 61, or 63.

OAC 252:100-13 (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. Open burning will not be performed as part of this project.

OAC 252:100-19 (Particulate Matter) [Applicable]
This subchapter sets forth particulate matter emission standards for fuel-burning and industrial process equipment. The allowable PM emission rates for the boilers are specified in OAC 252:100, Appendix C. The PM emission rates provided in past emission inventories are more than an order of magnitude less than the allowable PM emission rates specified in OAC 252:100, Appendix C.

Subchapter 19 also specifies limitations on PM emissions based on process weight rate. The PM emission rates for industrial processes provided in past emission inventories are much less than the allowable PM emission rates specified in OAC 252:100, Appendix G. All points are in compliance with Subchapter 19.

OAC 252:100-25 (Visible Emissions and Particulates) [Applicable]
No discharge of greater than 20% opacity is allowed except for short-term occurrences that 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. This project does not involve any combustion sources. The existing fabric filter systems will continue to be operated as listed in the current permit.

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 specific precautions to be taken.

OAC 252:100-31 (Sulfur Compounds) [Applicable]
Part 5 limits sulfur dioxide emissions from new equipment (constructed after July 1, 1972). For gaseous fuels the limit is 0.2 lb/MMBTU heat input; for liquid fuels, the limit is 0.8 lb/MMBTU; and for solid fuels, the limit is 1.2 lb/MMBTU. This project does not involve any combustion sources.

OAC 252:100-33 (Nitrogen Oxides) [Not Applicable]
This subchapter prohibits nitrogen oxide emissions calculated as nitrogen dioxide from any new gas-fired fuel-burning equipment with a rated heat input of 50 MMBtu/hr or greater in excess of 0.20 lb/MMBtu, two-hour maximum. This project does not involve any combustion sources.

OAC 252:100-35 (Carbon Monoxide) [Not Applicable]
None of the affected sources are associated with this project: gray iron cupola, blast furnace, basic oxygen furnace, petroleum catalytic cracking unit, or petroleum catalytic reforming unit.

OAC 252:100-37 (Volatile Organic Compounds) [Applicable]
Part 3 affects new (constructed after December 28, 1974) storage tanks with a capacity between 400 and 40,000 gallons storing a VOC with a true vapor pressure greater than 1.5 psia. This project does not involve any storage tanks.
Part 5 limits the VOC content of coatings in coating lines or operations. This project does not involve coating operations.
Part 7 requires fuel-burning and refuse-burning equipment to be operated to minimize emissions of VOC. This project does not involve any combustion sources.

OAC 252:100-39 (VOC Emissions in Former Nonattainment Areas) [Not Applicable]
Part 7 deals with the manufacture of pneumatic rubber tires, but only applies in Oklahoma County. Since the plant is in Comanche County, this subchapter is not applicable.

OAC 252:100-42 (Toxic Air Contaminants (TAC)) [Applicable]
Part 5 of OAC 252:100-41 was superseded by this subchapter. Any work practice, material substitution, or control equipment required by the Department prior to June 11, 2004, to control a TAC, shall be retained unless a modification is approved by the Director. Since no Area of Concern (AOC) has been designated anywhere in the state, there are no specific requirements for this facility at this time.

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:

| | | |
|----------------|---------------------------------|---------------------------|
| 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 252:100-21 | Wood-Waste Burning Equipment | 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 252:100-35 | Carbon Monoxide | not type of emission unit |
| OAC 252:100-39 | Nonattainment Areas | not in area category |
| OAC 252:100-47 | Landfills | not in source category |

SECTION VII. FEDERAL REGULATIONS

PSD, 40 CFR Part 52 [Applicable]
 The facility qualifies as a major stationary source because it emits more than 250 TPY of VOCs, a regulated pollutant. Due to the proposed construction and operating modifications which result in increases of more than 40 TPY of VOCs, a PSD review was completed in the “PSD Review” section.

NSPS, 40 CFR Part 60 [Subparts A and BBB Applicable]
Subpart A sets forth general requirements for equipment subject to NSPS. Any physical or operational change to an NSPS affected source requires submittal of initial notification and recordkeeping. In addition, initial performance tests required under each applicable subpart are to be performed within 60 days of achieving maximum production rate and not later than 180 days after initial startup. The DEQ must be notified within 30 days prior to any initial performance test and must receive those results. Goodyear Lawton will comply with requirements set forth in Subpart A.

Subpart BBB, Rubber Tire Manufacturing. Subpart BBB applies to green tire spraying machines, tread end cementers, sidewall cementers, and under tread cementers that have been installed or modified after January 20, 1983. The proposed project does not involve any equipment subject to Subpart BBB. Goodyear will continue to comply with the requirements of Subpart BBB for

their existing subject equipment and the monitoring, recordkeeping and reporting requirements of the Title V permit.

NESHAP, 40 CFR Part 61

[Not Applicable]

There are no emissions of any of the regulated pollutants: arsenic, asbestos, benzene, beryllium, coke oven emissions, mercury, radionuclides or vinyl chloride except for trace amounts of benzene. Subpart J (Equipment Leaks of Benzene) concerns only process streams which contain more than 10% benzene by weight. All streams at Goodyear Lawton are less than 1% benzene by weight.

NESHAP, 40 CFR Part 63

[Applicable]

Subpart XXXX, Rubber Tire Manufacturing. The Rubber Tire Manufacturing MACT applies to owners or operators of a rubber tire manufacturing facility that is located at, or is a part of, a major source of HAP emissions. Goodyear Lawton is a rubber tire manufacturing facility and is a major source of HAPs. Therefore, Goodyear Lawton is subject to this subpart as an existing affected source. Goodyear will continue to comply with the requirements of Subpart XXXX and the monitoring, recordkeeping and reporting requirements of the Title V permit.

CAM, 40 CFR Part 64

[Applicable]

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

Banbury Mixers #3, 4, 5, 6, & 7 have potential to emit, prior to any control device, of greater than 100 TPY. Therefore, CAM is applicable to these sources. Emissions after the control device are less than 100 TPY and any requirements will be addressed in the Title V permit renewal.

Chemical Accident Prevention Provisions, 40 CFR Part 68

[Not Applicable]

This facility does not process or store more than the threshold quantity of any regulated substance (Section 112r of the Clean Air Act 1990 Amendments). More information on this federal program is available on the web page: www.epa.gov/ceppo.

Stratospheric Ozone Protection, 40 CFR Part 82

[Subpart A and F Applicable]

These standards require phase out of Class I & II substances, reductions of emissions of Class I & II substances to the lowest achievable level in all use sectors, and banning use of nonessential products containing ozone-depleting substances (Subparts A & C); control servicing of motor vehicle air conditioners (Subpart B); require Federal agencies to adopt procurement regulations which meet phase out requirements and which maximize the substitution of safe alternatives to Class I and Class II substances (Subpart D); require warning labels on products made with or containing Class I or II substances (Subpart E); maximize the use of recycling and recovery upon

disposal (Subpart F); require producers to identify substitutes for ozone-depleting compounds under the Significant New Alternatives Program (Subpart G); and reduce the emissions of halons (Subpart H).

Subpart A identifies ozone-depleting substances and divides them into two classes. Class I controlled substances are divided into seven groups; the chemicals typically used by the manufacturing industry include carbon tetrachloride (Class I, Group IV) and methyl chloroform (Class I, Group V). A complete phase-out of production of Class I substances is required by January 1, 2000 (January 1, 2002, for methyl chloroform). Class II chemicals, which are hydrochlorofluorocarbons (HCFCs), are generally seen as interim substitutes for Class I CFCs. Class II substances consist of 33 HCFCs. A complete phase-out of Class II substances, scheduled in phases starting by 2002, is required by January 1, 2030.

This facility does not utilize any Class I & II substances.

SECTION VIII. COMPLIANCE

Tier Classification and Public Review

The application for this permit was determined to be a **Tier II** based on the request for a PSD construction permit and a significant modification to an existing major source for which a Title V operating permit is required. 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.

The applicant published the “Notice of Filing a Tier II Application” in *The Lawton Constitution*, a daily newspaper in Comanche County, on December 23, 2011. The notice stated that the application was available for public review at the Lawton Public Library, 110 S.W. 4th St., Lawton, the DEQ Air Quality office at 707 N. Robinson, Oklahoma City, or in the Air Quality section of the DEQ web site at www.deq.state.ok.us. The applicant published a “Notice of Tier II Draft Permit” in *The Lawton Constitution*, a daily newspaper in Comanche County, on April 5, 2012. The notice stated that the draft permit was available for public review at the Lawton Public Library, 110 S.W. 4th St., Lawton, the DEQ Air Quality office at 707 N. Robinson, Oklahoma City, or in the Air Quality section of the DEQ web site at www.deq.state.ok.us. The facility is located within 50 miles of the **Oklahoma - Texas** border. The state of Texas was notified of the draft permit. Goodyear requested concurrent public and EPA review. No comments were received from the public or the state of Texas.

EPA had two comments. EPA noticed that they have had several modifications in the past several years and wondered whether they should be aggregated for PSD permitting. DEQ examined the projects again and determined that they were separate projects. EPA questioned whether the NOx increases of 18.75 TPY were included in the ozone impact analysis. Yes, the NOx increases were included in the modeling analysis.

Fee Paid

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

SECTION IX. SUMMARY

The applicant has demonstrated the ability to comply with the applicable Air Quality 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 permit is recommended.

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

**The Goodyear Tire & Rubber Company
Banbury Mixers #3, 4, 5, and 8 Modification**

Permit No. 99-103-C (M-10) PSD

The permittee is authorized to construct in conformity with the specifications submitted to Air Quality on December 16, 2011. The Evaluation Memorandum dated October 8, 2012, is attached to this permit to explain 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 and emission limitations: [OAC 252:100-8-6(a)(1)]

| EUG | EU Name / Model | VOC Emissions (TPY) (Not Including Ethanol) | Ethanol Emissions (TPY) | PM_{10/2.5} Emissions (TPY) |
|-------------|---|--|--------------------------------|--|
| EUG-BSWBB | Black Sidewall Banburys | 744.34 | 657.08 | 82.73 |
| EUG-WSWBB | White Sidewall Banbury | | | |
| EUG-EXT | Extruders 2, 3, 5, and 6 | | | |
| EUG-EXTNSPS | Extruders 1, 4, and 7 | | | |
| EUG-GC | Gum Calender 2 and 3 | | | |
| EUG-FWC | Fabric & Wire Calenders | | | |
| EUG-GTS | Non-NSPS Green Tire Spray Booths | | | |
| EUG-GTSNSPS | NSPS Green Tire Spray Booths | | | |
| EUG-HF | Hot Former | | | |
| EUG-STRIPP | Green Tire Stripping | | | |
| EUG-CP | Curing Presses | | | |
| EUG-GRFVM | Force Variation Machine & Radial Run-out Grinders | | | |
| EUG-GRWSW | White Sidewall Grinders | | | |
| EUG-BLUE | White Sidewall Machines | | | |
| EUG-RECYCLE | Recycling Mills | | | |

- a. Compliance with the above emissions limitations shall be based on a 12-month monthly rolling total, and demonstrated by means of monthly records maintained on site.

EUG “B&W”: Babcock & Wilcox Boilers Emissions

| EU | CO | | VOC | | NO _x | | | SO ₂ | | | PM | | |
|--------------------|-------|------|-------|-----|-----------------|-------|-----|-----------------|-------|-----|-----------|-------|-----|
| | lb/hr | TPY | lb/hr | TPY | lb/MM Btu | lb/hr | TPY | lb/MM Btu | lb/hr | TPY | lb/MM Btu | lb/hr | TPY |
| Coal | | | | | | | | | | | | | |
| PHCB1 | 41.6 | 90.6 | 0.4 | 0.9 | 0.7 | 105 | 460 | 1.2 | 180 | 728 | 0.3 | 48 | 210 |
| PHCB2 | 41.6 | 90.6 | 0.4 | 0.9 | 0.7 | 105 | 460 | 1.2 | 180 | 728 | 0.3 | 48 | 210 |
| Natural Gas | | | | | | | | | | | | | |
| PHCB1 | 12.5 | 54.6 | 0.8 | 3.6 | 0.2 | 24.4 | 107 | 0.2 | 24.4 | 107 | 0.3 | 40.3 | 176 |
| PHCB2 | 12.5 | 54.6 | 0.8 | 3.6 | 0.2 | 24.4 | 107 | 0.2 | 24.4 | 107 | 0.3 | 40.3 | 176 |

- a. Compliance with TPY emissions limitations shall be based on a 12-month monthly rolling total, and demonstrated by means of monthly records maintained on-site.
- b. Compliance with lb/hr emissions limitations shall be based on the 12-month monthly rolling total divided by the hours of operation of the individual boiler during each calendar month.
- c. Compliance with lb/MMBtu emission limitations shall be based on AP-42 emission factors.
- d. The boilers shall be fueled with pipeline quality natural gas or coal.
- e. If the boilers burn coal, they shall be controlled with an electrostatic precipitator, and they shall be equipped with CEMs for NO_x and SO₂ and a COM for PM₁₀.

EUG “KEEL”: Keeler Boiler Emissions

| EU | CO | | VOC | | NO _x | | | SO ₂ | | | PM | | |
|--------------------|-------|------|-------|-----|-----------------|-------|-----|-----------------|-------|-----|-----------|-------|-----|
| | lb/hr | TPY | lb/hr | TPY | lb/MM Btu | lb/hr | TPY | lb/MM Btu | lb/hr | TPY | lb/MM Btu | lb/hr | TPY |
| Fuel Oil | | | | | | | | | | | | | |
| PHOB | 4.1 | 18.1 | 0.2 | 0.9 | 0.3 | 27.7 | 121 | 0.8 | 73.8 | 323 | 0.4 | 33.2 | 145 |
| Natural Gas | | | | | | | | | | | | | |
| PHOB | 10.2 | 44.8 | 0.7 | 2.9 | 0.2 | 20 | 88 | 0.2 | 20 | 88 | 0.4 | 36 | 158 |

- a. Compliance with TPY emissions limitations shall be based on a 12-month monthly rolling total, and demonstrated by means of monthly records maintained on-site.
- b. Compliance with lb/hr emissions limitations shall be based on the 12-month monthly rolling total divided by the hours of operation of the boiler during the month.
- c. Compliance with lb/MMBTU emission limitations shall be based on AP-42 emission factors.
- d. The boiler shall be fueled with pipeline quality natural gas or fuel oil.
- e. Fuel oil sulfur content shall not exceed 0.8% by weight.

EUG “COOL”: Cooling Tower

| | |
|-----------------------------|------------|
| EU | PM |
| | TPY |
| Marley Cooling Tower (CT-1) | 7.5 |

- a. The permittee shall maintain on-site records regarding Total Dissolved Solids (TDS) and Drift percent.
 - b. Compliance with the above emission limitation shall be based on a 12-month monthly rolling total, and demonstrated by means of monthly records maintained on site.
2. The permittee shall be authorized to operate the facility continuously (24 hours per day, every day of the year). [OAC 252:100-8-6(a)(1)]
3. Mixing of the following non-productive High Dispersion Silica (HDS) compounds shall be restricted to Banbury Mixers No. 3, 4, 5, 6, and 7 with emissions controlled by an RTO: [OAC 252:100-8-6(a)(1)]
- a. Mix passes with a mixing temperature greater than or equal to 290°F during which ethanol generating silane couplers are added to the compound, and the compound contains at least 25 parts of silica per hundred parts of rubber (phr) by weight.
 - b. Mix passes with a mixing temperature greater than or equal to 290°F of compounds that already contain ethanol generating silane couplers, and that contain at least 25 parts of silica per hundred parts of rubber (phr) by weight.
4. Except as specified in Specific Condition 3, all other compounds/formulations are authorized to be mixed in Banbury Mixers No. 1, 2, 3, 4, 5, 6, 7, and 8. [OAC 252:100-8-6(a)(1)]
5. The permittee shall maintain monthly records that include coupling agent usage for: [OAC 252:100-43]
- a. Conventional silica rubber,
 - b. High dispersion silica rubber,
 - c. Imported rubber containing coupling agent, and
 - d. Exported rubber containing coupling agent.

These records shall be used to calculate the actual quantity of ethanol emitted during each calendar month. The method used to calculate these emissions shall use Rubber Manufacturer’s Association (RMA) emission factors, rubber throughput, silane coupling agent usage, and hours of operation. The records shall be updated within thirty (30) days after the end of each month. Compliance will be based on a 12-month monthly rolling total. These 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.

6. Emissions from Banbury Mixers No. 3, 4, 5, 6, and 7 shall be vented to a Regenerative Thermal Oxidizer (RTO) control device when non-productive High Dispersion Silica (HDS) rubber specified in Specific Condition 3 is mixed unless otherwise allowed in OAC 252:100-9 (Excess Emission and Malfunction Reporting Requirements). The RTO #1 control device shall reduce the input stream of ethanol by 95 weight percent or to a concentration of 20 parts per million by volume, on a dry basis and corrected to 3 percent oxygen, whichever is less stringent. The RTO #2 control device shall reduce the input stream of ethanol by 98 weight percent. Emissions from Banbury Mixers No. 6 and 7 shall be vented to RTO #1. Emissions from Banbury Mixers No. 3 and 4 shall be vented to RTO #2. Emissions from Banbury Mixer No. 5 shall be vented to either RTO #1 or RTO #2. [OAC 252:100-8-6(a)(3)(A)]

7. The permittee shall operate and maintain the RTOs as follows: [OAC 252:100-8-6(a)(3)(A)]

- a. Operate at a temperature equal to or greater than 1,350 °F (hourly average) in the center bed combustion zone.
- b. The temperature shall be monitored and recorded continuously (at least four times an hour and averaged over the hour with a minimum data availability of 90 percent) using a thermocouple or equivalent measurement device.
- c. Proper operation of the center bed combustion zone thermocouple shall be verified annually.
- d. The RTOs shall only be fueled with pipeline quality natural gas.
- e. Provide a means for logging all occasions when operating temperatures are 3 % less than the established hourly average temperature.
- f. RTO #1 shall have no more than two (2) Banbury Mixers mixing non-productive High Dispersion Silica (HDS) rubber routed to it at a time.
- g. RTO #2 shall have no more than three (3) Banbury Mixers mixing non-productive High Dispersion Silica (HDS) rubber routed to it at a time

8. All NSPS affected sources (which includes but are not limited to tread end cementing operations at Extruder lines #1, #4 and #7 and Green tire spraying operations at paint lines #1 & #2, and #7) at the plant are subject to the applicable requirements of 40 CFR Part 60, Subpart BBB shall comply with all applicable requirements, including the following:

[40 CFR Part 60, Subpart BBB]

- a. § 60.540 Applicability and designation of affected facilities.
- b. § 60.541 Definitions.
- c. § 60.542 Standards for volatile organic compounds.
- d. § 60.542a Alternate standard for volatile organic compounds.
- e. § 60.543 Performance test and compliance provisions.
- f. § 60.544 Monitoring of operations.
- g. § 60.545 Recordkeeping requirements.
- h. § 60.546 Reporting requirements.
- i. § 60.547 Test methods and procedures.
- j. § 60.548 Delegation of authority.

9. The following emission units and/or operations are subject to and shall comply with all applicable requirements of 40 CFR Part 63, Subpart XXXX: [40 CFR Part 63, Subpart XXXX]

- a. Mixed rubber compound non-stick coating (slurry dip),
- b. Tread striping operations at extruder lines,
- c. Tread end cementing operations at extruder lines,
- d. Green tire stripping operations,
- e. Uncured rubber tire component refreshing,
- f. Curing bladder release agent,
- g. Tire mold lubricant (swab),
- h. White sidewall protective coating,
- i. Inspector and classifier identification stamp,
- j. Cured tire repair operations,
- k. Bead lubricants for tire inspection and grinding operations, and
- l. Tire quality markings (harmonic dot, etc).

As a demonstration of compliance, 40 CFR 63.5996 requires the owner or operator of each source complying with either the purchase alternative or the monthly average alternative to demonstrate that no cements and solvents were purchased and used at the affected source that contain HAPs in amounts above those established in 40 CFR 63.5985(a) and 40 CFR 63.5985(b), respectively.

- a. Purchase alternative: Use only cements and solvents that, as purchased, contain less than 2 lb HAP/ton of cement or solvent for HAP listed in Table 16 of this subpart, and less than 20 lb HAP/ton of cement or solvent for all other HAP. [40 CFR 63.5985(a)]
- b. Monthly average alternative:
 - i. Option 1: Use cements and solvents such that monthly average emissions of HAP listed in Table 16 of this subpart are less than 2 lb HAP/ton of cement or solvent, and less than 20 lb HAP/ton of cement or solvent for all other HAP. [40 CFR 63.5985(b)]
 - ii. Option 2: Use cements and solvents such that the monthly average emissions of HAP are less than 0.00005 lb HAP/ton of rubber used at the tire production affected source. [40 CFR 63.5985(b)]

10. The following operations shall utilize the specified PM emissions controls or equivalent devices with at least the required control efficiency. The permittee shall inspect and maintain the air pollution control devices in accordance with good engineering practices to ensure proper operation. [OAC 252:100-19]

| Operation | PM Emission Control Device | Minimum Required Efficiency |
|---|-----------------------------------|------------------------------------|
| Banburys - all | Baghouse | 99% |
| Force grinder operations - all. | Dust collector | 91.7% |
| White sidewall grinder operations - all | Dust collector | 99.9% |
| Radial run-out grinder operations - all | Dust collector | 99.9% |

11. The permittee shall maintain records of operations as listed below. Such 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. [OAC 252:100-43]

- a. 12-month monthly rolling total emission calculations. The records shall be updated within thirty (30) days after the end of each month. Compliance will be based on a 12-month monthly rolling total.
- b. MSDS sheet for all solvents and cements used which documents VOC and HAP content in lbs per gallon.
- c. Sulfur content of each shipment of liquid fuel and coal.
- d. Records required by 40 CFR Part 60, Subpart BBB.
- e. Records required by 40 CFR Part 63, Subpart XXXX.
- f. Number of tires produced (monthly and 12-month monthly rolling total).
- g. Hot Former rubber throughput (monthly and 12-month monthly rolling total).
- h. Amount of Green tire spray used and total tires sprayed (monthly) (EUG-GTSNSPS – Booths #1, #2, and #7).
- i. Material used in the stripping operation and the monthly and annual usage for this material.
- j. Monthly and annual records of Total Dissolved Solids (TDS), Drift %, and annual PM₁₀ emissions from drift losses from the Marley Cooling Tower (EUG COOL).
- k. Monthly and annual records of coupling agent usage.
- l. MSDS and coating formulations for all paints applied in EUG-BLUE, EUG-GTS, and EUG-GTSNSPS.
- m. Monthly and annual records of the amount of cement used and total cut tread for Extruders #1, #4, and #7.
- n. The temperature of each RTO center bed combustion zone (hourly average). A log of all occasions when operating temperatures are 3 % less than the established temperature.
- o. Records required by Specific condition No. 16.
- p. Records to show compliance with Specific Conditions 7.f. and 7.g.

12. The equipment items listed below are considered insignificant because emissions are less than 5 TPY. There are no applicable emission limitations specified.

| EU | EU Name / Model | Capacity (gal.) | Constr./Mod. Date |
|-----------|---------------------------------|------------------------|--------------------------|
| FOST-02 | No. 2 Fuel Oil Storage Tank | 250,000 | 1979 |
| TF 1 | Silanic Storage Tank | 30,000 | 1979 |
| TF 3 | Mapline Storage Tank | 30,000 | 1979 |
| TF 2 | Sardine Storage Tank | 30,000 | 1979 |
| TF 4 | Zonflax Storage Tank | 15,000 | 1979 |
| TF 5 | Cherine Storage Tank | 15,000 | 1979 |
| TF 6 | Rickyine Storage Tank | 7,500 | 1979 |
| AST-02 | Sulfuric Acid Storage Tank | 2,000 | 1979 |
| SHST | Sodium Hypochlorite Storage Tk. | 1,350 | 2000 |
| AST-03 | Hydrochloric Acid Storage Tank | 1350 | 2003 |
| PST-01 | Propane Storage Tank | 1,000 | 1979 |
| PST-02 | Propane Storage Tank | 1,000 | 1979 |

| EU | EU Name / Model | Constr./Mod. Date |
|-------------------------|---|-------------------|
| MT01-MT34, CB01-CB04 | Carbon Black Storage & Handling | N/A |
| N/A | Slurry Mixing | N/A |
| CT-02 | Curing Cooling Tower | 2000 |
| CT-03 | Power House Cooling Tower | 1979 |
| CT-04 | Psychometric Cooling Tower | 1998 |
| EFP-1 – EFP-4 | Emergency Fire Pumps | N/A |
| GRNDTK | Gasoline/Diesel Split Tank and Fuel Oil Tanks | N/A |
| N/A | Surface Pre-Cure | N/A |
| N/A | Bead Production | N/A |
| N/A | Miscellaneous Solvent Usage | N/A |

13. The following records shall be maintained on site to verify Insignificant Activities. No recordkeeping is required for those operations which qualify as Trivial Activities.

- a. Log of hours of operation for each Emergency Fire Pump.
- b. Monthly records of fuel purchases for the Gasoline/Diesel Split Tank.
- c. Type of liquid stored and vapor pressure of the liquid for the process and fuel oil tanks.
- d. Weight of crushed drums disposed monthly.
- e. Annual amount of carbon black utilized at the facility.
- f. Annual weight of slurry purchased and applicable MSDS.
- g. Record of the hours of operation annually and calculation of annual emissions based on AP-42 emission factors for the following:
 - i. Curing Cooling Tower,
 - ii. Power House Cooling Tower, and
 - iii. Psychometric Cooling Tower.

14. The permittee may add equipment/processes to the facility which are classified as Insignificant Activities in Appendix I or Trivial Activities (as defined in OAC 252:100-8-2) during the life of this permit. New equipment listed as Insignificant Activities in Appendix I that require the maintenance of records (e.g., hours of operation, quantity of materials processed, capacity, etc.) shall be identified and appropriate records maintained at the facility. Upon request, the permittee shall make such records available to the AQD.

15. To the extent this permit requires the permittee to record and/or maintain records, the same may be conducted in hardcopy or electronically as long as such records can be provided to DEQ personnel within a reasonable time following a request for the same.

16. For any modification using “projected actual emissions” as defined in OAC 252:100-8-31, the permittee shall document and maintain a record of the information required by OAC 252:100-8-36.2(c)(1)(A) through (C). The permittee shall monitor the emissions of any

regulated NSR pollutant that could increase as a result of the modification and that is emitted by any emissions unit identified; and calculate and maintain a record of the annual emissions, in TPY on a calendar year basis, for a period of 5 years following resumption of regular operations after the modification, or for a period of 10 years following resumption of regular operations after the modification if it increases the design capacity or potential to emit of the affected emissions unit. The permittee shall submit a report to the Director if the annual emissions, in TPY, from the modification, exceed the baseline actual emissions (as documented and maintained by an amount that is significant for that regulated NSR pollutant, and if such emissions differ from the preconstruction projection for that modification. The report shall be submitted to the AQD within 60 days after the end of the calendar year in which the exceedance or difference occurred. The report shall contain the information required by OAC 252:100-8-36.2(c)(5)(A) through (C). If the permittee materially fails to comply with these provisions, then the calendar year emissions are presumed to equal the source's potential to emit.

[OAC 252:100-8-36.2(c)]

17. Within 180 days of completion of construction of RTO #2, compliance with the control efficiencies of RTO #2 shall be demonstrated by conducting a stack test of RTO #2. A written report shall be submitted to Air Quality within 60 calendar days of the testing. Performance testing shall be conducted using the following methods found in 40 CFR Part 60, Appendix A:

- Method 1: sample and velocity traverses
- Method 2: stack gas velocity and volumetric flow rate
- Method 3 or 3A: gas analysis for carbon dioxide, oxygen, and dry molecular weight
- Method 4: moisture content in stack gases
- Method 9: visual determination of opacity
- Method 25A: total gaseous hydrocarbons emissions from stationary sources

18. The permittee shall file an administratively complete operating permit application within 180 days of commencement of operation of this modification. [OAC 252:100-8-4(b)(5)]

The Goodyear Tire & Rubber Company
Lindon Pierce, Regional Environmental Manager
#1 Goodyear Boulevard
Lawton, OK 73505

Re: Construction Permit No. **99-103-C (M-10) PSD**
Banbury Mixers #3, 4, 5, and 8 Modification
Goodyear Lawton Tire Manufacturing Plant
#1 Goodyear Boulevard, Lawton, OK, 73505

Dear Mr. Pierce:

Enclosed is the modified construction permit authorizing modification of the referenced facility. Please note that this permit is issued subject to certain standard and specific conditions that are attached.

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

Thank you for your cooperation in this matter. If you have any questions, please refer to the permit number above and contact Phillip Martin at (405) 702-4180.

Sincerely,

Phillip Martin
Existing Source Permits Section Manager
Air Quality Division



PART 70 PERMIT

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

Permit No. 99-103-C (M-10) PSD

Goodyear Tire & Rubber Company,

having complied with the requirements of the law, is hereby granted permission to
construct modifications at the Goodyear Lawton Tire Plant in Lawton, Oklahoma,

subject to standard conditions dated July 21, 2009, and specific conditions, both attached.

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

Director, Air Quality Division

Date

**MAJOR SOURCE AIR QUALITY PERMIT
STANDARD CONDITIONS
(July 21, 2009)**

SECTION I. DUTY TO COMPLY

A. This is a permit to operate / construct this specific facility in accordance with the federal Clean Air Act (42 U.S.C. 7401, et al.) 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, permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application. All terms and conditions are enforceable by the DEQ, by the Environmental Protection Agency (EPA), and by citizens under section 304 of the Federal Clean Air Act (excluding state-only requirements). This permit is valid for operations only at the specific location listed.

[40 C.F.R. §70.6(b), OAC 252:100-8-1.3 and OAC 252:100-8-6(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. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in assessing penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations. [OAC 252:100-8-6(a)(7)(B)]

SECTION II. REPORTING OF DEVIATIONS FROM PERMIT TERMS

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

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. Every written report submitted under this section shall be certified as required by Section III (Monitoring, Testing, Recordkeeping & Reporting), Paragraph F. [OAC 252:100-8-6(a)(3)(C)(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), OAC 252:100-8-6(c)(1), and OAC 252:100-8-6(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 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 or alternative date as specifically identified in a subsequent 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. Submission of these periodic reports will satisfy any reporting requirement of Paragraph E below that is duplicative of the periodic reports, if so noted on the submitted 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 (Reporting Of Deviations From Permit Terms) 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.

[OAC 252:100-43]

F. Any Annual Certification of Compliance, Semi Annual Monitoring and Deviation Report, Excess Emission Report, and Annual Emission Inventory submitted in accordance with this permit shall be certified by a responsible official. This certification shall be signed by a responsible official, and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete."

[OAC 252:100-8-5(f), OAC 252:100-8-6(a)(3)(C)(iv), OAC 252:100-8-6(c)(1), OAC 252:100-9-7(e), and OAC 252:100-5-2.1(f)]

G. Any owner or operator subject to the provisions of New Source Performance Standards (“NSPS”) under 40 CFR Part 60 or National Emission Standards for Hazardous Air Pollutants (“NESHAPs”) under 40 CFR Parts 61 and 63 shall maintain a file of all measurements and other information required by the applicable general provisions and subpart(s). These records shall be maintained in a permanent file suitable for inspection, shall be retained for a period of at least five years as required by Paragraph A of this Section, and shall include records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of an affected facility, any malfunction of the air pollution control equipment; and any periods during which a continuous monitoring system or monitoring device is inoperative.

[40 C.F.R. §§60.7 and 63.10, 40 CFR Parts 61, Subpart A, and OAC 252:100, Appendix Q]

H. 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 preventive or corrective measures adopted. [OAC 252:100-8-6(c)(4)]

I. All testing must be conducted under the direction of qualified personnel by methods approved by the Division Director. All tests shall be made and the results calculated in accordance with standard test procedures. The use of alternative test procedures must be approved by EPA. 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]

J. The reporting of total particulate matter emissions as required in Part 7 of OAC 252:100-8 (Permits for Part 70 Sources), OAC 252:100-19 (Control of Emission of Particulate Matter), and OAC 252:100-5 (Emission Inventory), shall be conducted in accordance with applicable testing or calculation procedures, modified to include back-half condensables, for the concentration of particulate matter less than 10 microns in diameter (PM₁₀). NSPS may allow reporting of only particulate matter emissions caught in the filter (obtained using Reference Method 5).

K. The permittee shall submit to the AQD a copy of all reports submitted to the EPA as required by 40 C.F.R. Part 60, 61, and 63, for all equipment constructed or operated under this permit subject to such standards. [OAC 252:100-8-6(c)(1) and OAC 252:100, Appendix Q]

SECTION IV. COMPLIANCE CERTIFICATIONS

A. No later than 30 days after each anniversary date of the issuance of the original Part 70 operating permit or alternative date as specifically identified in a subsequent 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.

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

B. The compliance 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. 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)(C)(i)-(v)]

C. The compliance certification shall contain a certification by a responsible official as to the results of the required monitoring. This certification shall be signed by a responsible official, and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document 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 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, OAC 252:100-5-2.2, 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 thirty (30) days after such sale or transfer.

[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 and 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 prior to the expiration date 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 or the EPA 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.
- (4) DEQ determines that the permit should be amended under the discretionary reopening provisions of OAC 252:100-8-7.3(b).

C. The permit may be reopened for cause by EPA, pursuant to the provisions of OAC 100-8-7.3(d).

[OAC 100-8-7.3(d)]

D. The permittee shall notify AQD before making changes other than those described in Section XVIII (Operational Flexibility), those qualifying for administrative permit amendments, or those defined as an Insignificant Activity (Section XVI) or Trivial Activity (Section XVII). The notification should include any changes which may alter the status of a "grandfathered source," as defined under AQD rules. Such changes may require a permit modification.

[OAC 252:100-8-7.2(b) and OAC 252:100-5-1.1]

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 exceedance resulting from an emergency shall be reported to AQD promptly but no later than 4:30 p.m. on the next working day after the permittee first becomes aware of the exceedance. 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.

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

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

C. 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. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. [OAC 252:100-8-2]

D. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that: [OAC 252:100-8-6 (e)(2)]

- (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.

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)]

F. Every written report or document submitted under this section shall be certified as required by Section III (Monitoring, Testing, Recordkeeping & Reporting), Paragraph F. [OAC 252:100-8-6(a)(3)(C)(iv)]

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 to OAC Title 252, Chapter 100, 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.

- (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.

[OAC 252:100-8-2 and OAC 252:100, Appendix I]

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 and OAC 252:100, Appendix J]

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 seven (7) days, or twenty four (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 paragraph. [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) 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]
- (2) 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]
- (3) For all emissions units not subject to an opacity limit promulgated under 40 C.F.R., Part 60, NSPS, no discharge of greater than 20% opacity is allowed except for: [OAC 252:100-25]
 - (a) 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;
 - (b) Smoke resulting from fires covered by the exceptions outlined in OAC 252:100-13-7;
 - (c) An emission, where the presence of uncombined water is the only reason for failure to meet the requirements of OAC 252:100-25-3(a); or
 - (d) Smoke generated due to a malfunction in a facility, when the source of the fuel producing the smoke is not under the direct and immediate control of the facility and the immediate constriction of the fuel flow at the facility would produce a hazard to life and/or property.
- (4) 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]

- (5) 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]
- (6) Volatile Organic Compound (VOC) storage tanks built after December 28, 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)]
- (7) 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]

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; and
- (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; and
 - (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 Source's 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 OAC 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 C.F.R. § 70.7(h)(1). This public notice shall include notice to the public that this permit is subject to EPA review, EPA objection, and petition to EPA, as provided by 40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 70.8(a) and (c).
- (5) The DEQ complies with 40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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]