



## 1.0 GENERAL CONDITIONS

### 1.1 Description

Continental Tire the Americas, LLC has applied for a construction permit for changes to the Commercial Vehicle Tire (CVT) Area at its tire manufacturing plant in Mount Vernon. This project includes new carbon black bins, one new rubber mixing unit (Mixer #21), two modified mixing units, two new extruders and fifteen new curing presses. The existing Tire Uniformity Grinding Operations and Tire Repair Operations would also experience an increase in throughput. The new curing presses would require additional steam from the existing boilers to operate.

The new carbon black day bins and new rubber mixing unit (Mixer #21) were previously permitted as part of changes to the mixing department (See Construction Permit No. 12070023). However, the Permittee determined that they were not needed as part of that project. This permit now provides for construction of these units as part of this CVT Area Expansion Project.

### 1.2 Applicable Provisions and Emission Standards

1.2.1 The affected units are subject to particular emission standards as set forth in Section 2 (Unit-Specific Conditions for Specific Emission Units) of this permit.

1.2.2 In addition, except as otherwise specified, emission units at this plant are subject to the following regulations of general applicability:

- a. Pursuant to 35 IAC 212.301 and 212.314, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour).
- b. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124.

### 1.3 Non-Applicability Provisions

This permit is issued based on this project not being a major modification for purposes of 40 CFR 52.21, Prevention of Significant Deterioration (PSD) because it will not be accompanied by significant increases in emissions of NSR pollutants. (See Attachment 1.)

1.4 Control Requirements and Work Practice Requirements

The Permittee shall, to the extent practicable, maintain and operate the affected units, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

1.5 Annual Limits

Unless otherwise specified in an applicable provision, compliance with the annual limits shall be determined from a running total of 12 months of data.

1.6 General Recordkeeping Requirements

1.6.1 The Permittee shall keep the following records.

- a. Before beginning actual construction of the project, the Permittee shall document and maintain a record of the following information: [40 CFR 52.21(r)(6)(i)]
  - i. A description of the project;
  - ii. Identification of the emissions unit(s) whose emissions could be affected by the project; and
  - iii. A description of the applicability test used to determine that the project is not a major modification, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under 40 CFR 52.21(b)(41)(ii)(c) and an explanation for why such amount was excluded, and any netting calculations, if applicable.
- b. The Permittee shall keep records for regulated NSR pollutants that are emitted by any emissions unit identified in 40 CFR 52.21(r)(6)(i)(b) (See also Condition 1.6.1(a)(ii)) and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity or potential to emit that regulated NSR pollutant at such emissions unit. [40 CFR 52.21(r)(6)(iii)]

1.6.2 Records for Opacity Observations

The Permittee shall keep records for all opacity measurements made in accordance with USEPA Method 9 for affected units that it conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such measurements are made, these records shall include

the identity of the observer, a description of the measurements that were made, the operating condition of the affected units, the observed opacity, and copies of the raw data sheets for the measurements.

#### 1.6.3 Retention and Availability of Records

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

### 1.7 Reporting Requirements

#### 1.7.1 Reporting and Notifications Associated with Emissions Tests

- a. The Illinois EPA shall be notified prior to emissions tests required by this permit to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may at its discretion accept notifications with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe testing.
- b. At least 60 days prior to the actual date of required emissions testing, a written test plan shall be submitted to the Illinois EPA for review. This plan shall describe the specific procedures for testing, including as a minimum:
  - i. The person(s) who will be performing sampling and analysis and their experience with similar tests.
  - ii. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the emission unit and any control equipment will be determined.

- iii. The specific determinations of emissions and operation, which are intended to be made, including sampling and monitoring locations.
  - iv. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods.
  - v. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification.
- c. Copies of the Final Reports(s) for required emissions tests shall be submitted to the Illinois EPA within 60 days after the date of testing. The Final Report shall include as a minimum:
- i. A summary of results.
  - ii. General information.
  - iii. Description of test method(s), including description of sample points sampling train, analysis equipment, and test schedule.
  - iv. Detailed description of test conditions, including:
    - A. Process information.
    - B. Control equipment information, e.g., equipment condition and operating parameters during testing.
  - v. Data and calculations, including copies of all raw data sheets, opacity observation records and records of laboratory analyses, sample calculations, and data on equipment calibration.

#### 1.7.2 Reporting of Deviations

Except as specified in a particular provision of this permit or in a subsequent CAAPP Permit for the plant, reports for deviation from applicable requirements of this permit shall include at least the following information: the date and time of the event, a description of the event, information on the magnitude of the deviation, a discussion of the probable cause of the deviation, a description of the corrective measures taken, and a description of any preventative measures taken to prevent future occurrences.

- 1.7.3 The Permittee shall submit a report to the Illinois EPA and USEPA if the annual emissions, in tons per year, from the project, exceed the baseline actual emissions (as documented and maintained pursuant to 40 CFR 52.21(r)(6)(i)(c), by a

significant amount (as defined in 40 CFR 52.21(b)(23)), and if such emissions differ from the preconstruction projection as documented and maintained pursuant to 40 CFR 52.21(r)(6)(i)(c). Such report shall be submitted to the Illinois EPA and USEPA within 60 days after the end of such year. The report shall contain the following information: [40 CFR 52.21(r)(6)(v)]

- a. The name, address and telephone number of the source;
- b. The annual emissions as calculated pursuant to 40 CFR 52.21(r)(6)(iii); and
- c. Any other information that the Permittee wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection).

#### 1.8 Addresses

One copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276

and one copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
2009 Mall Street  
Collinsville, Illinois 62234

and one copy of reports and notifications concerning emission testing or continuous monitoring systems shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Source Monitoring Unit  
9511 West Harrison  
Des Plaines, Illinois 60016

#### 1.9 Authorization to Operate

The Permittee is allowed to operate the CVT Area, Rubber Mixing Area and other operations with this new configuration under this Construction Permit until its CAAPP Permit is reissued or revised to address this project provided that the Permittee completes the following. This condition supersedes Standard Condition 6. (See Attachment 2.)

- a. The Permittee has completed initial testing of control equipment for emissions of VOM in accordance with Condition 2.2.7; and

- b. The Permittee applies for a renewed or revised CAAPP permit within one year of initial startup of new and modified emission units pursuant to this project, as provided by Section 39.5(5) of the Environmental Protection Act.

**2.0 UNIT SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS**

2.1 Carbon Black Handling Operations

2.1.1 Description

The project includes installation of new carbon black day storage bins, which will be used to supply carbon black to new Mixer #21.

Carbon black, a raw material in the tire making process, is delivered to the plant by truck or railcar. Once unloaded, the carbon black is transferred to a silo for storage prior to use. When called for by the process, carbon black is pneumatically transferred from the silo to a day bin in the rubber mixing department. The handling of carbon black is a source of particulate matter. All carbon black handling operations are controlled by filters.

2.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Control Equipment
Day Bins #19-#24	Additional storage of carbon black in the mixing department	Baghouse

2.1.3 Applicable Provisions and Emission Standards

- a. An "affected unit" is a carbon black handling operation described in Conditions 2.1.1 and 2.1.2.
- b. The affected units are subject to 35 IAC 212.321(a), which provides that no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 IAC 212.321(c).

2.1.4 Work Practice Requirements

The affected units shall be controlled by filters at all times the affected units are in operation.

2.1.5 Emission Limits

This permit is issued based on negligible emissions of particulate matter (PM/PM<sub>10</sub>/PM<sub>2.5</sub>) from the affected units, in total. For this purpose, emissions from the affected units combined shall not exceed 0.1 lb/hour and 0.44 tons/year.

2.1.6 Testing Requirements

- a. i. Upon request of the Illinois EPA, the Permittee shall have the PM emissions from affected unit(s) measured at the Permittee's expense by an approved testing service using standard USEPA Test Methods.
- ii. For this testing, the Permittee shall submit reports and notifications in accordance with Condition 1.7.1.
- b. Upon request of the Illinois EPA, the Permittee shall have the opacity from the affected unit(s) measured at the Permittee's expense by a certified observer using USEPA Method 9.

2.1.7 Inspection Requirements

- a. The Permittee shall measure and record the pressure drop across each baghouse on at least a daily basis.
- b. The Permittee shall perform detailed inspections of the dust collection equipment for the affected units at least every 15 months while the units are out of service, with an initial inspection performed before any maintenance and repair activities are conducted during the period the unit is out of service and a follow-up inspection performed after any such activities are completed.

2.1.8 Recordkeeping Requirements

- a. The Permittee shall maintain an operating log for the affected units that, at a minimum, includes identification of each period when an affected unit or the associated control device operated in an atypical manner as related to generation of PM emissions.
- b. The Permittee shall keep an inspection and maintenance log for each baghouse and the bin vent filter. At a minimum, these logs shall show the date and nature of inspection, preventative maintenance and repair of the baghouses or bin vent filter.
- c. The Permittee shall maintain an inspection and maintenance log or other records for each affected unit and associated emission control devices that, at a minimum, document performance of the inspections and results of inspections required by Conditions 2.1.8(a) and (b) and other activities performed to maintain proper operation as related to control of emissions.

2.1.9 Reporting Requirements

If there is any deviation from the requirements of this permit involving affected units, as determined by the records required

by this permit or by other means, the Permittee shall report to the Illinois EPA as specified below until such time the affected units are addressed by an operating permit. The report shall include the information requested in Condition 1.7.2.

- a. Deviations from the work practice requirements and emission limits in Conditions 2.1.4 and 2.1.5 shall be reported within 30 days of such occurrence.
- b. Other deviations shall be reported in a semi-annual report.

## 2.2 Mixing Operations

### 2.2.1 Description

This project includes construction of one new mixer with twin screw roller die (Mixer #21), modification of existing Mixers #10 and #12 by increasing their capacity. Particulate matter from these mixers will be controlled baghouses. A new baghouse will be installed for Mixer #21. VOM emissions from Mixers #12 and #21 will be controlled by regenerative thermal oxidizers (RTOs). A new RTO will be installed for Mixer #12.

### 2.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Control Equipment
Mixer #10	Modified mixer with twin screw roller die.	Existing Baghouse
Mixer #12	Modified mixer with two drop mills.	Existing Baghouse and New RTO (EC68-1)
Mixer #21	New mixer with twin screw roller die.	New Baghouse and Existing RTO (EC268-2)*

\* The RTO also controls Mixers #19 and #20 and tread end cementing operations.

### 2.2.3 Applicable Provisions and Emission Standards

- a. For the purpose of these unit-specific conditions, affected units are the mixers including associated roller dies or mills described in Conditions 2.2.1 and 2.2.2.
- b. The affected units are subject to 35 IAC 212.321(a), which provides that no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 IAC 212.321(c).
- c. The affected units are subject to 35 IAC 215.301, which provides that no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from each affected unit. If no odor nuisance exists the limitation shall apply only to photochemically reactive material as defined in 35 IAC 211.4690.

### 2.2.4 Non-Applicability Provisions

- a. This permit is issued based on the affected units being rubber processing operations that are not subject to any

emission limitations or other requirements under the NESHAP, 40 CFR Part 63 Subpart XXXX, pursuant to 40 CFR 63.5982(b)(4).

- b. This permit is issued based on the affected units not being subject to the control requirements of the NSPS, 40 CFR Part 60 Subpart BBB, because the affected units are not cementing or spraying operations addressed by the requirements of the NSPS, 40 CFR 60.540.

#### 2.2.5 Work Practice and Control Requirements

- a. The capture and control systems for the affected units shall be operated at all times the affected units are in operation.
- b. Each RTO controlling the affected units shall be capable of achieving a minimum VOM destruction efficiency of 99 percent or an outlet VOM concentration of:
  - i. For the RTO controlling Mixers #19-21 and tread end cementing operation, (EC268-2): No more than 4.9 ppmv (as propane).
  - ii. For the RTO controlling Mixer #12, (EC68-1): No more than 2.0 ppmv (as propane).
- c. i. For the new RTO (EC68-1):
  - A. Upon completion of start-up and achievement of normal operation of Mixer #12, the RTO combustion chambers shall be preheated to the temperature at which compliance was demonstrated in the most recent emissions test or 1600°F in the absence of an emissions test, before the Mixer #12 begins operation, and this temperature shall be maintained during operation of the mixer.
  - B. Notwithstanding the above, the RTO combustion chambers may be operated at a lower temperature for purposes of additional emissions testing.
- ii. For the existing RTO (EC268-2):

This permit does not affect requirements for the RTO, which shall continue to be subject to the established control requirements and work practices as set forth in existing permits, e.g., Construction Permit No. 12070023, when Mixers #19-21 and the tread end cementing operations are operating.

2.2.6 Operational and Emission Limits

- a. The production rate for Mixer #21 shall not exceed 6,500,000 pounds of rubber per month and 65,000,000 pounds of rubber per year.
- b. i. A. Hourly emissions from Mixers #19-21 and tread end cementing operations, which are all controlled by a common RTO, in total, shall not exceed the following limits:

Pollutant	Limits
	Pounds/Hour
VOM	13.95
NO <sub>x</sub>	0.84
CO	0.71

- B. Annual emissions from Mixers #19-21 and tread end cementing operations shall not exceed the applicable limits in Attachment 1.
- ii. This permit is issued based on negligible emissions of SO<sub>2</sub> from Mixers #19-21 and tread end cementing operations, in total. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.
- iii. This permit is issued based on minimal emissions of PM/PM<sub>10</sub>/PM<sub>2.5</sub> from Mixers #19-21 and tread end cementing operations, in total. For this purpose, emissions shall not exceed nominal emission rates of 0.25 lb/hour and 1.1 tons/year.

2.2.7 Testing Requirements

- a. i. A. Within 180 days of initial startup of Mixer #21, the Permittee shall have an emissions test performed on the RTO (EC268-2).
- B. Within 180 days of initial startup of modified Mixer #12, the Permittee shall have an emissions test performed on its RTO (EC68-1).
- C. These tests shall be performed during operating conditions that are representative of maximum emissions, e.g., while Mixer #12 is in operation and processing the maximum amount of material. These tests shall be designed to determine the emission rate in terms of lbs VOM/hour and lbs VOM/lb rubber processed and the destruction efficiency of the RTO.
- ii. If the criteria for total enclosure are not met, this test shall also be designed to determine the capture

efficiency of the capture system for units venting to each RTO.

- iii. The following methods and procedures shall be used for testing, unless use of another method developed or supported by USEPA is approved by the Illinois EPA as part of the approval of the test plan. Refer to 40 CFR Part 51, Appendix M and 40 CFR 60, Appendix A, for USEPA test methods.

Capture Efficiency	USEPA Method 204 of 40 CFR 51, Appendix M
Total Gaseous Organic Conc.	Method 25A, with ethanol used as the calibration gas

- iv. For this testing, the Permittee shall submit reports and notifications in accordance with Condition 1.7.1.
- b. Upon request of the Illinois EPA, the Permittee shall have the opacity from the affected unit(s) measured at the Permittee's expense by a certified observer using USEPA Method 9.

#### 2.2.8 Inspection Requirements

- a. The Permittee shall perform inspections of each affected unit, including associated control measures, on at least a monthly basis to confirm proper operation as related to control of emissions.
- b. The Permittee shall perform detailed inspections of the dust collection equipment for the affected mixers at least every 15 months while the units are out of service, with an initial inspection performed before any maintenance and repair activities are conducted during the period the unit is out of service and a follow-up inspection performed after any such activities are completed.

#### 2.2.9 Monitoring Requirements

- a. For the new RTO (EC68-1):
  - i. The Permittee shall use continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications at all times the RTO is in use. The continuous monitoring equipment shall monitor the combustion chamber temperatures of the RTO.
  - ii. The Permittee shall calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring device, such as a strip chart, recorder or computer,

having an accuracy of  $\pm 1$  percent of the temperature measured in degrees Celsius or  $\pm 0.5$  degrees Celsius, whichever is greater.

- b. For the existing RTO (EC268-2), the Permittee shall continue to be subject to established monitoring requirements for the RTO, as set forth in existing permits, e.g., Construction Permit No. 12070023.

#### 2.2.10 Recordkeeping Requirements

- a. The Permittee shall maintain the following operating records:
  - i. Total throughput of rubber for each affected unit (tons/month and tons/year).
  - ii. Usage of organo-silane coupling agents for each affected mixer, by type (tons/month and tons/year).
- b. Permittee shall maintain an operating log for the affected units that, at a minimum, includes:
  - i. Information for any significant changes in the compounding process, the type of silane coupler used, or the curing process that may affect the evolution of VOM, with description.
  - ii. Identifies each period when an affected unit or the associated control device operated in an atypical manner as related to generation of VOM or PM emissions.
- c. The Permittee shall maintain the following records for emissions:
  - i. A file containing the emission factors used to calculate the VOM emissions from the affected units and the maximum hourly VOM emission rates during normal operation of the units, with supporting documentation and calculations, which file shall be kept current.
  - ii. For Mixer #19-21 and tread end cementing operations: The emissions of VOM, NO<sub>x</sub>, CO, and GHG (as CO<sub>2</sub>e) (tons/month and tons/year), with supporting calculations.
- d. The Permittee shall maintain an inspection and maintenance log or other records for each affected mixer and associated emission control devices that, at a minimum, document performance of the inspections and results of inspections required by Conditions 2.2.8(a) and (b) and other

activities performed to maintain proper operation as related to control of emissions.

- e. i. For RTO EC68-1, the Permittee shall collect and record all of the following information each day for the RTO and maintain the information at the facility for a period of three years:
  - A. Control device monitoring data.
  - B. A log of operating time for the capture system, control device, monitoring equipment and the associated affected units.
  - C. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.
- ii. For RTO EC268-2, the Permittee shall continue to be subject to established recordkeeping requirements for the RTO, as set forth in existing permits, e.g., Construction Permit No. 12070023.
- f. The Permittee shall maintain a file that contains documentation of the burner capacity of RTO EC68-1.

#### 2.2.11 Reporting Requirements

If there is any deviation from the requirements of this permit involving affected units, as determined by the records required by this permit or by other means, the Permittee shall report to the Illinois EPA as specified below until such time the affected units are addressed by an operating permit. The report shall include the information specified in Condition 1.7.2.

- a. Deviations from the emission limits in Condition 2.2.6 shall be reported within 30 days of such occurrence.
- b. Other deviations shall be reported in a semi-annual report.

## 2.3 Extrusion Operations

### 2.3.1 Description

This project includes construction of two new rubber extruders. In the extruders, uncured rubber is forced through dies to form rubber compound into a usable shape.

### 2.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Control Equipment
New Extruders	Uncured rubber is forced through dies	None

### 2.3.3 Applicable Provisions and Emission Standards

- a. An "affected unit" is an extrusion operation described in Conditions 2.3.1 and 2.3.2.
- b. The affected units are subject to 35 IAC 212.321(a), which provides that no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 IAC 212.321(c).
- c. The affected units are subject to 35 IAC 215.301, which provides that no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from each affected unit. If no odor nuisance exists the limitation shall apply only to photochemically reactive material as defined in 35 IAC 211.4690.

### 2.3.4 Non-Applicability Provisions

This permit is issued based on the affected units not being subject to 40 CFR Part 63 Subpart XXXX. This is because the extruding operations do not use cements or solvents. See 40 CFR 63.5982(b)(1).

### 2.3.5 Emission Limits

- a. This permit is issued based on minimal emissions of VOM from the affected units, in total. For this purpose, emissions of VOM from all affected units, in total, shall not exceed 0.2 lb/hour and 0.85 tons/year.
- b. This permit is issued based on negligible emissions of PM from the affected units, in total. For this purpose,

emissions of PM from all affected units, in total, shall not exceed 0.1 lb/hour and 0.44 tons/year.

2.3.6 Testing Requirements

- a. Upon request of the Illinois EPA, the Permittee shall have the VOM emissions from designated affected units measured at the Permittee's expense by an approved testing service using standard USEPA Test methods.
- b. For this testing, the Permittee shall submit reports and notifications in accordance with Condition 1.7.1.

2.3.7 Recordkeeping Requirements

- a. The Permittee shall maintain records for the total throughput (tons/month and tons/year) or other measure of activity that indicates throughput (on a monthly and annual basis) for the affected units.
- b.
  - i. The Permittee shall keep a file, which shall be kept current, that contains the emission factors and other operating data used to calculate VOM and PM emissions from the affected units, with supporting documentation.
  - ii. The Permittee shall maintain records of the total emissions of VOM (tons/month and tons/year) from the affected units, with supporting calculations.

2.3.8 Reporting Requirements

If there is any deviation from the requirements of this permit involving affected units, as determined by the records required by this permit or by other means, the Permittee shall report to the Illinois EPA as specified below until such time the affected units are addressed by an operating permit. The report shall include the information requested in Condition 1.7.2.

- a. Deviations from the emission limits in Condition 2.3.5 shall be reported within 30 days of such occurrence.
- b. Other deviations shall be reported in a semi-annual report.

## 2.4 Curing Operations

### 2.4.1 Description

This project includes construction of up to fifteen new curing presses.

Tire curing is the operation during the manufacture of tires where the assembled uncured tire, also known as a "green" tire, is vulcanized and converted into a finished tire. Curing presses consist of a frame into which a tire mold of the appropriate size, contour, tread pattern, and sidewall design is placed. Rows of curing presses are called trenches. A green tire is loaded into the mold with a rubber bladder inflated into the center of the tire, into which steam is injected to provide the pressure and temperature required to form and vulcanize the tire over a specified time.

VOM emissions from volatile compounds in the rubber will evolve due to the high temperatures at which curing occurs.

### 2.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Control Equipment
Curing Presses	Fifteen new dual-cavity curing presses for commercial vehicle tires	None

### 2.4.3 Applicable Provisions and Emission Standards

- a. An "affected press" is a tire curing press described in Conditions 2.4.1 and 2.4.2.
- b. The affected presses are subject to 35 IAC 212.321(a), which provides that no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 IAC 212.321(c).
- c. The affected presses are subject to 35 IAC 215.301, which provides that no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from each affected unit. If no odor nuisance exists the limitation shall apply only to photochemically reactive material as defined in 35 IAC 211.4690.

#### 2.4.4 Non-Applicability Provisions

- a. This permit is issued based on the affected presses being rubber processing operations that are not subject to any emission limitations or other requirements under the NESHAP, 40 CFR Part 63 Subpart XXXX, pursuant to 40 CFR 63.5982(b)(4).
- b. This permit is issued based on the affected presses not being subject to the control requirements of the NSPS, 40 CFR Part 60 Subpart BBB, because the affected presses are not cementing or spraying operations addressed by the requirements of the NSPS, 40 CFR 60.540.
- c. This permit is issued based on the eight additional presses not resulting in an increase in emissions, consistent with the provisions for determining changes in emissions at 40 CFR 52.21(a)(2)(iv)(d), 40 CFR 52.21(b)(4) and 40 CFR 52.21(b)(48)(iii). Similarly, no increase in emissions will occur at affected equipment upstream and downstream of the curing operations as there will be no change in permitted emissions.

#### 2.4.5 Operational and Emission Limits

- a. The maximum rubber throughput for the affected presses shall not exceed 1,666,500 pounds of rubber per month and 16,665,000 pounds of rubber per year, total.
- b.
  - i.
    - A. Monthly VOM emissions from the affected presses, in total, shall not exceed 1.7 tons/month.
    - B. Annual VOM emissions from the affected presses shall not exceed the applicable limit in Attachment 1.
  - ii. This permit is issued based on negligible emissions of PM from the affected presses, in total. For this purpose, emissions of PM from all affected presses, in total, shall not exceed 0.44 tons/year.

#### 2.4.6 Testing Requirements

- a.
  - i. Upon request of the Illinois EPA, the Permittee shall have the VOM emissions from designated affected presses measured at the Permittee's expense by an approved testing service using standard USEPA test methods.
  - ii. For this testing, the Permittee shall submit reports and notifications in accordance with Condition 1.7.1.

- b. Upon request of the Illinois EPA, the Permittee shall have the opacity from the affected unit(s) measured at the Permittee's expense by a certified observer using USEPA Method 9.

#### 2.4.7 Recordkeeping Requirements

- a. The Permittee shall maintain records of the total throughput of rubber for the affected presses, in total (tons/month and tons/year).
- b. The Permittee shall maintain the following records for emissions from the affected presses:
  - i. A file containing the emission factors used to calculate the VOM emissions and the maximum hourly VOM emission rate, with supporting documentation and calculations, which shall be kept current.
  - ii. VOM emissions (tons/month and tons/year), with supporting calculations.
- c. The Permittee shall keep records for all opacity measurements made in accordance with USEPA Method 9 for the affected units that it conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such measurements are made, these records shall include the formal report for the measurements if conducted pursuant to Condition 2.4.6(b), or otherwise the identity of the observer, a description of the measurements that were made, the operating condition of the affected process, the observed opacity, and copies of the raw data sheets for the measurements.

#### 2.4.8 Reporting Requirements

If there is any deviation from the requirements of this permit involving affected units, as determined by the records required by this permit or by other means, the Permittee shall report to the Illinois EPA as specified below until such time the affected units are addressed by an operating permit. The report shall include the information requested in Condition 1.7.2.

- a. Deviations from the operational and emission limits in Condition 2.4.5 shall be reported within 30 days of such occurrence.
- b. Other deviations shall be reported in a semi-annual report.

Attachment 1: Annual Emission Limits and Increases<sup>a</sup> In Emissions For the Project (Tons/Year)

Affected Units	NO <sub>x</sub>		CO		VOM <sup>b</sup>		PM <sup>c</sup>		GHG (as CO <sub>2</sub> e)	
	Limit	Increase	Limit	Increase	Limit	Increase	Limit	Increase	Limit	Increase
Carbon Black Handling Operations										
New Day Bins #13-#24	---	---	---	---	---	---	0.44	0.44	---	---
Existing Day Bins for Mixer #10	---	---	---	---	---	---	n/a	0.03	---	---
Existing Day Bins for Mixer #12	---	---	---	---	---	---	n/a	0.05	---	---
Mixing Operations										
New Mixer #21, Existing Mixers #19 and #20 and Tread End Cementing (RTO EC268-2)	7.50	3.66	6.30	3.08	61.08	16.99	1.10	0.60	10,000	5,000
Modified Mixer #12 (RTO EC68-1)	n/a	0.75	n/a	0.63	n/a	<sup>d</sup>	n/a	0.06	n/a	1,000
Modified Mixer #10	---	---	---	---	n/a	4.92	n/a	0.01	---	---
Extrusion Operations										
New Extruders HF and CF	---	---	---	---	0.85	0.85	0.44	0.44	---	---
Curing Operations										
New Presses	---	---	---	---	16.41	16.41	0.44	0.44	---	---
Tire Uniformity and Repair										
Existing Tire Uniformity Grading	---	---	---	---	n/a	0.01	n/a	0.09	---	---
Existing Tire Repair	---	---	---	---	n/a	0.01	n/a	0.01	---	---
Utilities										
Existing Boilers	---	---	---	---	---	---	---	---	---	---
Total:		4.41		3.71		39.19		4.16		6,000
Significance Threshold:		40		100		40		25/15/10		75,000
Greater Than Significant?		No		No		No		No		No

Notes:

--- Minimal or no increase.

- a. Increases in emissions from new units are equal to the unit's potential to emit or permitted emissions (or "limit"). Increases in emissions at existing units are calculated by comparing projected actual emissions with baseline actual emissions as those terms are defined in 40 CFR 52.21(b). Baseline actual emissions are from the period January 2007 through December 2008. Emissions of SO<sub>2</sub> from this project will be negligible, i.e., less than 0.44 tons/year.
- b. VOM emissions attributable to fuel combustion in the RTOs have also been included in the VOM limit/increase. See Attachment 2 for details regarding VOM increases.
- c. All PM assumed to be PM<sub>10</sub> and PM<sub>2.5</sub>. The significant emission rates for PM, PM<sub>10</sub>, and PM<sub>2.5</sub> are 25 tons, 15 tons, and 10 tons per year, respectively. PM<sub>10</sub> and PM<sub>2.5</sub> includes both filterable and condensable particulate.
- d. A decrease in emissions is expected.

Attachment 2: Change in VOM Emissions for Affected Units (Tons/Yr)

Unit	BAE <sup>a</sup>	PAE <sup>b</sup>	Change <sup>c</sup>
New Mixer #21	0	16.79	16.79
Mixer #20 <sup>d</sup>	18.61	18.61	0
RTO Combustion	0.21	0.41	0.20
Mixer #19 <sup>d</sup>	25.27	25.27	0
Tread End Cementing <sup>d</sup>			
Subtotal		61.08	16.99
Modified Mixer #12	13.44	4.73	-8.71
New RTO Combustion	0	0.05	0.05
Subtotal		4.78	-8.66
Modified Mixer #10	7.60	12.52	4.92
Subtotal		Total	4.92
New Extruders HF and CF	0	0.85	0.85
Subtotal		0.85	0.85
New Presses	0	16.41	16.41
Subtotal		16.41	16.41
Existing Tire Uniformity Grading	<0.01	0.01	0.01
Subtotal		Total	0.01
Existing Tire Repair	<0.01	0.01	0.01
Subtotal		Total	0.01

Notes:

- a. BAE means Baseline Actual Emissions as defined in 40 CFR 52.21(b)(48).
- b. PAE means Projected Actual Emissions as defined in 40 CFR 52.21(b)(41).
- c. The change in emissions is calculated by comparing the BAE with the PAE.
- d. These units are grouped with new Mixer #21 because they share a common RTO. Mixer #19, Mixer #20 and Tread End Cementing are treated as "new emission units" because they have existed for less than 2 years (See also 40 CFR 52.21(b)(7)(i)). For purposes of calculating the change in emissions at these units for this project, the units' PAE (25.27 tons/year as limited by Construction Permit No. 11010008) are compared with the units' BAE (25.27 tons/year, see 40 CFR 52.21(b)(48)(e)(iii)). Accordingly, the change in emissions is zero.

Attachment 3: Standard Permit Conditions

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS  
ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Environmental Protection Agency to impose conditions on permits, which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.
2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act and Regulations adopted by the Illinois Pollution Control Board.
3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, shall have been submitted to the Illinois EPA and a supplemental written permit issued.
4. The Permittee shall allow any duly authorized agent of the Illinois EPA upon the presentation of credentials, at reasonable times:
  - a. To enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,
  - b. To have access to and to copy any records required to be kept under the terms and conditions of this permit,
  - c. To inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,
  - d. To obtain and remove samples of any discharge or emissions of pollutants, and
  - e. To enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.

5. The issuance of this permit:
  - a. Shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located,
  - b. Does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities.
  - c. Does not release the Permittee from compliance with other applicable statutes and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations.
  - d. Does not take into consideration or attest to the structural stability of any units or parts of the project, and
  - e. In no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.
- 6a. Unless a joint construction/operation permit has been issued, a permit for operation shall be obtained from the Illinois EPA before the equipment covered by this permit is placed into operation.
- b. For purposes of shakedown and testing, unless otherwise specified by a special permit condition, the equipment covered under this permit may be operated for a period not to exceed thirty (30) days.
7. The Illinois EPA may file a complaint with the Board for modification, suspension or revocation of a permit.
  - a. Upon discovery that the permit application contained misrepresentations, misinformation or false statement or that all relevant facts were not disclosed, or
  - b. Upon finding that any standard or special conditions have been violated, or
  - c. Upon any violations of the Environmental Protection Act or any regulation effective thereunder as a result of the construction or development authorized by this permit.