217/782-2113

TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT
and
TITLE I PERMIT[1]

PERMITTEE

Goodyear Tire and Rubber Company
Attn: Ken Thompson, Project Manager - Environmental
3769 Route 20 East
Freeport, Illinois 61032

Application No.: 95120073 I.D. No.: 177813AAA
Applicant's Designation: Date Received: December 6, 1995
Operation of: Rubber Tires Manufacturing Plant
Date Issued: January 10, 2003 Expiration Date[2]: January 9, 2008
Source Location: 3769 Route 20 East, Freeport, Stephenson County
Responsible Official: C. Grunder, Plant Manager

This permit is hereby granted to the above-designated Permittee to OPERATE a rubber tires manufacturing plant, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

If you have any questions concerning this permit, please contact Anatoly Belogorsky at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:AB:jar

cc: Illinois EPA, FOS, Region 2
USEPA

[1] This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the CAA and regulations promulgated thereunder, including 40 CFR 52.21 – federal PSD and 35 IAC Part 203 – Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.

[2] Except as provided in Condition 8.7 of this permit.

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1.0 SOURCE IDENTIFICATION

1.1 Source

Goodyear Tire and Rubber Company
3769 Route 20 East
Freeport, Illinois 61032
815/235-7643

I.D. No.: 177813AAA
Standard Industrial Classification: 3011, Rubber Products

1.2 Owner/Parent Company

Goodyear Tire and Rubber Company
1144 East Market Street
Akron, Ohio 44316

1.3 Operator

Goodyear Tire and Rubber Company
3769 Route 20 East
Freeport, Illinois 61032

Ken Thompson
815/235-7643

1.4 General Source Description

Goodyear Tire and Rubber Company is located at 3769 Route 20 East in Freeport and manufacturers rubber tires for different type of passenger cars and farm equipment.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Unit
BAT	Best Available Technology
Btu	British thermal unit
°C	Degrees Celsius
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
Cd	Cadmium
CEMS	Continuous Emission Monitoring System
cfm	Cubic foot per minute
CFR	Code of Federal Regulations
CO	Carbon Monoxide
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
EP	Emission Point/Process
°F	Degrees Fahrenheit
ft	Feet
G	Grams
gal	Gallons
gr	Grains
HAP	Hazardous Air Pollutant
HCl	Hydrogen Chloride
Hg	Mercury
HMIWI	Hospital/Medical/Infectious Waste Incinerator
hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
kW	kilowatts
L	liter
LAER	Lowest Achievable Emission Rate
lb	pound
MACT	Maximum Achievable Control Technology
mg	milligram
mmBtu	Million British thermal units
mmscf	Million standard cubic feet
mo	month
MW	Megawatts
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides

Pb	Lead
NSPS	New Source Performance Standards
PM	Particulate Matter
PM_{10}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration
RMP	Risk Management Plan
scf	Standard cubic feet
scm	Standard cubic meters
SO_2	Sulfur Dioxide
T	Ton
TEQ	Toxic equivalency
T1	Title I – identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New – identifies Title I conditions that are being established in this permit
T1R	Title I Revised – identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material
yr	year

3.0 INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

None

3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

None

3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

a. Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

b. Extruders used for the extrusion of metals, minerals, plastics, rubber, or wood, excluding extruders used in the manufacture of polymers, provided that volatile organic materials or class I or II substances subject to the requirements of Title VI of the CAA are not used as foaming agents or release agents or were not used as foaming agents in the case of extruders processing scrap material [35 IAC 201.210(a)(5)].

c. Equipment used for filling drums, pails, or other packaging containers, excluding aerosol cans, with soaps, detergents, surfactants, lubricating oils, waxes, vegetable oils, greases, animal fats, glycerin, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(8)].

d. Equipment used for the mixing and blending of materials at ambient temperature to make water based adhesives, provided each material mixed or blended contains less than 5% organic solvent by weight [35 IAC 201.210(a)(9)].

e. Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons per year, provided the storage tank is not used for the storage of gasoline or any material listed as a HAP pursuant to Section 112(b) of the CAA [35 IAC 201.210(a)(10)].

f. Storage tanks of any size containing virgin or re-refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

g. Coating operations (excluding powder, architectural and industrial maintenance coating) with aggregate VOM usage that never exceeds 15 lbs/day from all coating lines at the source, including VOM from coating, dilutents, and cleaning materials [35 IAC 201.210(a)(13)].

h. Printing operations with aggregate organic solvent usage that never exceeds 750 gallons per year from all printing lines at the source, including organic solvent from inks, dilutents, fountain solutions, and cleaning materials [35 IAC 201.210(a)(14)].

i. Gas turbines and stationary reciprocating internal combustion engines of less than 112 kW (150 horsepower) power output [35 IAC 201.210(a)(15)].

j. Gas turbines and stationary reciprocating internal combustion engines of between 112 kW and 1,118 kW (150 and 1,500 horsepower) power output that are emergency or standby units [35 IAC 201.210(a)(16)].

k. Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials [35 IAC 201.210(a)(17)].

3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, 218.182, or 219.182.

3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.

3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, 218.301, or 219.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

3.3 Addition of Insignificant Activities

3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).

3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.

3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 1	Carbon Black Handling Units	1963	Baghouses
Unit 2	Blending and Mixing Units	1963; 1968; 1970; 1974; 1988; 2002 (Modification)	Dust Collectors
Unit 3	Extrusion/Calendaring Areas	1963; 1970; 1996	None
Unit 4	Bead Preparation Areas	1979	None
Unit 5	Green Tire Spray Booths	1963-2001;	None
Unit 6	Curing Presses	1963-2001; 2002 (Modification)	None
Unit 7	Tire Finishing Areas	1996	Cyclone Dust Collectors
Unit 8	Boilers	1979	None
Unit 9	Turbines	1996	None

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of VOM emissions.

5.2 Applicable Regulations

5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.

5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:

a. 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), pursuant to 35 IAC 212.301 and 212.314.

Compliance with this requirement is considered to be assured by the inherent nature of operations at this source, as demonstrated by historical operation.

b. 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, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.

5.2.3 The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.2.4 Risk Management Plan

Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the Accidental Release Prevention regulations in 40 CFR Part 68, then the owner or operator shall submit [40 CFR 68.215(a)(2)(i) and (ii)]:

a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or

b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan (RMP), as part of the annual compliance certification required by 40 CFR Part 70 or 71.

5.2.5 a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by 40 CFR Part 70 or 71.

b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.

5.2.6 Episode Action Plan

a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.

b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.

c. If a change occurs at the source, which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.

d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:

i. Illinois EPA, Compliance Section; and

ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or

iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.

5.2.7 Rubber Tire Manufacturing (40 CFR Part 60, Subpart BBB)

The following tire manufacturing operations involved into manufacturing of rubber tires with a bead diameter less than or equal to 0.5 meter (19.7 inches) and a cross section dimension less than or equal to 0.325 m (12.8 inches) and constructed, modified, or reconstructed after January 20, 1983 are subject to requirements of 40 CFR Part 60, Subpart BBB: each under tread cementing operation; each sidewall cementing operation; each tread end cementing operation; each bead cementing operation; and each green tire spraying operation. Specific requirements of 40 CFR Part 60, Subpart BBB are discussed further in Section 7.

5.3 Non-Applicability of Regulations of Concern

a. Manufacturing of rubber tires with dimensions exceeding those mentioned in Condition 5.2.7 and/or constructed prior to January 20, 1983 are exempt from requirements of 40 CFR Part 60, Subpart BBB.

b. This source is not subject to 40 CFR Part 63, Subpart XXXX “National Emissions Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing” because this source is not a major source of hazardous air pollutant (HAP)

emissions. If the source exceeds major source threshold levels for HAP emissions, as established in 40 CFR 63.5981(a)(2), then the source has to demonstrate compliance with Subpart XXXX and apply for revision of this permit.

5.4 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the following source-wide operational and production limitations and/or work practice requirements:

None

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	789.74
Sulfur Dioxide (SO_2)	0.23
Particulate Matter (PM)	81.19
Nitrogen Oxides (NO_x)	96.71
HAP, not included in VOM or PM	22.27
Total	990.14

5.5.2 Emissions of Hazardous Air Pollutants

This permit is issued based on the emissions of HAPs as listed in Section 112(b) of the CAA not being equal to or exceeding 10 tons per year of a single HAP or 25 tons per year of any combination of such HAPs, so that this source is considered a minor source for HAPs.

5.5.3 Other Source-Wide Emission Limitations

None

5.6 General Recordkeeping Requirements

5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

Total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit.

5.6.2 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.

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the source with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

5.7.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year.

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Emissions

Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7, and compliance procedures in Section 7 (Unit Specific Conditions) of this permit.

5.10 PSD Permit

On May 21, 2002 the PSD Construction Permit No. 01040070 was issued for equipment consisting of the modification of the rubber mixing processes and curing processes in its existing tire manufacturing plant as described in the above referenced application. This Permit is granted based upon and subject to the findings and conditions which follow:

In conjunction with this permit, approval is given with respect to the Prevention of Significant Deterioration of Air Quality Regulations (PSD) for this modification, in that the Illinois Environmental Protection Agency (Illinois EPA) finds that the application fulfills all applicable requirements of 40 CFR 52.21. This approval is issued pursuant to the Clean Air Act, as amended, 42 U.S.C. 7401 et seq., the Federal regulations promulgated thereunder at 40 CFR 52.21 for Prevention of Significant Deterioration of Air Quality (PSD), and a Delegation of Authority agreement between the United States Environmental Protection Agency and the Illinois EPA for the administration of the PSD Program. This approval becomes effective in accordance with the provisions of 40 CFR 124.15 and may be appealed in accordance with the provisions of 40 CFR 124.19. This approval is also based upon and subject to the findings and conditions which follow:

Findings

1. Goodyear Tire & Rubber Company (“Goodyear”) has requested a PSD permit for a modification of its tire manufacturing plant in Freeport. The applicant is seeking approval of a change in rubber formulation to include organo-silane coupling agents for the purpose of enhancing the properties of the rubber, including reducing rolling resistance of tires which improves fuel economy. This results in the evolution of ethanol, a volatile organic material (VOM) during the processing and curing of the rubber. The emissions increase from the proposed change in raw materials meets the definition of major modification pursuant to 40 CFR 52.2.

2. The tire manufacturing plant is located in Silver Creek Township in Stephenson County. The area is currently designated attainment for all criteria pollutants.

3. The proposed project has the potential to increase emissions of volatile organic material (VOM) by more than 40 tons per year as listed in Table I. The project is therefore subject to PSD review as a major modification for VOM emissions.

4. After reviewing all the materials submitted by Goodyear, the Illinois EPA has determined that the plant, as now proposed, will (i) be in compliance with all applicable Board emission standards, (ii) utilize Best Available Control Technology (BACT) on emissions of VOM, and (iii) be in compliance with other limits as set in Conditions of this permit.

5. The air quality analysis submitted by Goodyear and reviewed by the Illinois EPA shows that the plant, as now proposed, will also not cause violations of the ambient air quality standards for VOM. The air quality analysis also shows compliance with the allowable VOM increment.

6. The Illinois EPA has determined that the plant, as now proposed, would comply with all applicable Illinois Air Pollution Control Board Regulations and the federal Prevention of Significant Deterioration of Air Quality Regulations (PSD), 40 CFR 52.21.

7. A copy of the application and the Illinois EPA's formal review of the application and a draft of this permit were placed in a location in the vicinity of the project, and the public was given notice and opportunity to examine this material and to submit comments and to request a public hearing on this matter.

5.10.2 Conditions

Banbury Mixers

The Banbury mixers are the primary pieces of equipment for producing the rubber compounds that are used for the tires. Operated in batch mode, the mixers blend the raw materials together to form feedstock for the remaining processes. Rubber is mixed several times to achieve the necessary properties and composition. The first step is to produce “non-productive” rubber, during the first

stages of mixing. The last stage of mixing in the Banbury is used to produce “productive” rubber, which contains additional ingredients, the curing package, necessary for the vulcanization or curing of the rubber when the tires are produced in the plant.

Curing Presses

Tire curing is the operation during the manufacture of tires where the assembled “green” tire is vulcanized. Curing presses consist of a frame with a control system into which a tire mold, that contains the appropriate tread pattern, sidewall design, tire size and contour, is placed. A 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 (or cycle). Platen presses hold two molds (dual cavity) simultaneously, typically sized for passenger, front farm and truck sized tire molds. Dome presses hold one mold (single cavity) and are sized to hold the larger rear farm and OTR (Off the Road) sized tires.

This permit addresses the increase in VOM emissions resulting from the use of organo-silane coupling agents, as further discussed in Attachment I.

a. Usage of silane coupler in the affected Banbury mixers, determined as the amount of silane coupler material, including carrier material provided by the supplier, shall not exceed the following limits:

Silane Coupler Usage	
(Tons/Month)	(Tons/Year)
180.4	1,443.3

These limits are based on the current month’s data and the previous 11 months of data.

b. Emissions of VOM from the combined operation of the affected Banbury mixers and curing presses shall not exceed 0.194 lbs per pound of silane coupler used at the affected mixers and presses. Compliance with this limit shall be determined as a monthly average. This limitation represents Best Available Control Technology (BACT) for these operations.

c. Emissions of VOM attributable to use of organo-silane coupling agents in the affected Banbury mixers and affected curing presses shall not exceed the following

limits:

VOM Emissions (Tons/Month)	VOM Emissions (Tons/Year)
30.0	280.0

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

6.0 NOT APPLICABLE TO THIS PERMIT

7.0 UNIT SPECIFIC CONDITIONS

7.1 Unit 1: Carbon Black Handling Units

7.1.1 Description

Carbon black is used as an additive in the production of rubber compounds. The material is stored in silos and transferred to mixers by sealed conveyors.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 1	Carbon Black Silos #1 and #2 Carbon Black Unloading/Conveying Lines #1 and #2	Baghouses Baghouses

7.1.3 Applicability Provisions and Applicable Regulations

a. An affected "carbon black handling unit" is an emission unit, which transfers or stores raw materials prior to further mixing and processing.

b. An affected carbon black handling unit is subject to 35 IAC 212.321(b)(1), 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 subsection (c) of 35 IAC 212.321 (See also Attachment 1) [35 IAC 212.321(a)].

7.1.4 Non-Applicability of Regulations of Concern

None

7.1.5 Operating Requirements and Work Practices

a. The Permittee shall follow good operating practices for the baghouses, including periodic inspection, routine maintenance and repair of defects.

b. The Permittee shall operate, maintain, and replace the fabric filters in a manner that assures compliance with the conditions of this Section.

7.1.6 Emission Limitations

None

7.1.7 Testing Requirements

None

7.1.8 Monitoring Requirements

None

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected carbon black handling unit to demonstrate compliance with Condition 5.5.1 and Section 7 of this permit, pursuant to Section 39.5(7)(b) of the Act:

a. Amount of carbon black processed in lb/hr and ton/yr.

b. Emissions calculated based on the procedures established in Condition 7.1.12.

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of noncompliance of affected carbon black handling unit with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

If there is an exceedance of the emission limitations of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.1.12 Compliance Procedures

a. Compliance with the PM emission limits established by 35 IAC 212.121 is assured and achieved by the proper operation and maintenance, as required by this section

and the work-practices inherent in operation of the affected carbon black handling units.

b. PM_{10} Emissions = (Air flow, cfm) x (Estimated Dust Loading, gr/scf) x (1 lb/7,000 gr) x (60 minutes/hr) x [100 – (Efficiency, %)/100]

7.2 Unit 2 Blending and Mixing Units

7.2.1 Description

A variety of pigments are processed (mixed and weighed) prior to being added to the mixers. Mixers are the primary components for producing the rubber compounds that are used for tires. Operated in a batch mode, the mixers blend the raw materials together to form feedstock for the remaining processes.

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 2	Banbury Mixers #1 – #7	Dust Collectors
	Mixer Rubber Handling Systems #2, #3, and #6	Dust Collectors
	Pigment Blending	Dust Collectors

7.2.3 Applicability Provisions and Applicable Regulations

a. An affected "blending and mixing unit" is an emission unit described in Conditions 7.2.1 and 7.2.2.

b. Each affected blending and mixing unit (constructed or modified after April 14, 1972) is subject to 35 IAC 212.321(b)(1), 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 subsection (c) of 35 IAC 212.321 (See also Attachment 1) [35 IAC 212.321(a)].

c. Each affected blending and mixing unit (constructed or modified prior to April 14, 1972) is subject to 35 IAC 212.322(b)(1) and (b)(2), which provides that:

> No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any existing 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 prior to April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 (See also Attachment 1) [35 IAC 212.322(a)].

d. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit unless no odor nuisance exists and non-photochemically reactive materials are used [35 IAC 215.301].

7.2.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected blending and mixing unit not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected blending and mixing unit does not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.2.5 Operating Requirements and Work Practices

a. The Permittee shall follow good operating practices for the dust collectors, including periodic inspection, routine maintenance and repair of defects.

b. The Permittee shall operate, maintain, and replace the fabric filters in a manner that assures compliance with the conditions of this Section.

c. Usage of silane coupler in the affected Banbury mixers, determined as the amount of silane coupler material, including carrier material provided by the supplier, shall not exceed the following limits:

Silane Coupler Usage	
(Tons/Month)	(Tons/Year)
180.4	1,443.3

These limits are based on the current month’s data and the previous 11 months of data.

7.2.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5.1, the affected Banbury mixers are subject to the following:

a. Emissions of VOM from the combined operation of the affected Banbury mixers and curing presses shall not exceed 0.194 lbs per pound of silane coupler used at the affected mixers and presses. Compliance with this limit shall be determined as a monthly average, in accordance with Condition 7.2.12. This limitation represents Best Available Control Technology (BACT) for these operations.

b. Emissions of VOM attributable to use of organo-silane coupling agents in the affected Banbury mixers and affected curing presses shall not exceed the following limits:

VOM Emissions	
(Tons/Month)	(Tons/Year)
30.0	280.0

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

c. The above limitations were established in the PSD Permit 01040070, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit complies with BACT requirements specified the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

7.2.7 Testing Requirements

a. Prior to relying on a loss factor for generation of VOM from use of organo-silane coupling agents that is lower than specified in Condition 7.2.12, the Permittee shall have the VOM emissions from the affected Banbury mixers and affected curing presses while using organo-silane coupling agents measured at the Permittee’s expense by an approved testing

service, to confirm that such lower factor is representative for this source.

Notwithstanding the above, the Illinois EPA may upon request of the Permittee provide more time for testing pursuant to this permit if such time is reasonably needed to address unavoidable delays in performance of testing or if waive this testing if it determines that this factor is supported by test data.

b. The following methods and procedures shall be used for testing of emissions, as approved by the Illinois EPA. Refer to 40 CFR 60, Appendix A for USEPA test methods.

Location of Sample Points	USEPA Method 1
Gas Flow and Velocity	USEPA Method 2
Flue Gas Weight	USEPA Method 3
Moisture	USEPA Method 4
Volatile Organic Material	USEPA Method 18, 25 or 25A, as appropriate

c. The Permittee shall submit a written test plan to the Illinois EPA for its approval for the initial testing for VOM and if a significant change in the procedures for this testing is planned from the procedures followed in the previous test. This plan shall be submitted at least 90 days prior to the actual date of testing and include the following information as a minimum:

i. A description of the planned test procedures.

ii. The person(s) who will be performing sampling and analysis and their experience with similar tests.

iii. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions.

iv. The methodology that will be used to determine the operating rate during the period of testing, e.g., the rate of coupling introduced to the process.

d. The Permittee shall notify the Illinois EPA prior to conducting these measurements to enable the Illinois EPA to observe testing. Notification for 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 accept shorter advance notice if it does not interfere with the Illinois EPA's ability to observe testing.

e. Copies of the Final Report(s) for these tests shall be submitted to the Illinois EPA within 30 days after the test results are compiled and finalized.

f. The Final Report from testing shall include as a minimum:

i. A summary of results.

ii. General Information.

iii. A detailed description of methodology for determination of the rate of VOM introduced into processes during the period of testing, with supporting information.

iv. Detailed description of operating conditions of the emission unit(s) being tested, including:

A. Process information, e.g. type and amount of rubber processed and organo-silane content; and

B. All other relevant control equipment information, i.e., equipment condition and operating parameters during testing.

v. Data and calculations.

vi. Conclusions.

7.2.8 Monitoring Requirements

None

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected blending and mixing unit to demonstrate compliance with Condition 5.5.1 and Section 7 of this permit, pursuant to Section 39.5(7)(b) of the Act:

a. Banbury Mixers #1 – #7

i. Changes in the compounding process or the type of silane coupler used that may increase the evolution of VOM, with description, the effect on evolution of VOM-emissions, and supporting data and calculations.

ii. Total silane coupler throughput on a monthly and annual basis through the affected Banbury mixers (ton/mo and ton/yr).

iii. VOM emissions from the affected emission units expressed as lb VOM per lb of silane coupler processed, with supporting calculations..

iv. VOM emissions for the affected Banbury mixers, as calculated based on the procedures established in Condition 7.2.12.

b. Other affected blending and mixing units

i. Total rubber throughput on the monthly and annual basis (ton/mo and ton/yr).

ii. Total blending throughput on the monthly and annual basis (ton/mo and ton/yr).

iii. Total emissions of VOM calculated based on the procedures established in Condition 7.2.12.

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of noncompliance of affected blending and mixing units with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

If there is an exceedance of the emission limitations of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.2.12 Compliance Procedures

a. Compliance with the PM emission limits established by 35 IAC 212.121 and 212.122 is assured and achieved by the proper operation and maintenance, as required by this section and the work-practices inherent in operation of the affected blending and mixing units.

b. To determine compliance with Conditions 7.2.6(b), VOM emissions from the affected Banbury mixers (and curing presses described further in Section 7.5) shall be calculated based on an appropriate emission factor for generation of VOM. Unless otherwise approved by the Illinois EPA, this factor shall represent maximum theoretical generation of VOM from the reaction of the most volatilizing organo-silane coupler with the rubber matrix.

For the proposed coupling agents, this yields a factor of:

E_{BMCE} = 0.194 x lbs of silane coupler used

Where the emission factor of 0.194 lb/VOM for each lb of silane coupler developed in conjunction with studies performed by the Rubber Manufacturing Association.

7.3 Unit 3: Extrusion/Calendaring Areas

7.3.1 Description

Extrusion systems produce tire components by combining a variety of rubber compounds and extruding them into the desired shapes by applying tread end cementing on Extruders #2 and #4.The calendar lines combine fabric and rubber compounds to produce the materials used in the construction of tires.

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 3	3 Roll Calendar Line	None
	2 Roll Calendar Line	None
	4 Roll Calendar Lines #1 and #2	None
	Extruder #2	None
	#4 Quad Extruder System	None

7.3.3 Applicability Provisions and Applicable Regulations

a. An "affected calendar/extrusion station" is an emission unit described in Conditions 7.3.1 and 7.3.2.

b. Each affected calendar/extrusion station (constructed or modified after April 14, 1972) is subject to 35 IAC 212.321(b)(1), 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 subsection (c) of 35 IAC 212.321 (See also Attachment 1) [35 IAC 212.321(a)].

c. Each affected calendar/extrusion station (constructed or modified prior to April 14, 1972) is subject to 35 IAC 212.322(b)(1) and (b)(2), which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any existing 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 prior to April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 (See also Attachment 1) [35 IAC 212.322(a)].

d. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit unless no odor nuisance exists and non-photochemically reactive materials are used [35 IAC 215.301]. This emission limitation is applied to any operation other than tread end and bead cementing.

e. Extruders #2 and #4 are subject to the following requirements of 40 CFR Part 60, Subpart BBB and 35 IAC 215.463:

Each tread end cementing operation performed on the calendar/extrusion stations is limited to 10 grams of VOM emissions or less per tire, pursuant to 35 IAC 215.463 and 40 CFR 60.542(a)(3).

7.3.4 Non-Applicability of Regulations of Concern

a. This permit is issued based on the affected calendar/extrusion stations not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM), because the affected units do not use an add-on control devices to achieve compliance with an emission limitation or standard.

b. The affected calendar/extrusion stations (other than Extruder #2 and #4) are excluded from applicability of 40 CFR 60.542(a)(3) and (4) and 35 IAC Part 215, Subpart S “Rubber and Miscellaneous Plastic Products” based on the date of construction of affected units and/or dimensions of tires processed.

7.3.5 Operating Requirements and Work Practices

None

7.3.6 Emission Limitations

None

7.3.7 Testing Requirements

a. Monthly performance tests shall be conducted as follows pursuant to 40 CFR 60.543(d):

For each tread end cementing operation where water-based cements containing 1.0 percent, by weight, of VOC or more are used (inside and/or outside) that do not use a VOC emission reduction system, the owner or operator shall use the following procedure to determine compliance with the g/tire limit specified under 40 CFR 60.542(a)(3):

i. Determine the density and weight fraction VOC as specified under 40 CFR 60.543(c)(1).

ii. Calculate the total mass of VOC used at the affected facility for the month (M_o) as specified under 40 CFR 60.543(c)(2).

iii. Determine the total number of tires cemented or sprayed at the affected facility for the month (T_o) by the following procedure:

For a trend end cementing operation, T_o equals the number of treads cemented for the month.

iv. Calculate the mass of VOC used per tread cemented at the affected facility for the month (G):

$$G = \frac{M_o}{T_o}$$

b. In determining compliance for each tread end cementing operation, the owner or operator shall include only those tires defined under 40 CFR 60.541(a) when determining T_o [40 CFR 60.543(m)]

7.3.8 Monitoring Requirements

None

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for all affected calendar/extrusion stations to demonstrate compliance with Condition 5.5.1 and Section 7 of this permit, pursuant to Section 39.5(7)(b) of the Act:

a. Total rubber throughput on the monthly and annual basis (ton/mo and ton/yr).

b. Total cement usage, gallons/pounds per month and gallons/pounds per year.

c. Cement usage on Extruders #2 and #4, gallons/pounds per month and gallons/pounds per year.

d. Weight fraction of VOM in each cement used for the tread end cementing operation, wt. %.

e. VOM emissions from each type of the cementing operations performed subject to 40 CFR 60.542(a) and calculated based on the procedures established in Condition 7.3.12.

f. Total emissions of VOM calculated based on the procedures established in Condition 7.3.12.

g. Results of the monthly performance tests as specified under 40 CFR 60.543(b)(1) and required by 40 CFR 60.545(e).

7.3.10 Reporting Requirements

a. The Permittee shall promptly notify the Illinois EPA, Compliance Section, of noncompliance of affected calendar/extrusion stations with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

> If there is an exceedance of the emission limitations of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

b. The Permittee shall follow appropriate reporting requirements established in 40 CFR 60.546 (c) and (f).

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee may use rubber or cement compounds other than those identified in Condition 7.3.12(b). If this is a case, the Permittee shall start using other appropriate emission factors (for complying with requirements of Condition 7.3.12(b)) associated with application of new compounds and adopted by the Rubber Manufacturing Association and/or USEPA as a part of AP-42.

7.3.12 Compliance Procedures

a. Compliance with the PM emission limits established by 35 IAC 212.321 and 212.322 is assured and achieved by the proper operation and maintenance, as required by this section and the work-practices inherent in operation of the affected calendar/extrusion stations.

b. To determine compliance with Conditions 5.5.1, VOM emissions from the affected calendar/extrusion station shall be calculated based on the following emission factors developed by the Rubber Manufacturing Association:

Emission Units	Rubber Compound	VOM Emission Factor, lb/lb Rubber Processed
Mill Line/Extruder #2	#6 #4	5.64 E-05 8.37 E-05
Mill Line/3-Roll Calendar: Mills Calendars	 #2 #2	 1.10 E-04 5.59 E-05
Mill Line/2-Roll Gum Calendar: Mills Calendars	 #2 #2	 1.10 E-04 5.59 E-05
Mill Line/4-Roll Calendar: Mills Calendars	 #1 #1	 8.99 E-05 5.33 E-05

Emission Units	VOM Content, wt.%
Quad Extruder: End Cementing Marking/Stripping	 83 81
Extruder #2: End Cementing Marking/Stripping	 83 77

c. Compliance with emission limits in Condition 7.3.3(d) for cementing operations shall be demonstrated through the procedures established by 40 CFR 60.543(d) and Condition 7.3.7.

7.4 Unit 4: Bead Preparation Areas

7.4.1 Description

The bead units combine wire and rubber compounds to produce tire beads, which are utilized in the construction of tires. Rubber extruders and winders process the materials to form the tire beads. The operation is conducted in a batch mode as each bead is formed separately. The bead unit operation is divided into farm and passenger tires. Farm tires require the use of a solvent-based cement in bead manufacture. Passenger tire beads are made without cement.

7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 4	Bead Preparation Machines #4 - #6	None

7.4.3 Applicability Provisions and Applicable Regulations

a. An "affected bead preparation machine" is an emission unit described in Conditions 7.4.1 and 7.4.2 above.

b. Each affected bead preparation machine is subject to 35 IAC 212.321(b)(1), 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 subsection (c) of 35 IAC 212.321 (See also Attachment 1) [35 IAC 212.321(a)].

c. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit unless no odor nuisance exists and non-photochemically reactive materials are used [35 IAC 215.301].

7.4.4 Non-Applicability of Regulations of Concern

a. This permit is issued based on the affected bead preparation machine not being subject to requirements

of 35 IAC 215.461 based on the exemption criteria for tires with an inside bead diameter more than 19.7 inches.

b. This permit is issued based on the affected bead preparation machine not being subject to requirements of 40 CFR 60, Subpart BBB “Standards of Performance for the Rubber Tire Manufacturing Industry” either based on the exemption criteria for tires with an inside bead diameter more than 19.7 inches or construction/modification had occurred prior to January 20, 1983.

c. This permit is issued based on the affected tire stock and bead preparation machines not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM), because the affected tire stock and bead preparation machines do not use an add-on control devices to achieve compliance with an emission limitation or standard.

7.4.5 Operating Requirements and Work Practices

Bead cementing operations are allowed to perform for tires with an inside bead diameter exceeding 19.7 inches and a cross section dimension more than 12.8 inches. For smaller tires bead cementing shall not be applied.

7.4.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5.1, the affected bead preparation machines are subject to the following:

Total emissions and operation of all bead preparation machines shall not exceed the following limits:

VOM Containing Material Usage		VOM Emissions	
(lb/mo)	(ton/yr)	(lb/mo)	(ton/yr)
7,931	47.6	7,693	46.2

The above limitations were established in Permit 79010006, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total)

7.4.7 Testing Requirements

None

7.4.8 Monitoring Requirements

None

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected bead preparation machines to demonstrate compliance with Condition 5.5.1 and Section 7 of this permit, pursuant to Section 39.5(7)(b) of the Act:

a. Cement/Solvents (lb/month and lb/year);

b. VOM content of each cement/solvent applied (wt. %);

c. Total monthly and annual emissions of VOM, as established in Condition 7.4.6 and calculated based on the procedures established in Condition 7.4.12.

7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of noncompliance of affected tire stock and bead preparation machines with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

If there is an exceedance of the emission limitations of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA’s Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.4.12 Compliance Procedures

a. Compliance with the PM emission limits established by 35 IAC 212.121 is assured and achieved by the proper operation and maintenance, as required by this section and the work-practices inherent in operation of the affected bead preparation machines.

b. To determine compliance with Conditions 5.5.1 and 7.4.6, VOM emissions from the affected bead preparation machines shall be calculated based on the formula listed below:

VOM (ton) = Pounds of Solvent Used (lb) x VOM Content (wt. %) x (1 ton/2000 lb)

7.5 Unit 5: Green Tire Spray Booths

7.5.1 Description

The assembled uncured (green) tires are sprayed with a lubricant.

7.5.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 5	Farm Spray Booths #1 – #4 Passenger Spray Booths #1, #5, #6	None None

7.5.3 Applicability Provisions and Applicable Regulations

a. An "affected spray booth" is an emission unit described in Conditions 7.5.1 and 7.5.2 above.

b. Each affected spray booth is subject to 35 IAC 212.321(b)(1), 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 subsection (c) of 35 IAC 212.321 (See also Attachment 1) [35 IAC 212.321(a)].

c. An affected spray booth (Passenger Spray Booth #1) involved into green tire spraying operation performed on the tires that have a bead diameter less than or equal to 0.5 meter (19.7 inches) and a cross section dimension less than or equal to 0.325 m (12.8 inches) and constructed, modified, or reconstructed after January 20, 1983 is subject to the following requirements of 40 CFR Part 60, Subpart BBB:

40 CFR 60.542(a)(5):

For each green tire spraying operation where only water-based sprays are used:

i. Discharge into the atmosphere no more than 1.2 grams of VOC per tire sprayed with an inside green tire spray for each month; and

ii. Discharge into the atmosphere no more than 9.3 grams of VOC per tire sprayed with an outside green tire spray for each month.

d. An affected spray booth (Farm Spray Booth #1) involved into green tire spraying operation performed on the tires that have a bead diameter less than or equal to 0.5 meter (19.7 inches) and a cross section dimension less than or equal to 0.325 m (12.8 inches) and constructed, modified, or reconstructed after January 20, 1983 is subject to the following requirements of 40 CFR Part 60, Subpart BBB:

40 CFR 60.542(a)(7):

For each green tire spraying operation where both water-based and organic solvent-based sprays are used:

i. Water-based sprays:

A. Discharge into the atmosphere no more than 1.2 grams of VOC per tire sprayed with a water-based inside green tire spray for each month; and

B. Discharge into the atmosphere no more than 9.3 grams of VOC per tire sprayed with a water-based outside green tire spray for each month; and.

ii. Solvent-based sprays:

Maintain total (uncontrolled) VOC use less than or equal to the levels specified below, depending upon duration of the compliance period:

A. 3,220 kilograms of VOC per 28 days;

B. 3,340 kilograms of VOC per 29 days;

C. 3,450 kilograms of VOC per 30 days;

D. 3,570 kilograms of VOC per 31 days; or

ER. 4,030 kilograms of VOC per 35 days.

e. In lieu of complying with 35 IAC 215.462, the owner or operator of an emission source may utilize an alternative volatile organic emission reduction system, including an alternative production process, which is demonstrated to be equivalent to 35 IAC 215.462 on the basis of emissions of volatile organic matter [35 IAC 215.463]. The Permittee complies with this requirement by application of water-based or solvent-based sprays with identical limitation as described in Conditions 7.5.3(c) and (d) above.

7.5.4 Non-Applicability of Regulations of Concern

a. Each affected spray booth (other than identified in Condition 7.5.3(c) or (d)) involved into green tire spraying operation performed on the tires that have a bead diameter more than 0.5 meter (19.7 inches) or constructed/modified prior to January 20, 1983 is not subject to requirements and emission standards of 40 CFR Part 60, Subpart BBB “Standards of Performance for the Rubber Tire Manufacturing Industry”, pursuant to definition of “tire” in 40 CFR 60.541(a) and criteria of applicability in 40 CFR 60.540(a).

b. Each affected spray booth involved into green tire spraying operation performed on the tires that have a bead diameter exceeding 19.7 inches and cross section dimension exceeding 12.8 inches is not subject to the emission standards of 35 IAC 215.462, pursuant to definition of “pneumatic rubber tire manufacture” in 35 IAC 211.4790.

c. Affected spray booth (Passenger Spray Booth #1 and Farm Spray Booth #1) are not subject to 35 IAC 215.462, pursuant to 35 IAC 215.463 and Condition 7.5.3(e) of this permit.

d. This permit is issued based on the affected spray booths not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM), because the affected tire stock and bead preparation machines do not use an add-on control devices to achieve compliance with an emission limitation or standard.

7.5.5 Operating Requirements and Work Practices

Farm spray booth #1 is allowed to process (spray) all dimensional types of tires.

7.5.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5.1, the affected spray booth is subject to the following:

Farm Spray Booth #1:

a. Total tire production shall not exceed 21,900 tires per month and 219,000 tires per year.

b. Emissions shall not exceed the following limits:

VOM		PM	
(ton/mo)	(ton/yr)	(ton/mo)	(ton/yr)
3.83	30.65	0.28	3.3

The above limitations were established in the permit 00010072, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

7.5.7 Testing Requirements

a. Pursuant to 40 CFR 60.543(b)(1), the owner or operator, who applies solvent-based sprays and complies with monthly uncontrolled VOC use (kg/mo) limit, shall conduct a performance test each month according to the procedures established below in this Condition.

b. For each green tire spraying operation where organic solvent-based sprays are used where the owner or operator seeks to comply with the uncontrolled monthly VOC use limits, the owner or operator shall use the following procedure (established under 40 CFR 60.543(c)) to determine compliance with the applicable (depending upon duration of compliance period) uncontrolled monthly VOC use limit specified under 40 CFR 60.542(a)(6)(ii) and (a)(7)(iv):

i. Determine the density and weight fraction VOC (including dilution VOC) of each cement or

green tire spray from its formulation or by analysis of the cement or green tire spray using Method 24. If a dispute arises, the Administrator may require an owner or operator who used formulation data to analyze the cement or green tire spray using Method 24.

ii. Calculate the total mass of VOC used at the affected facility for the month (M_o) by the following procedure:

A. For each affected facility for which cement or green tire spray is delivered in batch or via a distribution system that serves only the affected facility:

$$M_o = \sum_{i=1}^{a} L_{C_i} D_{C_i} W_{O_i}$$

Where:

a = The number of different cements or green tire sprays used during the month that are delivered in batch or via a distribution system that serves only a single affected facility

B. For each affected facility for which cement or green tire spray is delivered via a common distribution system that also serves other affected or existing facilities:

1. Calculate the total mass of VOC used for all of the facilities served by the common distribution system for the month (M}:

$$M = \sum_{i=1}^{b} L_{C_i} D_{C_i} W_{O_i}$$

Where:

b - The number of different cements or green tire sprays used during the month that are delivered via a common distribution system that also

serves other affected or existing facilities

2. Determine the fraction (F_o) of M used at the affected facility by comparing the production records and process specifications for the material cemented or sprayed at the affected facility for the month to the production records and process specifications for the material cemented or sprayed at all other facilities served by the common distribution system for the month or by another procedure acceptable to the Administrator

3. Calculate the total monthly mass of VOC used at the affected facility for the month (M_o):

$$M_o = MF_o$$

iii. Determine the time duration of the monthly compliance period (T_d).

c. Monthly performance tests (for Passenger Spray Booth #1 and Farm Spray Booth #1) shall be conducted as follows pursuant to 40 CFR 60.543(d):

i. For each green tire spraying operation where water-based sprays containing 1.0 percent, by weight, of VOC or more are used (inside and/or outside) that do not use a VOC emission reduction system, the owner or operator shall use the following procedure to determine compliance with the g/tire limit specified under 40 CFR 60.542(a)(5)(i) and (a)(5)(ii).

A. Determine the density and weight fraction VOC as specified under 40 CFR 60.543(c)(1).

B. Calculate the total mass of VOC used at the affected facility for the month (M_o) as specified under 40 CFR 60.543(c)(2).

C. Determine the total number of tires sprayed at the affected facility for the month (T_o) by the following procedure:

1. For a green tire spraying operation that uses water-based inside green tire sprays, T_o equals the number of green tires that receive an application of water-based inside green tire spray for the month.

2. For a green tire spraying operation that uses water-based outside green tire sprays, T_o equals the number of green tires that receive an application of water-based inside green tire spray for the month.

D. Calculate the mass of VOC used per tire sprayed at the affected facility for the month (G):

$$G = \frac{M_o}{T_o}$$

E. Calculate the mass of VOC emitted per tire sprayed at the affected facility for the month (N):

$$N = G$$

d. The owner or operator of each green tire spraying operation using only water-based sprays (inside and/or outside) containing less than 1.0 percent, by weight, of VOC is not required to conduct a monthly performance test as described in 40 CFR 60.543(d). In lieu of conducting a monthly performance test, the owner or operator of each green tire spraying operation shall submit formulation data or the results of Method 24 analysis annually to verify the VOC content of each green tire spray material, provided the spraying formulation has not changed during the previous 12 months. If the spray material formulation changes, formulation data or Method 24 analysis of the new spray shall be conducted to determine the VOC content of the spray and reported within 30 days as required under 40 CFR 60.546(j). [40 CFR 60.543(b)(4)]

e. In determining compliance for each green tire spraying operation, the owner or operator shall include only those tires defined under 40 CFR 60.541(a) when determining B_o [40 CFR 60.543(m)].

f. Description of applicable test methods is given in 40 CFR 60.547.

7.5.8 Monitoring Requirements

None

7.5.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected spray booths to demonstrate compliance with Condition 5.5.1 and Section 7 of this permit, pursuant to Section 39.5(7)(b) of the Act:

a. Each owner or operator of a green tire spraying operation subject to 40 CFR 60, Subpart BBB and using water-based sprays containing less than 1.0 percent by weight of VOC, as specified under 40 CFR 60.543(b)(4), shall maintain records of formulation data or the results of Method 24 analysis conducted to verify the VOC content of the spray [40 CFR 60.545(f)];

b. Each owner or operator of a green tires spraying operation where organic solvent-based sprays are used who seeks to comply with a specified VOC monthly usage limit shall maintain records of monthly VOC use and the number of days in each compliance period [40 CFR 60.545(d)];

c. Separate solvent usage for NSPS and non-NSPS units (gal/month and gal/year);

d. VOM content of each solvent applied (lb/gal);

e. Density of each solvent (lb/gal);

f. Number of tires processed (separately for NSPS and non-NSPS units), tires/month and tires/year;

g. Monthly and annual emissions of VOM generated by emission units identified in Condition 7.5.6 and calculated based on the procedures established in Condition 7.5.12;

h. Total monthly and annual emissions of VOM from all affected spraying lines calculated based on the procedures established in Condition 7.5.12; and

i. All records of the monthly performance tests shall be maintained, as specified under 40 CFR 60.543(b)(1).

7.5.10 Reporting Requirements

a. Once every 6 months each owner or operator subject to the provisions of 40 CFR 60.545 shall report each monthly average VOC emission rate that exceeds the g/tire limit specified under 40 CFR 60.542(a)(5). [40 CFR 60.546(f)(1)]

b. Once every 6 months each owner or operator subject to the provisions of 40 CFR 60.545 shall report each monthly average VOC use rate that exceeds the kg/mo VOC use limit specified under 40 CFR 60.542(a)(6)(ii). [40 CFR 60.546(f)(2)]

c. The owner or operator of each green tire spraying operation (inside and/or outside) using water-based sprays containing less than 1.0 percent, by weight, of VOC shall furnish the Illinois EPA, within 60 days initially and annually thereafter, formulation data or Method 24 results to verify the VOC content of the water-based sprays in use. If the spray formulation changes before the end of the 12-month period, formulation data or Method 24 results to verify the VOC content of the spray shall be reported within 30 days. [40 CFR 60.546(j)]

d. The Permittee shall promptly notify the Illinois EPA, Compliance Section, of noncompliance of affected spray booths with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

If there is an exceedance of the emission limitations of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.5.12 Compliance Procedures

a. Compliance with the PM emission limits established by 35 IAC 212.321 is assured and achieved by the proper operation and maintenance, as required by this section and the work-practices inherent in operation of the affected spray booths.

b. To determine compliance with Conditions 5.5.1 and 7.5.6 (b), VOM emissions from the affected spray booths shall be calculated based on the formula listed below:

VOM (ton) = Gallons of Solvent Used (gal) x VOM Content (lb/gal) x (1 ton/2,000 lb)

c. Compliance with emission limits in Condition 7.5.3(c) and (d) shall be demonstrated through the procedures established in Condition 7.5.7.

7.6 Unit 6: Curing Presses

7.6.1 Description

The assembled green tires are dried and cured in presses.

7.6.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 6	Curing Presses: *Passenger* C 61-90; D 91-120; E 149-150; H 207-234; J 235-244; J 245-260; K 263-272; K 273-288 *Farm* A 1-6; A 7-10; B 1-5; B 6-9; C 1-6; C 7-12; C13; D 1-6; D7-11; D12; E1-12; E13; F1-10; F11; G1; G2-12; G13; H1-4; H5-H10; H11; H12-H13	None None

7.6.3 Applicability Provisions and Applicable Regulations

a. An “affected curing press” is an emission unit described in Conditions 7.6.1 and 7.6.2 above.

b. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit unless no odor nuisance exists and non-photochemically reactive materials are used [35 IAC 215.301].

7.6.4 Non-Applicability of Regulations of Concern

a. Each affected curing press is not subject to requirements and emission standards of 40 CFR Part 60, Subpart BBB “Standards of Performance for the Rubber Tire Manufacturing Industry” because no cementing or green tire spraying operations performed by affected curing presses.

b. Each affected curing press is not subject to requirements and emission standards of 35 IAC 215.461 and 215.462 because no cementing or green tire spraying operations performed by affected curing presses.

c. This permit is issued based on the affected curing press not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM), because the affected curing press does not use an add-on control device to achieve compliance with an emission limitation or standard.

7.6.5 Operating Requirements and Work Practices

None

7.6 6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5.1, the affected curing presses are subject to the following:

Emissions of VOM attributable to use of organo-silane coupling agents in the affected Banbury mixers (units from Section 7.2) and curing presses shall not exceed the following limits:

VOM Emissions	
(Tons/Month)	(Tons/Year)
30.0	280.0

The above limitations were established in the PSD permit 01040070, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit complies with BACT requirements specified the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. [T1]

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

7.6.7 Testing Requirements

See Condition 7.2.7

7.6.8 Monitoring Requirements

None

7.6.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items

for the affected curing presses to demonstrate compliance with Condition 5.5.1 and Section 7 of this permit, pursuant to Section 39.5(7)(b) of the Act:

a. VOM emission factor for the combined operation of the affected Banbury mixers and affected curing presses expressed as lb VOM per lb of silane coupler processed, with supporting calculations.

b. Total emissions of VOM for all affected Banbury mixers and curing presses, as calculated based on the procedures established in Condition 7.6.12.

7.6.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of noncompliance of affected spraying lines with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

If there is an exceedance of the emission limitations of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.6.12 Compliance Procedures

b. To determine compliance with Conditions 7.6.6, VOM emissions from the affected Banbury mixers and affected curing presses shall be calculated based on an appropriate emission factor for generation of VOM. Unless otherwise approved by the Illinois EPA, this factor shall represent maximum theoretical generation of VOM from the reaction of the most volatilizing organo-silane coupler with the rubber matrix.

For the proposed coupling agents, this yields a factor of:

E_{BMCE} = 0.194 x lbs of silane coupler used

Where the emission factor of 0.194 lb/VOM for each lb of silane coupler developed in conjunction with studies performed by the Rubber Manufacturing Association.

7.7 Unit 7: Tire Finishing Areas

7.7.1 Description

The grinding operation removes excess rubber from the tires as required to maintain the desired shape.

7.7.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 7	White Sidewall Grinders (2 Units) Force Grinders (3 Units)	Cyclone Dust Collector Cyclone Dust Collector

7.7.3 Applicability Provisions and Applicable Regulations

a. An “affected tire finishing area” is an emission unit described in Conditions 7.7.1 and 7.7.2 above.

b. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit unless no odor nuisance exists and non-photochemically reactive materials are used. [35 IAC 215.301]

7.7.4 Non-Applicability of Regulations of Concern

a. Each affected tire finishing area is not involved into cementing and green tire spraying operation and therefore is not subject to requirements and emission standards of 40 CFR Part 60, Subpart BBB.

b. Each affected tire finishing area is not involved into cementing green tire spraying operation and therefore is not subject to emission standards of 35 IAC 215.461 and 215.462.

c. This permit is issued based on the affected tire finishing areas not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM), because each affected tire finishing area does not have potential pre-control device emissions of PM that equals or exceeds major source threshold levels.

d. Grinding operations are exempt from applicability of 35 IAC 212.321 and 212.322 pursuant to 35 IAC 212.681.

7.7.5 Operating Requirements and Work Practices

a. The Permittee shall follow good operating practices for the dust collectors, including periodic inspection, routine maintenance and repair of defects.

b. The Permittee shall operate, maintain, and replace the fabric filters in a manner that assures compliance with the conditions of this Section.

7.7.6 Emission Limitations

None

7.7.7 Testing Requirements

None

7.7.8 Monitoring Requirements

None

7.7.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected tire finishing areas to demonstrate compliance with Condition 5.5.1 and Section 7 of this permit, pursuant to Section 39.5(7)(b) of the Act:

a. Number of tires processed, tires/month and tires/year; and

b. Total monthly and annual emissions of PM_{10} calculated based on the procedures established in Condition 7.7.12.

7.7.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of noncompliance of affected tire finishing area with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

If there is an exceedance of the emission limitations of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The

report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

7.7.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.7.12 Compliance Procedures

a. Compliance with VOM emission limit of Condition 7.7.3(b) is assured and achieved by the proper operation and maintenance, as required by this section and the work-practices inherent in operation of the affected tire finishing area.

b. To determine compliance with condition 5.5.1, PM_{10} emissions from the affected tire finishing area shall be calculated based on the following formula:

PM_{10} Emissions = (Air flow, cfm) x (Estimated Dust Loading, gr/scf) x (1 lb/7,000 gr) x (60 minutes/hr) x [100 – (Efficiency, %)/100]

7.8 Unit 8: Boilers

7.8.1 Description

Natural gas-fired boilers used to produce heat and steam for the source needs.

7.8.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Equipment	Description/Date of Construction	Emission Control Equipment
Unit 8	Boilers	Two Boilers With a Maximum Heat Input Capacity Equal to 74.6 mmBtu/hr Each	None

7.8.3 Applicability Provisions and Applicable Regulations

a. An "affected boiler" for the purpose of these unit specific conditions is a natural gas-fired boiler used for processing heat and steam for source operational needs.

b. No person shall cause or allow the emission of carbon monoxide into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected 50 percent excess air [35 IAC 216.121].

7.8.4 Non-Applicability of Regulations of Concern

a. Each affected boiler is not subject to 35 IAC 217.141, Emissions of Nitrogen Oxides From Existing Fuel Combustion Emission Sources in Major Metropolitan Areas, because the actual heat input of each boiler is less than 73.2 MW (250 mmBtu/hr).

b. Pursuant to 35 IAC 215.303, any fuel combustion emission unit is not subject to 35 IAC Part 215, Subpart G: Use of Organic Material.

c. This permit is issued based on the affected boiler not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM), because the affected boiler does not use an add-on control device to achieve compliance with an emission limitation or standard.

d. Neither of the affected boilers is subject to 40 CFR Part 60, Subpart Dc “Standards of Performance for Small Industrial-Commercial-Institutional Steam

Generating Units” and Subpart Db “Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units” because all these boilers had been constructed prior to June 9, 1989 and June 19, 1984, respectively.

7.8.5 Operational and Production Limits and Work Practices

Each affected boiler shall only be operated with natural gas as the fuel.

7.8.6 Emission Limitations

None

7.8.7 Testing Requirements

None

7.8.8 Monitoring Requirements

None

7.8.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected boilers to demonstrate compliance with conditions of this permit, pursuant to Section 39.5(7)(b) of the Act:

a. Total natural gas usage (mmscf/mo and mmscf/yr); and

b. Monthly and annual emissions of regulated air pollutants as calculated in accordance with compliance procedures in Condition 7.8.12.

7.8.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with the emission limitations as follows pursuant to Section 39.5(7)(f)(ii) of the Act:

If there is an exceedance of the emission limitations In Condition 5.5.1, as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

7.8.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.8.12 Compliance Procedures

a. Compliance with Condition 7.7.3(b) is assumed to be achieved by the work-practices inherent in the operation of affected boiler, so that no compliance procedures are set in this permit addressing this regulation.

b. Compliance with the emission limits established in Condition 5.5.1 of this permit shall be based on the recordkeeping requirements of Condition 7.8.9 and the emission factors and formulas listed below:

Natural Gas Mode

Pollutant	Emission Factor ($lb/10^6 ft^3$)
PM	7.6
NO_x	100.0
SO_2	0.6
VOM	5.5
CO	84.0

These are the emission factors for uncontrolled natural gas combustion in small boilers (< 100 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, March 1998.

Emissions (lb) = Natural Gas Consumed Multiplied by the Appropriate Emission Factor.

7.9 Unit 9: Turbines

7.9.1 Description

Three natural gas fired turbines are used at the facility. They operate on a continuous basis for electric power generation for facility needs.

7.9.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 9	Three Stationary Solar Turbines (Heat Input Capacity - 55.3 mmBtu/hr Each)	None

7.9.3 Applicability Provisions and Applicable Regulations

a. An "affected turbine" for the purpose of these unit specific conditions, is the emission unit described in Conditions 7.9.1 and 7.9.2.

b. The emission of VOM into the atmosphere shall not exceed 3.6 kg/hour (8 lb/hour) from an affected engine or turbine, except as provided in 35 IAC 215.302, 215.303, or 215.304 and the following exemption: If no odor nuisance exists the limitation of 35 IAC 215 Subpart K shall only apply to photochemically reactive material [35 IAC 215.301].

c. i. 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 35 IAC 212.122.

ii. The emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minutes period, provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such emission unit shall be limited to 3 times in

any 24 hours [35 IAC 212.123].

d. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm. [35 IAC 214.301]

e. The affected turbines are subject to the following emission standards for sulfur dioxide and nitrogen oxide established in 40 CFR Part 60, Subpart GG "Standards of Performance for Stationary Gas Turbines":

i. SO_2

No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis [40 CFR 60.333(a)].

ii. NO_x

Pursuant to 40 CFR 60.332(a)(2) and 60.332(c), no owner or operator of an affected gas turbine with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour) but less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired shall cause to be discharged into the atmosphere from such gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.015\frac{(14.4)}{Y} + F$$

Where:

STD = Allowable NO_x emissions (percent by volume at 15 percent oxygen and on a dry basis).

Y = Manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the

facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = NO_x emission allowance for fuel-bound nitrogen calculated from the nitrogen content of the fuel as follows:

Fuel-Bound Nitrogen (Percent by Weight)	F (NO_x Percent by Volume)
$N \leq 0.015$	0
$0.015 < N \leq 0.1$	0.04 (N)
$0.1 < N \leq 0.25$	0.04 + 0.0067(N - 0.1)
$N > 0.25$	0.005

Where:

N = The nitrogen content of the fuel (percent by weight).

7.9.4 Non-Applicability of Regulations of Concern

a. The affected turbines are not subject to the following requirements:

i. The affected engines/turbines are not subject to 35 Ill. Adm. Code 216.121, emissions of carbon monoxide from fuel combustion emission units, because the affected turbines are not by definition fuel combustion emission units.

ii. The affected turbines are not subject to 35 Ill. Adm. Code 217.121, emissions of nitrogen oxides from new fuel combustion emission sources, because the actual heat input of each unit is less than 73.2 MW (250 mmBtu/hr) and the affected turbines are not by definition fuel combustion emission units.

iii. This permit is issued based on the affected turbines not being subject to 35 Ill. Adm. Code 212.321 because due to the unique nature of this processes, such rules cannot reasonably be applied.

b. This permit is issued based on the affected turbines not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM), because the affected turbines do not use an add-on control device to achieve compliance with an emission limitation or standard.

7.9.5 Operating Requirements and Work Practices

a. Each affected turbine shall only be operated with natural gas as the fuel.

b. Total annual fuel consumption shall not exceed 1.48 x 10^9 scf.

7.9.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5.1, all affected turbines are limited to the following emission limits:

PM_{10} Emissions (Tons/Yr)	CO Emissions (Tons/Yr)	VOM Emissions (Tons/Yr)	NO_x Emissions (Tons/Yr)
17.45	89.48	17.75	73.21

The above limitations were established in Permit 95010051, pursuant to 40 CFR 52.21. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 40 CFR 52.21[T1].

7.9.7 Testing Requirements

a. For gas turbines, the owner or operator shall determine compliance with the sulfur content standard in 40 CFR 60.333(b) by using ASTM D 1072-80,D 3031-81,D 4084-82, or D 3246-81, pursuant to 40 CFR 60.335(d).

b. To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Administrator to determine the nitrogen content of the fuel being fired

c. The owner or operator shall determine compliance with the nitrogen oxides and sulfur dioxide standards in 40 CFR 60.332 and 60.333(a) as follows:

The nitrogen oxides emission rate (NO_x) shall be computed for each run using the following equation:

$$NO_x = (NO_{xo})\ (P_r/P_o)^{0.5} e^{19(Ho-0.00633)}\ (288°K/T_a)^{1.53}$$

Where:

NO_x = Emission rate of NO_x at 15 percent O2 and ISO standard ambient conditions, ppm by volume

NO_x = Observed NO_x concentration, ppm by volume at 15 percent O_2

P_r = Reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg

P_o = Observed combustor inlet absolute pressure at test, mm Hg

H_o = Observed humidity of ambient air, g H_2O/g air.

e = Transcendental constant, 2.718

T_a = Ambient temperature, °K

7.9.8 Monitoring Requirements

The owner or operator of any stationary gas turbine subject to the provisions of this subpart shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:

If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Illinois EPA before they can be used to comply with 40 CFR 60.334(b).

7.9.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected engines/turbines to demonstrate compliance with conditions of this permit, pursuant to Section 39.5(7)(b) of the Act:

a. The operating parameters of the engines/turbines, as related by emissions;

b. Natural gas consumption (scf/month and scf/yr);

c. Nitrogen content and sulfur content of the fuel based on the quarterly data and provisions described in Condition 7.9.8;

d. Monthly and annual emissions of regulated air pollutants as calculated in accordance with compliance procedures in Condition 7.9.12.

7.9.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected engines with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

If there is an exceedance of the emission limitations In Conditions 7.9.3 and 7.9.6, as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

7.9.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.9.12 Compliance Procedures

a. Compliance with Condition 7.9.3(b), (c), and (d) is assumed to be achieved by work-practices inherent in operation of affected engines/generators, so that no compliance procedures are set in the permit addressing this regulation.

b. Compliance with the emission limits in Conditions 5.5.1 and 7.9.6 shall be based on the following emission factors:

Compliance with the emission limits shall be determined using representative emission factors developed from site-specific emission testing (PM-10, NO_x, CO) and USEPA emission factors (VOM). For this purpose, the following emission factors shall apply unless and until superseded by more recent data:

0.0022 lb/mmBtu for PM-10, 0.0223 lb/mmBtu for CO, 0.024 lb/mmBtu for VOM and 0.0723 lb/mmBtu for NO_x.

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after October 3, 2002 (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

8.3 Emissions Trading Programs

As of the date of issuance of this permit, there are no such economic incentive, marketable permit or emission trading programs that have been approved by USEPA.

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes without applying for or obtaining an amendment to this permit, provided that the changes do not constitute a modification under Title I of the CAA, emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change, and the Permittee provides written

notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change [Section 39.5(12)(a) of the Act]. This notice shall:

a. Describe the physical or operational change;

b. Identify the schedule for implementing the physical or operational change;

c. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;

d. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and

e. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

A report summarizing required monitoring as specified in the conditions of this permit shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

Monitoring Period	Report Due Date
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

a. The name and identification of the affected unit(s);

b. The person(s) who will be performing sampling and analysis and their experience with similar tests;

c. 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 source and any control equipment will be determined;

d. The specific determination of emissions and operation which are intended to be made, including sampling and monitoring locations;

e. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods;

f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and

g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

a. The name and identification of the affected unit(s);

b. The date and time of the sampling or measurements;

c. The date any analyses were performed;

d. The name of the company that performed the tests and/or analyses;

e. The test and analytical methodologies used;

f. The results of the tests including raw data, and/or analyses including sample calculations;

g. The operating conditions at the time of the sampling or measurements; and

h. The name of any relevant observers present including the testing company’s representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:

i. Illinois EPA - Air Compliance Section

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (MC 40)
P.O. Box 19276
Springfield, Illinois 62794-9276

ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
5415 North University
Peoria, Illinois 61614

iii. Illinois EPA - Air Permit Section

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506

iv. USEPA Region 5 - Air Branch

USEPA (AE - 17J)
Air & Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604

b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

8.7 Obligation to Comply with Title I Requirements

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 (“Title I provisions”) and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].

9.1.2 In particular, this permit does not alter or affect the following:

a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;

b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and

d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless such malfunction or breakdown is allowed by a permit condition [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(p)(ii) of the Act]:

a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

d. Sample or monitor any substances or parameters at any location:

i. At reasonable times, for the purposes of assuring permit compliance; or

ii. As otherwise authorized by the CAA, or the Act.

e. Obtain and remove samples of any discharge or emission of pollutants; and

f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source.

9.4 Obligation to Comply with Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

9.5 Liability

9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

9.5.2 Liability of Permittee

This permit 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 sources.

9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

9.5.4 Illinois EPA Liability

This permit 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 source.

9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

9.6.3 Retention of Records

a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].

b. Other records required by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Compliance Section no later than May 1 of the following year, as required by 35 IAC Part 254.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Section, Air Regional Field Office, and USEPA Region 5 – Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.

c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the 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 this permit [Section 39.5(7)(o)(ii) of the Act].

9.10.2 Emergency Provision

a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the

following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:

i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency. Normally, an act of God such as lightning or flood is considered an emergency;

ii. The permitted source was at the time being properly operated;

iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.

b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing

of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;

b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;

c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and

d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under Section 39.5(15)(b) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(l), (n), and (o) of the Act].

10.0 ATTACHMENTS

10.1 Attachment 1 - Changes in VOM Emission from Affected Banbury Mixers and Curing Presses With pursuant to the PSD Permit 01040070

Changes in VOM Emission from Affected Banbury Mixers and Curing Presses With Use of Organo-Silane Coupling Agents (Tons/Year)

Equipment	Past Actual Emissions[1]	Emissions Increase[2]	Maximum Anticipated Future Emissions[3]
Banbury Mixers	7.9	70.0	77.9
Curing Presses	6.5	210.0	216.5
Totals:	14.4	280.0	294.4

Notes:

[1] Actual emissions are the emissions from 2001 based on actual levels of operation and appropriate emission factors for these operations. This does not address other operation at the plant.

[2] Maximum emissions from use of organo-silane coupling agents, as addressed by this permit. Emissions are assumed to be split 25% and 75% between mixing and curing.

[3] This assumes all tires from the plant would be produced with rubber containing organo-silane coupling.

10.2 Attachment 2 - Allowable Emissions of Particulate Matter

10.2.1 Process Emission Units for Which Construction or Modification Commenced On or After April 14, 1972

a. 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 subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].

b. The emissions of particulate matter into the atmosphere in any one-hour period from the affected coating lines shall not exceed the allowable emission rates specified in the following equation:

$$E = A(P)^B$$

Where:

P = Process weight rate;
E = Allowable emission rate; and,

i. For process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rates in excess of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

Limits for Process Emission Units for which Construction or Modification Commenced On or After April 14, 1972 [35 IAC 212.321(c)]:

Metric		English	
P Mg/hr	E kg/hr	P T/hr	E lb/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.2	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.0	3.9	10.00	8.70
13.0	4.8	15.00	10.80
18.0	5.7	20.00	12.50
23.0	6.5	25.00	14.00
27.0	7.1	30.00	15.60
32.0	7.7	35.00	17.00
36.0	8.2	40.00	18.20
41.0	8.8	45.00	19.20
45.0	9.3	50.00	20.50
90.0	13.4	100.00	29.50
140.0	17.0	150.00	37.00
180.0	19.4	200.00	43.00
230.0	22.0	250.00	48.50
270.0	24.0	300.00	53.00
320.0	26.0	350.00	58.00
360.0	28.0	400.00	62.00
408.0	30.1	450.00	66.00
454.0	30.4	500.00	67.00

10.2.2 Process Emission Units for Which Construction or Modification Commenced Prior to April 14, 1972

a. 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 prior to April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 [35 IAC 212.322(a)].

b. The emissions of particulate matter into the atmosphere in any one hour period from the affected unit shall not exceed the allowable emission rates

specified in the following equation:

$$E = C + A(P)^B$$

Where:

P = Process weight rate;
E = Allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rates in excess of 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	- 18.4	- 40.0

c. Limits for Process Emission Units for which Construction or Modification Commenced Prior to April 14, 1972 [35 IAC 212.322(c)]:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lb/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.0	8.7	10.00	19.20
13.0	11.1	15.00	25.20
18.0	13.8	20.00	30.50
23.0	16.2	25.00	35.40
27.2	18.5	30.00	40.00

32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

10.3 Attachment 3 - Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

10.4 Attachment 4 - Guidance on Revising This Permit

The Permittee must submit an application to the Illinois EPA using the appropriate revision classification in accordance with Sections 39.5(13) and (14) of the Act and 35 IAC 270.302. Specifically, there are currently three classifications for revisions to a CAAPP permit. These are:

1. Administrative Permit Amendment;

2. Minor Permit Modification; and

3. Significant Permit Modification.

The Permittee must determine, request, and submit the necessary information to allow the Illinois EPA to use the appropriate procedure to revise the CAAPP permit. A brief explanation of each of these classifications follows.

1. Administrative Permit Amendment

- Corrects typographical errors;
- Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
- Requires more frequent monitoring or reporting by the Permittee;
- Allows for a change in ownership or operational control of the source where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittees has been submitted to the Illinois EPA. This shall be handled by completing form 272-CAAPP, REQUEST FOR OWNERSHIP CHANGE FOR CAAPP PERMIT; or
- Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits.

2. Minor Permit Modification

- Do not violate any applicable requirement;

- Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;

- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:

    - A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the CAA; and

    - An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA.

- Are not modifications under any provision of Title I of the CAA;

- Are not required to be processed as a significant permit modification; and

- Modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches.

An application for a minor permit modification shall include the following:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;

- The source’s suggested draft permit/conditions;

- Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and

- Information as contained on form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT for the Illinois EPA to use to notify USEPA and affected States.

3. Significant Permit Modification

- Applications that do not qualify as either minor permit modifications or as administrative permit amendments;

- Applications requesting a significant change in existing monitoring permit terms or conditions;

- Applications requesting a relaxation of reporting or recordkeeping requirements; and

- Cases in which, in the judgment of the Illinois EPA, action on an application for modification would require decisions to be made on technically complex issues.

An application for a significant permit modification shall include the following:

- A detailed description of the proposed change(s), including all physical changes to equipment, changes in the method of operation, changes in emissions of each pollutant, and any new applicable requirements which will apply as a result of the proposed change. Note that the Permittee need only submit revised forms for equipment and operations that will be modified.

The Illinois EPA requires the information on the following appropriate forms to be submitted in accordance with the proper classification:

- Form 273-CAAPP, REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT; or

- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or

- Form 200-CAAPP, APPLICATION FOR CAAPP PERMIT (for significant modification).

Application forms can be obtained from the Illinois EPA website at http://www.epa.state.il.us/air/forms.

Note that the request to revise the permit must be certified for truth, accuracy, and completeness by a responsible official.

Note that failure to submit the required information may require the Illinois EPA to deny the application. The Illinois EPA reserves the right to require that additional information be submitted as needed to evaluate or take final action on

applications pursuant to Section 39.5(5)(g) of the Act and 35 IAC 270.305.

Illinois Environmental Protection Agency
Division Of Air Pollution Control -- Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506

Application For Construction Permit (For CAAPP Sources Only)	**For Illinois EPA use only**
	I.D. number:
	Permit number:
	Date received:

This form is to be used by CAAPP sources to supply information necessary to obtain a construction permit. Please attach other necessary information and completed CAAPP forms regarding this construction/modification project.

Source Information

1.	Source name:		
2.	Source street address:		
3.	City:		4. Zip code:
5.	Is the source located within city limits?		☐ Yes ☐ No
6.	Township name:	7. County:	8. I.D. number:

Owner Information

9.	Name:		
10.	Address:		
11.	City:	12. State:	13. Zip code:

Operator Information (if different from owner)

14.	Name		
15.	Address:		
16.	City:	17. State:	18. Zip code:

Applicant Information

19.	Who is the applicant? ☐ Owner ☐ Operator	20.	All correspondence to: (check one) ☐ Owner ☐ Operator ☐ Source
21.	Attention name and/or title for written correspondence:		
22.	Technical contact person for application:	23.	Contact person's telephone number:

This Illinois EPA is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

10.5 Attachment 5 Form 199-CAAPP, Application For Construction Permit (For CAAPP Sources Only)

Illinois Environmental Protection Agency
Division Of Air Pollution Control -- Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506

This Illinois EPA is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

Summary Of Application Contents

24.	Does the application address whether the proposed project would constitute a new major source or major modification under each of the following programs: a) Non-attainment New Source Review – 35 IAC Part 203; b) Prevention of Significant Deterioration (PSD) – 40 CFR 52.21; c) Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources – 40 CFR Part 63?	☐ Yes ☐ No
25.	Does the application identify and address all applicable emissions standards, including those found in the following: a) Board Emission Standards – 35 IAC Chapter I, Subtitle B; b) Federal New Source Performance Standards – 40 CFR Part 60; c) Federal Standards for Hazardous Air Pollutants – 40 CFR Parts 61 and 63?	☐ Yes ☐ No
26.	Does the application include a process flow diagram(s) showing all emission units and control equipment, and their relationship, for which a permit is being sought?	☐ Yes ☐ No
27.	Does the application include a complete process description for the emission units and control equipment for which a permit is being sought?	☐ Yes ☐ No
28.	Does the application include the information as contained in completed CAAPP forms for all appropriate emission units and air pollution control equipment, listing all applicable requirements and proposed exemptions from otherwise applicable requirements, and identifying and describing any outstanding legal actions by either the USEPA or the Illinois EPA? Note: The use of "APC" application forms is not appropriate for applications for CAAPP sources. CAAPP forms should be used to supply information.	☐ Yes ☐ No
29.	If the application contains TRADE SECRET information, has such information been properly marked and claimed, and have two separate copies of the application suitable for public inspection and notice been submitted, in accordance with applicable rules and regulations?	☐ Yes ☐ No ☐ Not Applicable, No TRADE SECRET information in this application

Note 1: Answering "No" to any of the above may result in the application being deemed incomplete.

Signature Block

This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.

30. I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete.
Authorized Signature:

BY:

_____ AUTHORIZED SIGNATURE

_____ TITLE OF SIGNATORY

_____ TYPED OR PRINTED NAME OF SIGNATORY

_____ / _____ / _____ DATE

Note 2: An operating permit for the construction/modification permitted in a construction permit must be obtained by applying for the appropriate revision to the source's CAAPP permit, if necessary.

10.6 Attachment 6 - Guidance on Renewing This Permit

Timeliness - Pursuant to Section 39.5(5)(n) of the Act and 35 IAC 270.301(d), a source must submit to the Illinois EPA a complete CAAPP application for the renewal of a CAAPP permit not later than 9 months before the date of permit expiration of the existing CAAPP permit in order for the submittal to be deemed timely. Note that the Illinois EPA typically sends out renewal notices approximately 18 months prior to the expiration of the CAAPP permit.

The CAAPP application must provide all of the following information in order for the renewal CAAPP application to be deemed complete by the Illinois EPA:

1. A completed renewal application form 200-CAAPP, APPLICATION FOR CAAPP PERMIT.

2. A completed compliance plan form 293-CAAPP, COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE FOR CAAPP PERMIT.

3. A completed compliance certification form 296-CAAPP, COMPLIANCE CERTIFICATION, signed by the responsible official.

4. Any applicable requirements that became effective during the term of the permit and that were not included in the permit as a reopening or permit revision.

5. If this is the first time this permit is being renewed and this source has not yet addressed CAM, the application should contain the information on form 464-CAAPP, COMPLIANCE ASSURANCE MONITORING (CAM) PLAN.

6. Information addressing any outstanding transfer agreement pursuant to the ERMS.

7. a. If operations of an emission unit or group of emission units remain unchanged and are accurately depicted in previous submittals, the application may contain a letter signed by a responsible official that requests incorporation by reference of existing information previously submitted and on file with the Illinois EPA. This letter must also include a statement that information incorporated by reference is also being certified for truth and accuracy by the responsible official's signing of the form 200-CAAPP, APPLICATION FOR CAAPP PERMIT and the form 296-CAAPP, COMPLIANCE CERTIFICATION. The boxes should be marked yes on form 200-CAAPP, APPLICATION FOR CAAPP PERMIT,

as existing information is being incorporated by reference.

b. If portions of current operations are not as described in previous submittals, then in addition to the information above for operations that remain unchanged, the application must contain the necessary information on all changes, e.g., discussion of changes, new or revised CAAPP forms, and a revised fee form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT, if necessary.

8. Information about all off-permit changes that were not prohibited or addressed by the permit to occur without a permit revision and the information must be sufficient to identify all applicable requirements, including monitoring, recordkeeping, and reporting requirements, for such changes.

9. Information about all changes made under 40 CFR 70.4(b)(12)(i) and (ii) that require a 7-day notification prior to the change without requiring a permit revision.

The Illinois EPA will review all applications for completeness and timeliness. If the renewal application is deemed both timely and complete, the source shall continue to operate in accordance with the terms and conditions of its CAAPP permit until final action is taken on the renewal application.

Notwithstanding the completeness determination, the Illinois EPA may request additional information necessary to evaluate or take final action on the CAAPP renewal application. If such additional information affects your allowable emission limits, a revised form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT must be submitted with the requested information. The failure to submit to the Illinois EPA the requested information within the time frame specified by the Illinois EPA, may force the Illinois EPA to deny your CAAPP renewal application pursuant to Section 39.5 of the Act.

Application forms may be obtained from the Illinois EPA website at http://www.epa.state.il.us/air/forms.html.

If you have any questions regarding this matter, please contact a permit analyst at 217/782-2113.

Mail renewal applications to:

Illinois Environmental Protection Agency

Division of Air Pollution Control
Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506