



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
MC 61-53
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant
DATE: January 29, 2008
RE: Firestone Industrial Products Company / 057-21499-00006
FROM: Matthew Stuckey, Deputy Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER.dot12/03/07



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Thomas W. Easterly
Commissioner

100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(317) 232-8603
(800) 451-6027
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Federally Enforceable State Operating Permit OFFICE OF AIR QUALITY

**Firestone Industrial Products Company
1700 Firestone Blvd.
Noblesville, Indiana 46060**

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

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. 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. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

Operation Permit No.: F 057-21499-00006	
Issued by/Original Signed By: Matthew Stuckey, Deputy Branch Chief Permits Branch Office of Air Quality	Issuance Date: January 29, 2008 Expiration Date: January 29, 2018

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SECTION A SOURCE SUMMARY

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

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary rubber product manufacturing.

Source Address:	1700 Firestone Blvd., Noblesville, Indiana 46060
Mailing Address:	1700 Firestone Blvd., Noblesville, Indiana 46060
General Source Phone Number:	(317) 773-0650
SIC Code:	3069
County Location:	Hamilton
Source Location Status:	Nonattainment for PM 2.5 standard Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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

- (a) One (1) natural gas boiler, identified as emission unit 001A, exhausting to stack BS-1A, constructed in 1998, using No. 2 fuel oil as backup fuel, rated at 31.38 million British thermal units per hour.
- (b) One (1) natural gas boiler, identified as emission unit 002, exhausting to stack BS-2 constructed in 1942, using No. 2 fuel oil as backup fuel, rated at 20 million British thermal units per hour.
- (c) One (1) rubber compounding operation, identified as emission unit 003, consisting of weighing and conveying raw materials, equipped with a baghouse and exhausting to M-15, constructed in the 1980s, capacity: 1,530 pounds of rubber per hour, 770 pounds of carbon black per hour, and 200 pounds of pigments per hour.
- (d) One (1) Werner-Pfleiderer mixing line, identified as emission unit 004, constructed in 1988, with one (1) mixer exhausting to baghouse J16, one (1) drop mix mill exhausting to baghouse K16 and one (1) slab mill, identified as emission unit 122, exhausting to baghouse K16, capacity: 2,500 pounds of compounded rubber per hour.
- (e) One (1) Banbury mixing line, identified as emission unit 005, constructed in 1937, with one (1) mixer exhausting to baghouse H16, one (1) uncontrolled drop mix mill and one (1) slab mill, identified as emission unit 123, exhausting to baghouse K16, capacity: 2,500 pounds of compounded rubber per hour.
- (f) One (1) manual cement dip operation consisting of three (3) tanks, identified as emission unit 010, constructed in 1980, for applying adhesive to metal parts, exhausting to three (3) stacks, all identified as S-31, maximum capacity: 5000 metal parts per hour, each.

- (g) Four (4) small spray booths, identified as emission units 012 through 015, exhausting to R- 24A, R-24B, R-25, and S-24 respectively, constructed in 1980, for applying adhesive to metal parts, equipped with air atomizer spray guns and dry filters for overspray control, maximum capacity: 1000 metal parts per hour, each.
- (h) One (1) product manufacturing operation which consists of the following:
 - (1) Fifty-three (53) curing presses, constructed between 1956 to 2001, identified as emission units 030 through 082, total capacity: 1,600 pounds of compounded rubber per hour.
 - (2) One (1) Werner Pfleiderer vertical press, constructed in 1982, identified as emission unit 083, total capacity: 1,600 pounds of compounded rubber per hour.
 - (3) One (1) Werner Pfleiderer horizontal press, constructed in 1982, identified as emission unit 084, total capacity: 1,600 pounds of compounded rubber per hour.
 - (4) Two (2) bag presses, constructed in 1977, identified as emission units 125 and 126, total capacity: 1,600 pounds of compounded rubber per hour.
 - (5) Nine (9) vulcanizers, constructed between 1935 to 2005, identified as emission units 086 through 091 and emission units 098 through 100, estimated total capacity: 900 pounds of compounded rubber per hour.
 - (6) Building, crimping and assembling operations, constructed between 1956 to 1997, estimated capacity: 1,000 pounds of metals and molded rubber parts per hour,
 - (7) 400 pound of calendered gum stock per hour, constructed in 1956; and
 - (8) 440 pounds of calendered fabric per hour, constructed in 1967.
- (i) One (1) swabbing operation, identified as emission unit 085, exhausting to P-1, constructed prior to 1980, capacity: 11,680 gallons of solvent and cement per year.
- (j) IDEM has determined that the remediation activities located at the source are not part of this source, and will not be included in this permit.

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities:

- (a) Four (4) parts washer units, identified as emission units 025, 026, 028 and 029. [326 IAC 8-3-2] [326 IAC 8-3-5]
- (b) Two (2) calendering processes, equipped with two (2) calendering lines identified as emission units 110 and 111, constructed in 1971 and 1957, respectively, capacity: 2,700 pounds of compounded rubber per hour, total. Also including four (4) calender warmup mills, identified as emission units 101 through 104, capacity: 5,400 pounds of compounded rubber per hour, total. [326 IAC 6-3-2]
- (c) One (1) extrusion process equipped with five (5) extruder warmup mills, identified as emission units 105 through 109, capacity: 1,800 pounds of compounded rubber per hour, total; and three (3) feed extruders, identified as emission units 112 through 114, capacity: 900 pounds of compounded rubber per hour. [326 IAC 6-3-2]
- (d) One (1) wheelabrator operation, identified as emission unit 20, controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.01 grains per actual cubic foot and a gas flow rate less than or equal to 4500 cubic feet per minute, including the following: deburring, buffing, polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- (e) Degreasing operations that do not exceed 145 gallons per twelve (12) months, except if subject to 326 IAC 20-6.

- (f) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to one percent (1%) by volume.
- (g) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (h) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]
- (i) On-site fire and emergency response training approved by the department.
- (j) Other emergency equipment as follows: stationary fire pumps.
- (k) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilo Pascals measured at 38°C).
- (l) A laboratory as defined in 326 IAC 2-7-1(21)(D).
- (m) One (1) No. 2 fuel oil storage tank, identified as emission unit 115, with a capacity of 25,000 gallons.
- (n) Two (2) process oil storage tanks identified as emission units 118 and 119, with a capacity of 15,000 gallons and 7,360 gallons respectively.
- (o) Research and Development activities as defined in 326 IAC 2-7-1(21)(E).

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

-
- (a) This permit, F 057-21499-00006, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

-
- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ 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. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.9 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.10 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.11 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.12 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to F 057-21499-00006 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

B.14 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
- (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:
- (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d) without a prior permit revision, if each of the following conditions is met:
- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
 - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and
 - (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b) through (d). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).
- (b) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.20 Source Modification Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.24 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) The potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period. This limitation shall make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue

MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

Testing Requirements [326 IAC 2-8-4(3)]

C.8 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

C.10 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

C.13 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.15 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.16 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue

MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

C.17 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (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.

SECTION D.1 FACILITY OPERATION CONDITIONS

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

- (a) One (1) natural gas boiler, identified as emission unit 002, exhausting to stack BS-2 constructed in 1942, using No. 2 fuel oil as backup fuel, rated at 20 million British thermal units per hour.
- (b) One (1) natural gas boiler, identified as emission unit 001A, exhausting to stack BS-1A, constructed in 1998, using No. 2 fuel oil as backup fuel, rated at 31.38 million British thermal units per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitation and Standards

D.1.1 Fuel Usage Limit [326 IAC 2-8-4]

Pursuant to this 326 IAC 2-8-4(1), the following conditions shall apply:

- (a) The total input of No. 2 fuel oil and No. 2 fuel oil equivalents to Boilers 002 and 001A, shall be limited to less than 2,875,000 U.S. gallons per twelve (12) consecutive month period with compliance determined at the end of each month. This usage will limit the potential to emit sulfur dioxide (SO₂) from the boilers to less than 98.9 tons per 12 consecutive month period.
- (b) Sulfur content of No. 2 distillate fuel oil shall not exceed 0.5% by weight.
- (c) For purposes of determining compliance with paragraph (a) of this condition, the following shall apply:

Each one (1) million cubic feet (MMCF) of natural gas burned shall be equivalent to 118.34 gallons of No. 2 oil, based on SO₂ emissions, such that the total gallons of No. 2 distillate fuel oil and No. 2 oil equivalent input does not exceed the limit specified.

Compliance with above conditions shall limit the source-wide SO₂ emissions to less than 100 tons per twelve (12) consecutive month period with compliance determined at the end of each month, respectively. Therefore, the requirements of 326 IAC 2-7 (Part 70) do not apply.

D.1.2 Particulate Matter Limitation (PM) [326 IAC 6-2-2]

Pursuant to 326 IAC 6-2-2 (Particulate Matter Emission Limitations for Sources of Indirect Heating), the PM emissions from the 20 million British thermal unit per hour heat input boiler shall be limited to 0.54 pound per million British thermal unit heat input.

The emission limitation is based on the following equation given in 326 IAC 6-2-2:

$$Pt = 0.87/Q^{0.16}$$

Where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

D.1.3 Particulate Matter Limitation (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating), the PM emissions from the 31.38 million British thermal unit per hour heat input boiler shall be limited to 0.39 pound per million British thermal unit heat input.

The emission limitations are based on the following equation is given in 326 IAC 6-2-4:

$$Pt = 1.09/Q^{0.16}$$

Where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

D.1.4 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-1] [326 IAC 7-2-1]

Pursuant to 326 IAC 7-1.1 (SO₂ Emissions Limitations) the SO₂ emissions from the Boilers 001A, and 002, rated at 31.38, and 20 MMBtu/hr, respectively, shall not exceed five-tenths (0.5) pounds per MMBtu heat input or a sulfur content of less than or equal to 0.5 percent when using distillate oil. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a thirty (30) day rolling weighted average.

Compliance Determination Requirements

D.1.5 Sulfur Dioxide Emissions and Sulfur Content

Compliance shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million British thermal units heat input by:
 - (1) Providing vendor analysis of No. 2 fuel oil delivered, if accompanied by a certification;
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or

- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the boiler, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

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

Compliance Monitoring Requirements

D.1.6 Visible Emissions Notations

- (a) Visible emission notations of each boiler's stack (BS-1A and BS-2) exhaust shall be performed once per day during normal daylight operations when combusting fuel oil. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

Record Keeping and Reporting Requirements

D.1.7 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1 and D.1.4, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the SO₂ emission limit and fuel usage limit established in Conditions D.1.1 and D.1.4.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
 - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period, the natural gas fired boiler certification does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34); and If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:
 - (4) Fuel supplier certifications;
 - (5) The name of the fuel supplier; and
 - (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

- (b) To document compliance with Condition D.1.6, the Permittee shall maintain a daily record of visible emission notations of the boiler exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (i.e. the process did not operate that day)
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.8 Reporting Requirements

- (a) The natural gas boiler certification shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or its equivalent, within thirty (30) days after the end of the six (6) month period being reported. The natural gas-fired boiler certification does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1.
- (b) A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "Authorized Individual" as defined by 326 IAC 2-1.1-1.

New Source Performance Standards (NSPS) [326 IAC 2-7-5(1)]

D.1.9 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

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

D.1.10 Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units [40 CFR Part 60, Subpart Dc]

Pursuant to 40 CFR Part 60, Subpart Dc, the Permittee shall comply with the provisions of the New Source Performance Standards for Small Industrial-Commercial- Institutional Steam Generating Units, as specified as follows.

§ 60.40c Applicability and delegation of authority.

(a) Except as provided in paragraph (d) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million Btu per hour (Btu/hr)) or less, but greater than or equal to 2.9 MW (10 million Btu/hr).

(b) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, § 60.48c(a)(4) shall be retained by the Administrator and not transferred to a State.

(c) Steam generating units which meet the applicability requirements in paragraph (a) of this section are not subject to the sulfur dioxide (SO₂) or particulate matter (PM) emission limits, performance testing requirements, or monitoring requirements under this subpart (§§ 60.42c, 60.43c, 60.44c, 60.45c, 60.46c, or 60.47c) during periods of combustion research, as defined in § 60.41c.

§ 60.41c Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from an individual fuel or combination of fuels during a period of 12 consecutive calendar months and the potential heat input to the steam generating unit from all fuels had the steam generating unit been operated for 8,760 hours during that 12-month period at the maximum design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility during a period of 12 consecutive calendar months.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388-77, 90, 91, 95, or 98a, Standard Specification for Classification of Coals by Rank (IBR--see Sec. 60.17), coal refuse, and petroleum coke. Coal-derived synthetic fuels derived from coal for the purposes of creating useful heat, including but not limited to solvent refined coal, gasified coal, coal-oil mixtures, and coal-water mixtures, are also included in this definition for the purposes of this subpart.

Coal refuse means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (kJ/kg) (6,000 Btu per pound (Btu/lb) on a dry basis.

Cogeneration steam generating unit means a steam generating unit that simultaneously produces both electrical (or mechanical) and thermal energy from the same primary energy source.

Combined cycle system means a system in which a separate source (such as a stationary gas turbine, internal combustion engine, or kiln) provides exhaust gas to a steam generating unit.

Combustion research means the experimental firing of any fuel or combination of fuels in a steam generating unit for the purpose of conducting research and development of more efficient combustion or more effective prevention or control of air pollutant emissions from combustion, provided that, during these periods of research and development, the heat generated is not used for any purpose other than preheating combustion air for use by that steam generating unit (i.e., the heat generated is released to the atmosphere without being used for space heating, process heating, driving pumps, preheating combustion air for other units, generating electricity, or any other purpose).

Conventional technology means wet flue gas desulfurization technology, dry flue gas desulfurization technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-78, 89, 90, 92, 96, or 98, "Standard Specification for Fuel Oils" (incorporated by reference -- see § 60.17).

Dry flue gas desulfurization technology means a sulfur dioxide (SO₂) control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline reagents used in dry flue gas desulfurization systems include, but are not limited to, lime and sodium compounds.

Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source (such as a stationary gas turbine, internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

Emerging technology means any SO₂ control system that is not defined as a conventional technology under this section, and for which the owner or operator of the affected facility has received approval from the Administrator to operate as an emerging technology under § 60.48c(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR Parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 40 CFR 51.24.

Fluidized bed combustion technology means a device wherein fuel is distributed onto a bed (or series of beds) of limestone aggregate (or other sorbent materials) for combustion; and these materials are forced upward in the device by the flow of combustion air and the gaseous products of combustion. Fluidized bed combustion technology includes, but is not limited to, bubbling bed units and circulating bed units. Fuel pretreatment means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources (such as stationary gas turbines, internal combustion engines, and kilns).

Heat transfer medium means any material that is used to transfer heat from one point to another point.

Maximum design heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel (or combination of fuels) on a steady state basis as determined by the physical design and characteristics of the steam generating unit.

Natural gas means (1) a naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane, or (2) liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835-86, 87, 91, or 97, "Standard Specification for Liquefied Petroleum Gases" (incorporated by reference -- see § 60.17).

Noncontinental area means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Oil means crude oil or petroleum, or a liquid fuel derived from crude oil or petroleum, including distillate oil and residual oil.

Potential sulfur dioxide emission rate means the theoretical SO₂ emissions (nanograms per joule [ng/J], or pounds per million Btu [lb/million Btu] heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.

Process heater means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

Residual oil means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society for Testing and Materials in ASTM D396-78, 89, 90, 92, 96, or 98, "Standard Specification for Fuel Oils" (incorporated by reference -- see § 60.17).

Steam generating unit means a device that combusts any fuel and produces steam or heats water or any other heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Wet flue gas desulfurization technology means an SO₂ control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a liquid material. This definition includes devices where the liquid material is subsequently converted to another form. Alkaline reagents used in wet flue gas desulfurization systems include, but are not limited to, lime, limestone, and sodium compounds.

Wet scrubber system means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of particulate matter (PM) or SO₂.

Wood means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

§ 60.42c Standard for sulfur dioxide.

(d) On and after the date on which the initial performance test is completed or required to be completed under § 60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 215 ng/J (0.50 lb/million Btu) heat input; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

(e) On and after the date on which the initial performance test is completed or required to be completed under § 60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, or coal and oil with any other fuel shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of the following:

(2) The emission limit determined according to the following formula for any affected facility that combusts coal, oil, or coal and oil with any other fuel:

$$E_s = (K_a H_a + K_b H_b + K_c H_c) / (H_a + H_b + H_c)$$

where:

E_s is the SO₂ emission limit, expressed in ng/J or lb/million Btu heat input,

K_a is 520 ng/J (1.2 lb/million Btu),

K_b is 260 ng/J (0.60 lb/million Btu),

K_c is 215 ng/J (0.50 lb/million Btu),

H_a is the heat input from the combustion of coal, except coal combusted in an affected facility subject to paragraph (b)(2) of this section, in Joules (J) [million Btu]

H_b is the heat input from the combustion of coal in an affected facility subject to paragraph (b)(2) of this section, in J (million Btu)

H_c is the heat input from the combustion of oil, in J (million Btu).

(f) Reduction in the potential SO₂ emission rate through fuel pretreatment is not credited toward the percent reduction requirement under paragraph (b)(2) of this section unless:

(1) Fuel pretreatment results in a 50 percent (0.50) or greater reduction in the potential SO₂ emission rate; and

(2) Emissions from the pretreated fuel (without either combustion or post-combustion SO₂ control) are equal to or less than the emission limits specified under paragraph (b)(2) of this section.

(g) Except as provided in paragraph (h) of this section, compliance with the percent reduction requirements, fuel oil sulfur limits, and emission limits of this section shall be determined on a 30-day rolling average basis.

(h) For affected facilities listed under paragraphs (h)(1), (2), or (3) of this section, compliance with the emission limits or fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier, as described under § 60.48c(f)(1), (2), or (3), as applicable.

(1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 million Btu/hr).

(i) The SO₂ emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.

(j) Only the heat input supplied to the affected facility from the combustion of coal and oil is counted under this section. No credit is provided for the heat input to the affected facility from wood or other fuels or for heat derived from exhaust gases from other sources, such as stationary gas turbines, internal combustion engines, and kilns.

§ 60.43c Standard for particulate matter.

(c) On and after the date on which the initial performance test is completed or required to be completed under § 60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts coal, wood, or oil and has a heat input capacity of 8.7 MW (30 million Btu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

(d) The PM and opacity standards under this section apply at all times, except during periods of startup, shutdown, or malfunction.

§ 60.44c Compliance and performance test methods and procedures for sulfur dioxide.

(a) Except as provided in paragraphs (g) and (h) of this section and in § 60.8(b), performance tests required under § 60.8 shall be conducted following the procedures specified in paragraphs (b), (c), (d), (e), and (f) of this section, as applicable. Section 60.8(f) does not apply to this section. The 30-day notice required in § 60.8(d) applies only to the initial performance test unless otherwise specified by the Administrator.

(b) The initial performance test required under § 60.8 shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the percent reduction requirements and SO₂ emission limits under § 60.42c shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affect facility will be operated, but not later than 180 days after the initial startup of the facility. The steam generating unit load during the 30-day period does not have to be the maximum design heat input capacity, but must be representative of future operating conditions.

(c) After the initial performance test required under paragraph (b) and § 60.8, compliance with the percent reduction requirements and SO₂ emission limits under § 60.42c is based on the average percent reduction and the average SO₂ emission rates for 30 consecutive steam generating unit operating days. A separate performance test is completed at the end of each steam generating unit operating day, and a new 30-day average percent reduction and SO₂ emission rate are calculated to show compliance with the standard.

(e) If coal, oil, or coal and oil are combusted with other fuels:

(1) An adjusted E_{ho} (E_{ho}^0) is used in Equation 19-19 of Method 19 to compute the adjusted E_{ao} (E_{ao}^0). The E_{ho}^0 is computed using the following formula:

$$E_{ho}^0 = [E_{ho} - E_w(1 - X_k)] / X_k$$

where:

E_{ho}^0 is the adjusted E_{ho} , ng/J (lb/million Btu).

E_{ho} is the hourly sulfur dioxide emission rate, ng/J (lb/million Btu).

E_w is the SO_2 concentration in fuels other than coal and oil combusted in the affected facility, as determined by the fuel sampling and analysis procedures in Method 9, ng/J (lb/million Btu). The value E_w for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure E_w if the owner or operator elects to assume $E_w = 0$.

X_k is the fraction of total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19.

(2) The owner or operator of an affected facility that qualifies under the provisions of § 60.42c(c) or (d) [where percent reduction is not required] does not have to measure the parameters E_w or X_k if the owner or operator of the affected facility elects to measure emission rates of the coal or oil using the fuel sampling and analysis procedures under Method 19.

(f) Affected facilities subject to the percent reduction requirements under § 60.42c(a) or (b) shall determine compliance with the SO_2 emission limits under § 60.42c pursuant to paragraphs (d) or (e) of this section, and shall determine compliance with the percent reduction requirements using the following procedures:

(2) If coal, oil, or coal and oil are combusted with other fuels, the same procedures required in paragraph (f)(1) of this section are used, except as provided for in the following:

(i) To compute the % P_s , an adjusted % R_g (% R_g^0) is computed from E_{ao}^0 from paragraph (e)(1) of this section and an adjusted average SO_2 inlet rate (E_{ai}^0) using the following formula:

$$\%R_g^0 = 100 [1.0 - E_{ao}^0 / E_{ai}^0]$$

where:

% R_g^0 is the adjusted % R_g , in percent

E_{ao}^0 is the adjusted E_{ao} , ng/J (lb/million Btu)

E_{ai}^0 is the adjusted average SO_2 inlet rate, ng/J (lb/million Btu)

(ii) To compute E_{ai}^0 , an adjusted hourly SO_2 inlet rate (E_{hi}^0) is used. The E_{hi}^0 is computed using the following formula:

$$E_{hi}^0 = [E_{hi} - E_w(1 - X_k)] / X_k$$

where:

E_{hi}^0 is the adjusted hourly E_{hi} , ng/J (lb/million Btu).

E_{hi} is the hourly sulfur dioxide inlet rate, ng/J (lb/million Btu).

E_w is the sulfur dioxide concentration in fuels other than coal and oil combusted in the affected facility, as determined by the fuel sampling and analysis procedures in Method 19, ng/J (lb/million Btu). The value E_w for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure E_w if the owner or operator elects to assume $E_w = 0$.

X_k is the fraction of total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19.

(g) For oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under § 60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under § 60.46c(d)(2).

(h) For affected facilities subject to § 60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO₂ standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under § 60.48c(f)(1), (2), or (3), as applicable.

(j) The owner or operator of an affected facility shall use all valid SO₂ emissions data in calculating %P_s and E_{ho} under paragraphs (d), (e), or (f) of this section, as applicable, whether or not the minimum emissions data requirements under § 60.46c(f) are achieved. All valid emissions data, including valid data collected during periods of startup, shutdown, and malfunction, shall be used in calculating %Ps or E_{ho} pursuant to paragraphs (d), (e), or (f) of this section, as applicable.

§ 60.45c Compliance and performance test methods and procedures for particulate matter.

(a) The owner or operator of an affected facility subject to the PM and/or opacity standards under Sec. 60.43c shall conduct an initial performance test as required under Sec. 60.8, and shall conduct subsequent performance tests as requested by the Administrator, to determine compliance with the standards using the following procedures and reference methods, except as specified in paragraph (c) and (d) of this section.

(1) Method 1 shall be used to select the sampling site and the number of traverse sampling points.

(2) Method 3 shall be used for gas analysis when applying Method 5, Method 5B, or Method 17.

(3) Method 5, Method 5B, or Method 17 shall be used to measure the concentration of PM as follows:

(i) Method 5 may be used only at affected facilities without wet scrubber systems.

(ii) Method 17 may be used at affected facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of Sections 8.1 and 11.1 of Method 5B may be used in Method 17 only if Method 17 is used in conjunction with a wet scrubber system. Method 17 shall not be used in conjunction with a wet scrubber system if the effluent is saturated or laden with water droplets.

(iii) Method 5B may be used in conjunction with a wet scrubber system.

(4) The sampling time for each run shall be at least 120 minutes and the minimum sampling volume shall be 1.7 dry standard cubic meters (dscm) [60 dry standard cubic feet (dscf)] except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.

(5) For Method 5 or Method 5B, the temperature of the sample gas in the probe and filter holder shall be monitored and maintained at 160±14 °C (320±25 °F).

(6) For determination of PM emissions, an oxygen or carbon dioxide measurement shall be obtained simultaneously with each run of Method 5, Method 5B, or Method 17 by traversing the duct at the same sampling location.

(7) For each run using Method 5, Method 5B, or Method 17, the emission rates expressed in ng/J (lb/million Btu) heat input shall be determined using:

- (i) The oxygen or carbon dioxide measurements and PM measurements obtained under this section,
- (ii) The dry basis F-factor, and
- (iii) The dry basis emission rate calculation procedure contained in Method 19 (appendix A).

(8) Method 9 (6-minute average of 24 observations) shall be used for determining the opacity of stack emissions.

(c) Units that burn only oil containing no more than 0.5 weight percent sulfur or liquid or gaseous fuels with potential sulfur dioxide emission rates of 230 ng/J (0.54 lb/MMBtu) heat input or less are not required to conduct emissions monitoring if they maintain fuel supplier certifications of the sulfur content of the fuels burned.

(d) In place of particulate matter testing with EPA Reference Method 5, 5B, or 17, an owner or operator may elect to install, calibrate, maintain, and operate a continuous emission monitoring system for monitoring particulate matter emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility who elects to continuously monitor particulate matter emissions instead of conducting performance testing using EPA Method 5, 5B, or 17 shall install, calibrate, maintain, and operate a continuous emission monitoring system and shall comply with the requirements specified in paragraphs (d)(1) through (d)(13) of this section.

(1) Notify the Administrator 1 month before starting use of the system.

(2) Notify the Administrator 1 month before stopping use of the system.

(3) The monitor shall be installed, evaluated, and operated in accordance with Sec. 60.13 of subpart A of this part.

(4) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under Sec. 60.8 of subpart A of this part or within 180 days of notification to the Administrator of use of the continuous monitoring system if the owner or operator was previously determining compliance by Method 5, 5B, or 17 performance tests, whichever is later.

(5) The owner or operator of an affected facility shall conduct an initial performance test for particulate matter emissions as required under Sec. 60.8 of subpart A of this part. Compliance with the particulate matter emission limit shall be determined by using the continuous emission monitoring system specified in paragraph (d) of this section to measure particulate matter and calculating a 24-hour block arithmetic average emission concentration using EPA Reference Method 19, section 4.1.

(6) Compliance with the particulate matter emission limit shall be determined based on the 24-hour daily (block) average of the hourly arithmetic average emission concentrations using continuous emission monitoring system outlet data.

(7) At a minimum, valid continuous monitoring system hourly averages shall be obtained as specified in paragraph (d)(7)(i) of this section for 75 percent of the total operating hours per 30-day rolling average.

(i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.

(ii) [Reserved]

(8) The 1-hour arithmetic averages required under paragraph (d)(7) of this section shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the boiler operating day daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under Sec. 60.13(e)(2) of subpart A of this part.

(9) All valid continuous emission monitoring system data shall be used in calculating average emission concentrations even if the minimum continuous emission monitoring system data requirements of paragraph (d)(7) of this section are not met.

(10) The continuous emission monitoring system shall be operated according to Performance Specification 11 in appendix B of this part.

(11) During the correlation testing runs of the continuous emission monitoring system required by Performance Specification 11 in appendix B of this part, particulate matter and oxygen (or carbon dioxide) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraph (d)(7)(i) of this section.

(i) For particulate matter, EPA Reference Method 5, 5B, or 17 shall be used.

(ii) For oxygen (or carbon dioxide), EPA reference Method 3, 3A, or 3B, as applicable shall be used.

(12) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 2 in appendix F of this part. Relative Response Audit's must be performed annually and Response Correlation Audits must be performed every 3 years.

(13) When particulate matter emissions data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the Administrator or EPA Reference Method 19 to provide, as necessary, valid emissions data for a minimum of 75 percent of total operating hours on a 30-day rolling average.

§ 60.46c Emission monitoring for sulfur dioxide

(a) Except as provided in paragraphs (d) and (e) of this section, the owner or operator of an affected facility subject to the SO₂ emission limits under § 60.42c shall install, calibrate, maintain, and operate a CEMS for measuring SO₂ concentrations and either oxygen or carbon dioxide concentrations at the outlet of the SO₂ control device (or the outlet of the steam generating unit if no SO₂ control device is used), and shall record the output of the system. The owner or operator of an affected facility subject to the percent reduction requirements under § 60.42c shall measure SO₂ concentrations and either oxygen or carbon dioxide concentrations at both the inlet and outlet of the SO₂ control device.

(b) The 1-hour average SO₂ emission rates measured by a CEMS shall be expressed in ng/J or lb/million Btu heat input and shall be used to calculate the average emission rates under § 60.42c. Each 1-hour average SO₂ emission rate must be based on at least 30 minutes of operation and include at least 2 data points representing two 15-minute periods. Hourly SO₂ emission rates are not calculated if the affected facility is operated less than 30 minutes in a 1-hour period and are not counted toward determination of a steam generating unit operating day.

(c) The procedures under § 60.13 shall be followed for installation, evaluation, and operation of the CEMS.

(1) All CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 (appendix B).

(2) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 (appendix F).

(3) For affected facilities subject to the percent reduction requirements under § 60.42c, the span value of the SO₂ CEMS at the inlet to the SO₂ control device shall be 125 percent of the maximum estimated hourly potential SO₂ emission rate of the fuel combusted, and the span value of the SO₂ CEMS at the outlet from the SO₂ control device shall be 50 percent of the maximum estimated hourly potential SO₂ emission rate of the fuel combusted.

(4) For affected facilities that are not subject to the percent reduction requirements of § 60.42c, the span value of the SO₂ CEMS at the outlet from the SO₂ control device (or outlet of the steam generating unit if no SO₂ control device is used) shall be 125 percent of the maximum estimated hourly potential SO₂ emission rate of the fuel combusted.

(d) As an alternative to operating a CEMS at the inlet to the SO₂ control device (or outlet of the steam generating unit if no SO₂ control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO₂ emission rate by sampling the fuel prior to combustion. As an alternative to operating a CEMS at the outlet from the SO₂ control device (or outlet of the steam generating unit if no SO₂ control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO₂ emission rate by using Method 6B. Fuel sampling shall be conducted pursuant to either paragraph (d)(1) or (d)(2) of this section. Method 6B shall be conducted pursuant to paragraph (d)(3) of this section.

(1) For affected facilities combusting coal or oil, coal or oil samples shall be collected daily in an as-fired condition at the inlet to the steam generating unit and analyzed for sulfur content and heat content according to Method 19. Method 19 provides procedures for converting these measurements into the format to be used in calculating the average SO₂ input rate.

(2) As an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

(3) Method 6B may be used in lieu of CEMS to measure SO₂ at the inlet or outlet of the SO₂ control system. An initial stratification test is required to verify the adequacy of the Method 6B sampling location. The stratification test shall consist of three paired runs of a suitable SO₂ and carbon dioxide measurement train operated at the candidate location and a second similar train operated according to the procedures in § 3.2 and the applicable procedures in section 7 of Performance Specification 2 (appendix B). Method 6B, Method 6A, or a combination of Methods 6 and 3 or Methods 6C and 3A are suitable measurement techniques. If Method 6B is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both sampling trains are to be operated similarly. For the location to be adequate for Method 6B 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent (0.10).

(e) The monitoring requirements of paragraphs (a) and (d) of this section shall not apply to affected facilities subject to § 60.42c(h)(1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO₂ standards based on fuel supplier certification, as described under § 60.48c(f) (1), (2), or (3), as applicable.

(f) The owner or operator of an affected facility operating a CEMS pursuant to paragraph (a) of this section, or conducting as-fired fuel sampling pursuant to paragraph (d)(1) of this section, shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive steam generating unit operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the Administrator.

§ 60.47c Emission monitoring for particulate matter.

(a) The owner or operator of an affected facility combusting coal, oil, gas, or wood that is subject to the opacity standards under Sec. 60.43c shall install, calibrate, maintain, and operate a COMS for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system, except as specified in paragraphs (c) and (d) of this section.

(b) All COMS for measuring opacity shall be operated in accordance with the applicable procedures under Performance Specification 1 (appendix B). The span value of the opacity COMS shall be between 60 and 80 percent.

(c) Units that burn only oil that contains no more than 0.5 weight percent sulfur or liquid or gaseous fuels with potential sulfur dioxide emission rates of 230 ng/J (0.54 lb/MMBtu) heat input or less are not required to conduct PM emissions monitoring if they maintain fuel supplier certifications of the sulfur content of the fuels burned.

(d) Owners or operators complying with the PM emission limit by using a PM CEMS monitor instead of monitoring opacity must calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for PM emissions discharged to the atmosphere as specified in Sec. 60.45c(d). The continuous monitoring systems specified in paragraph Sec. 60.45c(d) shall be operated and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

§ 60.48c Reporting and recordkeeping requirements.

(a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by § 60.7 of this part. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

(2) If applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under § 60.42c, or § 60.43c.

(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

(4) Notification if an emerging technology will be used for controlling SO₂ emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of § 60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.

(b) The owner or operator of each affected facility subject to the SO₂ emission limits of § 60.42c, or the PM or opacity limits of § 60.43c, shall submit to the Administrator the performance test data from the initial and any subsequent performance tests and, if applicable, the performance evaluation of the CEMS and/or COMS using the applicable performance specifications in appendix B.

(d) The owner or operator of each affected facility subject to the SO₂ emission limits, fuel oil sulfur limits, or percent reduction requirements under § 60.42c shall submit reports to the Administrator.

(e) The owner or operator of each affected facility subject to the SO₂ emission limits, fuel oil sulfur limits, or percent reduction requirements under § 60.43c shall keep records and submit reports as required under paragraph (d) of this section, including the following information, as applicable.

(1) Calendar dates covered in the reporting period.

(2) Each 30-day average SO₂ emission rate (ng/J or lb/million Btu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.

(3) Each 30-day average percent of potential SO₂ emission rate calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.

(4) Identification of any steam generating unit operating days for which SO₂ or diluent (oxygen or carbon dioxide) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.

(5) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.

(6) Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

(7) Identification of whether averages have been obtained based on CEMS rather than manual sampling methods.

(8) If a CEMS is used, identification of any times when the pollutant concentration exceeded the full span of the CEMS.

(9) If a CEMS is used, description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specifications 2 or 3 (appendix B).

(10) If a CEMS is used, results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1.

(11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1), (2), or (3) of this section, as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

(f) Fuel supplier certification shall include the following information:

(1) For distillate oil:

(i) The name of the oil supplier; and

(ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in § 60.41c.

(g) The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day. The owner or operator of an affected facility that only burns very low sulfur fuel oil or other liquid or gaseous fuels with potential sulfur dioxide emissions rate of 140 ng/J (0.32 lb/MMBtu) heat input or less shall record and maintain records of the fuels combusted during each calendar month.

(h) The owner or operator of each affected facility subject to a Federally enforceable requirement limiting the annual capacity factor for any fuel or mixture of fuels under § 60.42c or § 60.43c shall calculate the annual capacity factor individually for each fuel combusted. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of the calendar month.

(i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

(j) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of each reporting period.

SECTION D.2 FACILITY OPERATION CONDITIONS

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

(d) One (1) Werner-Pfleiderer mixing line, identified as emission unit 004, constructed in 1988, with one (1) mixer exhausting to baghouse J16, one (1) drop mix mill exhausting to baghouse K16 and one (1) slab mill exhausting to baghouse K16, estimated capacity: 2,500 pounds of compounded rubber per hour.

(e) One (1) Banbury mixing line, identified as emission unit 005, constructed in 1937, with one (1) mixer exhausting to baghouse H16, one (1) uncontrolled drop mix mill and one (1) slab mill exhausting to baghouse K16, estimated capacity: 2,500 pounds of compounded rubber per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

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

D.2.1 FESOP Limit [326 IAC 2-8-4]

The VOC emission rate from each mixing line (identified as 004 and 005) shall not exceed 0.44 pounds per ton of compounded rubber.

Compliance with the above emission limit in combination with Condition D.4.1 and the potential VOC and HAPs emissions from all the other emission units at the facility including insignificant activities shall limit the sourcewide VOC emissions to less than 100 tons per twelve (12) consecutive month period. Compliance with above conditions will render the requirements of 326 IAC 2-7 (Part 70) not applicable.

D.2.2 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e) (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the following facilities shall not exceed the limits as stated when operating at the respective process weight rates:

Emission Unit	Process Rate (tons/hr)	Allowable PM Emissions Pursuant to 326 IAC 6-3-2 (lb/hr)
Mixer at Werner-Pfleiderer mixing line	2500	4.76
Drop Mix Mill at Werner-Pfleiderer mixing line	2500	4.76
Mixer at Banbury mixing line	2500	4.76
Drop Mix Mill at Banbury mixing line	2500	4.76
Rubber Compounding Operation	3600	6.07

The pounds per hour limitations were calculated with the following equation:

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

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

Compliance Determination Requirements

D.2.3 Particulate Matter (PM)

- (a) The baghouse, J16, connected to the one (1) mixer shall be in operation at all times the mixer at the Werner-Pfleiderer line is in operation.
- (b) The baghouse, H16, connected to the one (1) mixer shall be in operation at all times the mixer at the Banbury mixing line is in operation.
- (c) The baghouse, K16, connected to the one (1) drop mix mill shall be in operation at all times the one (1) Werner-Pfleiderer mixing line is in operation.

D.2.4 Testing Requirements

Within 180 days after issuance of this FESOP permit F057-21499-00006, in order to demonstrate compliance with Condition D.2.1 the Permittee shall perform testing to verify the VOC loss rate for Werner-Pfleiderer mixing line (004) and Banbury mixing line (005), utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

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

D.2.5 Visible Emissions Notations

- (a) Visible emission notations of the baghouse stack exhausts shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.2.6 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouses (J16, H16 and K16) used in conjunction with the mixing lines, at least once weekly when the mixing lines are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.2.7 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, failed units and the associated process shall be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed units have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.2.8 Record Keeping Requirements

- (a) To document compliance with Condition D.2.5, the Permittee shall maintain a daily record of visible emission notations of the mixing lines' exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (i.e. the process did not operate that day).
- (b) To document compliance with Condition D.2.7, the Permittee shall maintain a daily record of the pressure drop across the baghouse controlling the mixing operation. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (i.e. the process did not operate that day).
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3

FACILITY OPERATION CONDITIONS

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

- (g) Four (4) small spray booths, identified as emission units 012 through 015, exhausting to R-24A, R-24B, R-25, and S-24 respectively, constructed in 1980, for applying adhesive to metal parts, equipped with air atomizer spray guns and dry filters for overspray control, capacity: 88 metal parts per hour, each.
- (i) One (1) swabbing operation, identified as emission unit 085, exhausting to P-1, constructed prior to 1980, capacity: 11,680 gallons of solvent and cement per year.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

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

D.3.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(d), particulate from four (4) small spray booths, identified as emission units 012 through 015, shall be controlled by a dry particulate filter and the Permittee shall operate the control device in accordance with manufacturer's specifications.

Compliance Determination Requirements

D.3.2 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when the four (4) small spray booths, identified as emission units 012 through 015, are in operation.

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

D.3.3 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters for four (4) small cement spray booths, identified as emission units 012 through 015. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks R-24A, R-24B, R-25, and S-24 while one or more of the booths are in operation. If a condition exists which should result in a response step, the Permittee failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.
- (b) Monthly inspections shall be performed of the particulate emissions from the stacks and the presence of overspray on the rooftops and the nearby ground. When there is a noticeable change in overspray emissions, or when evidence of overspray emissions is observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.3.4 Record Keeping Requirements

- (a) To document compliance with Condition D.3.3, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections.

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

SECTION D.4 FACILITY OPERATION CONDITIONS

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

- (c) One (1) rubber compounding operation, identified as emission unit 003, consisting of weighing and conveying raw materials, equipped with a baghouse and exhausting to M-15, constructed in the 1980s, estimated capacity: 1,530 pounds of rubber per hour, 770 pounds of carbon black per hour, and 200 pounds of pigments per hour.
- (h) One (1) product manufacturing operation which consists of the following:
 - (1) Fifty-three (53) curing presses, constructed between 1956 to 2001, identified as emission units 030 through 082, total capacity: 1,600 pounds of compounded rubber per hour.
 - (2) One (1) Werner Pfleiderer vertical press, constructed in 1982, identified as emission unit 083, total capacity: 1,600 pounds of compounded rubber per hour.
 - (3) One (1) Werner Pfleiderer horizontal press, constructed in 1982, identified as emission unit 084, total capacity: 1,600 pounds of compounded rubber per hour.
 - (4) Two (2) bag presses, constructed in 1977, identified as emission units 125 and 126, total capacity: 1,600 pounds of compounded rubber per hour.
 - (5) Nine (9) vulcanizers, constructed between 1935 to 2005, identified as emission units 086 through 091 and emission units 098 through 100, estimated total capacity: 900 pounds of compounded rubber per hour.
 - (6) Building, crimping and assembling operations, constructed between 1956 to 1997, estimated capacity: 1,000 pounds of metals and molded rubber parts per hour,
 - (7) 400 pound of calendered gum stock per hour, constructed in 1956; and
 - (8) 440 pounds of calendered fabric per hour, constructed in 1967.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

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

D.4.1 FESOP Limit [326 IAC 2-8-4]

- (a) The VOC emission rate from rubber compounding operation (003) shall not exceed 0.16 pounds per ton of compounded rubber.
- (b) The VOC emission rate from curing press (030 through 082) and vulcanizers (086 through 091 and emission units 098 through 100) shall not exceed 1.8 pounds per ton of compounded rubber, each.

Compliance with the above emission limits in combination with Condition D.2.1 and the potential VOC emissions from all of the other operations at the facility, including insignificant activities, shall limit the source-wide VOC emissions to less than 100 tons per twelve (12) consecutive month period. Compliance with above conditions will render the requirements of 326 IAC 2-7 (Part 70) not applicable

D.4.2 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the allowable PM emission rate from the one (1) rubber compounding operation shall not exceed 4.76 pounds per hour when operating at a process weight rate of 2,500 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

Compliance Determination Requirements

D.4.3 Particulate Matter (PM)

The baghouse for PM control shall be in operation and control emissions from the rubber compounding operation at all times that the rubber compounding is in operation.

D.4.4 Testing Requirements

Within 180 days after issuance of this FESOP permit F057-21499-00006, in order to demonstrate compliance with Condition D.4.1 the Permittee shall perform testing to verify the VOC loss rate for rubber compounding operation (003), press curing and vulcanizers, utilizing methods as approved by the Commissioner. This test shall be conducted for one (1) of each kind of unit, and shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

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

D.4.5 Visible Emissions Notations

- (a) Visible emission notations of the baghouse exhausted to M-15 stack exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.4.6 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouse used in conjunction with the rubber compounding operation, at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.5 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.4.7 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, failed units and the associated process shall be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed units have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.4.8 Record Keeping Requirements

- (a) To document compliance with Condition D.4.5, the Permittee shall maintain a daily record of visible emission notations of the rubber compounding operation exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (i.e. the process did not operate that day).
- (b) To document compliance with Condition D.4.7, the Permittee shall maintain a daily record of the pressure drop across the baghouses controlling the rubber compounding operation. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (i.e. the process did not operate that day).
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.5 FACILITY OPERATION CONDITIONS

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

- (a) Four (4) parts washer units, identified as emission units 025, 026, 028 and 029. [326 IAC 8-3-5].
- (b) Two (2) calendering processes, equipped with two (2) calendering lines identified as emission units 110 and 111, constructed in 1971 and 1957, respectively, capacity: 2,700 pounds of compounded rubber per hour, total. Also including four (4) calender warmup mills, identified as emission units 101 through 104, capacity: 5,400 pounds of compounded rubber per hour, total. [326 IAC 6-3-2].
- (c) One (1) extrusion process equipped with five (5) extruder warmup mills, identified as emission units 105 through 109, capacity: 1,800 pounds of compounded rubber per hour, total; and three (3) feed extruders, identified as emission units 112 through 114, capacity: 900 pounds of compounded rubber per hour. [326 IAC 6-3-2]

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

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

D.5.1 Cold cleaner operation (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2, the owner or operator of cold cleaning classified as insignificant activities, identified as emission units 025, 026, 028 and 029, shall:

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

D.5.2 Cold cleaner degreaser operation and control [326 IAC 8-3-5]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:

- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));

- (B) The solvent is agitated; or
 - (C) The solvent is heated.
- (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
- (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
- (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION**

Source Name: Firestone Industrial Products Company
Source Address: 1700 Firestone Blvd., Noblesville, Indiana 46060
Mailing Address: 1700 Firestone Blvd., Noblesville, Indiana 46060
FESOP Permit No.: F 057-21499-00006

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify)_____
- Report (specify)_____
- Notification (specify)_____
- Affidavit (specify)_____
- Other (specify)_____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT**

Source Name: Firestone Industrial Products Company
Source Address: 1700 Firestone Blvd., Noblesville, Indiana 46060
Mailing Address: 1700 Firestone Blvd., Noblesville, Indiana 46060
FESOP Permit No.: F 057-21499-00006

This form consists of 2 pages

Page 1 of 2

- | |
|---|
| <input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12) <ul style="list-style-type: none">• The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and• The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16 |
|---|

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
SEMI- ANNUAL NATURAL GAS FIRED BOILER CERTIFICATION**

Source Name: Firestone Industrial Products Company
Source Address: 1700 Firestone Blvd., Noblesville, Indiana 46060
Mailing Address: 1700 Firestone Blvd., Noblesville, Indiana 46060
FESOP Permit No.: F 057-21499-00006

<input type="checkbox"/> Natural Gas Only <input type="checkbox"/> Alternate Fuel burned From: _____ To: _____
--

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Signature: _____
Printed Name: _____
Title/Position: _____
Date: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Firestone Industrial Products Company
 Source Address: 1700 Firestone Blvd., Noblesville, Indiana 46060
 Mailing Address: 1700 Firestone Blvd., Noblesville, Indiana 46060
 FESOP Permit No.: F 057-21499-00006
 Facility: One (1) 31.38 MMBtu per hour boiler (001A), and one (1) 20 MMBtu per hour boiler (002)
 Parameter: No. 2 fuel oil and No. 2 fuel oil equivalent usage limit to limit SO₂ emissions
 Limit: Total input of No. 2 distillate fuel oil and No. 2 distillate fuel oil equivalents to boilers (001A and 002) shall be limited to 2,875,000 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month. This is equivalent to SO₂ emissions of 98.9 tons per year from boilers 001A and 002 less than 100 tons per year from the entire source.

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	No. 2 Distillate Fuel Oil and Equivalent Usage This Month	No. 2 Distillate Fuel Oil and Equivalent Usage Previous 11 Months	12 Month Total No. 2 Distillate Fuel Oil and Equivalent Usage
Month 1			
Month 2			
Month 3			

- ☛ No deviation occurred in this quarter.
- ☛ Deviation/s occurred in this quarter.
 Deviation has been reported on:

Submitted by:
 Title / Position:
 Signature:
 Date:
 Phone:

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE DATA SECTION
 FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
 QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Firestone Industrial Products Company
 Source Address: 1700 Firestone Blvd., Noblesville, Indiana 46060
 Mailing Address: 1700 Firestone Blvd., Noblesville, Indiana 46060
 FESOP Permit No.: F 057-21499-00006

Months: _____ **to** _____ **Year:** _____

<p>This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

Addendum to the
Technical Support Document for a
Federally Enforceable State Operating Permit (FESOP) Renewal

Source Name:	Firestone Industrial Products Company
Source Location:	1700 Firestone Blvd., Noblesville, Indiana 46060
County:	Hamilton
SIC Code:	3069
Permit No.:	F057-21499-00006
Permit Reviewer:	APT

On December 21, 2007, the Office of Air Quality (OAQ) had a notice published in The Noblesville Ledger in Noblesville, Indiana stating that Firestone Industrial Products Company had applied for a transition from a Part 70 Operating Permit to a Federally Enforceable State Operating Permit (FESOP) for a stationary rubber products manufacturing operation. The notice also stated that OAQ proposed to issue a FESOP for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Changes to the permit are noted as follows: ~~struck~~ language has been deleted; **bold** language has been added. If necessary, the Table of Contents will be modified to reflect these changes.

Necessary changes will be noted in this addendum only, as no changes will be made to the TSD.

Permit F057-21499-00006

Comments on the proposed transition from a Part 70 operating permit to a Federally Enforceable State Operating Permit (FESOP) were received on January 15, 2008, from Ms. Krista Torok representing Firestone Industrial Products.

Comment #1

Section A.2 (g) indicates the capacity for the manual cement dip operation to be 777 metal parts per hour and the calculations in Appendix A have the maximum units per hour as 5000 parts per hour. The capacity in the permit should match the capacity used in the calculations for HAPS/VOC potential emissions.

Response to Comment #1

The following changes have been made to the Emission Units and Pollution Control Equipment Summary, Section A.2 as follows:

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

* * *

- (g) One (1) manual cement dip operation consisting of three (3) tanks, identified as emission unit 010, constructed in 1980, for applying adhesive to metal parts, exhausting to three (3) stacks, all identified as S-31, **maximum** capacity: ~~777~~ **5000** metal parts per hour, **each**.

* * *

Comment #2

Section A.2 (h) indicates the capacity for each spray booth as 88 metal parts per hour. However, the calculations in Appendix A have the maximum units per hour as 1000 parts per hour for each spray booth. The capacity in the permit should match the capacity used in the calculations for HAPS/VOC potential emissions.

Response to Comment #2

The following changes have been made to the Emission Units and Pollution Control Equipment Summary, Section A.2 as follows:

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

* * *

- (h) Four (4) small spray booths, identified as emission units 012 through 015, exhausting to R- 24A, R-24B, R-25, and S-24 respectively, constructed in 1980, for applying adhesive to metal parts, equipped with air atomizer spray guns and dry filters for overspray control, **maximum** capacity: ~~88~~ **1000** metal parts per hour, **each**.

* * *

The following changes have been made to the Facility Description Box for Section D.3:

SECTION D.3

FACILITY OPERATION CONDITIONS

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

* * *

- (h) Four (4) small spray booths, identified as emission units 012 through 015, exhausting to R- 24A, R-24B, R-25, and S-24 respectively, constructed in 1980, for applying adhesive to metal parts, equipped with air atomizer spray guns and dry filters for overspray control, **maximum** capacity: ~~88~~ **1000** metal parts per hour, **each**.

* * *

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Comment #3

The capacity of the process oil tank, identified as 119, listed in Section A.3 (n) is 7360 gallons and not 10566.9 gallons.

Response to Comment #3

The following changes have been made to the Insignificant Activities, Section A.3 as follows:

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities:

* * *

- (n) Two (2) process oil storage tanks identified as emission units 118 and 119, with a capacity of 15,000 gallons and ~~40566.9~~ **7,360** gallons respectively.

* * *

Comment #4

The baghouses (J16, H16, K16) pressure drop ranges are specified as between 6.0-9.0 inches of water. The baghouse ranges should be maintained between 2.0-6.0 inches of water as recommended by the baghouse manufacturer. During the "seasoning" period of new bags, the pressure range is between 1.0-6.0 inches of water. The Baghouse ranges were previously put on stay by Cause No. 01-A-J-2712.

The rubber compounding operation (Emission unit 003) (M15) Baghouse pressure drop ranges are specified as between 12.0-16.0 inches of water. Cause No. 01-A-J-2712 M15 is to have a pressure range of 1.0-6.0 inches of water with a "seasoning" range of 0.5-6.0 inches of water.

Response to Comment #4

The following changes have been made to the Parametric Monitoring Section D.2.6:

D.2.6 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouses (J16, H16 and K16) used in conjunction with the mixing lines, at least once weekly when the mixing lines are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of ~~6.0 and 9.0~~ **1.0 and 6.0** inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

The following changes have been made to the Parametric Monitoring Section D.4.6:

D.4.6 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouse used in conjunction with the rubber compounding operation, at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of ~~12.0 and 17.0~~ **0.5 and 6.0** inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

Comment #5

Attachment A is the roof cleaning plan from Firestone which was previously a stayed item. The permit does not identify a requirement for a roof cleaning plan. Since there is no requirement, we would like to request that this attachment be removed from the permit.

Response to Comment #5

The potential to emit fugitive particulate matter from this source is below the twenty-five (25) ton per year threshold established in 326 IAC 6-5. Therefore, this source is not subject 326 IAC 6-5, and the fugitive particulate control plan is not required.

The following changes have been made to the Emission Limitations and Standards Section C.7:

~~C.7 — Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]~~

~~Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on. The plan is included as Attachment A.~~

The numbering and lettering for the remainder of Section C has been modified to reflect these changes.

Comment #6

Emission units 008 and 009, air stripper towers, are not owned and operated by Firestone Industrial Products. Firestone Industrial Products (FSIP) is a part of Bridgestone Firestone Diversified Products, LLC (BFDP) and the air stripper towers are part of the remediation activities and are owned and operated by Bridgestone Firestone National Tire, LLC (BFNT). Due to the change in ownership, the permittee would like to request that either the air stripper equipment is removed from the FESOP or that the ownership of the air stripper towers is identified within permit.

Response to Comment #6

IDEM, OAQ examined whether these two sources, the main plant and the remediation activities, should be considered one "major source" as defined at 326 IAC 2-7-1(22). In order for the two sources to be considered one major source, they must meet all three of the following criteria:

- (1) the sources must be under common ownership or common control;
- (2) the sources must have the same two-digit Standard Industrial Classification (SIC) Code or one must serve as a support facility for the other; and,
- (3) the sources must be located on contiguous or adjacent properties.

IDEM has determined that Firestone Industrial Products Company, LLC and Bridgestone Firestone National Tire, LLC are two separate sources. This determination was based on the following:

- a) The two sources do operate under common ownership and are located on the same property.
- b) The two sources have different Standard Industrial Classification (SICs), Firestone Industrial Products Company, LLC's SIC is 3069 and Bridgestone Firestone National Tire, LLC's SIC is 8999.
- c) The two sources have no connection concerning input, output, or other factors of function, and neither one serves as a support facility for the other.

It has been determined by IDEM that the remediation activities of Bridgestone Firestone National Tire, LLC qualify as an exemption, and do not require state permitting. The contact for this company has been notified of IDEM's decision, and has been provided with the information needed to apply for an exemption letter from IDEM. The FESOP for Firestone Industrial Products Company, LLC, permit number F057-21499-00006, has been modified as shown below to remove the two air stripper units utilized by Bridgestone Firestone National Tire, LLC for groundwater remediation.

The following changes have been made to the Emission Units and Pollution Control Equipment Summary, Section A.2 as follows:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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

* * *

~~(f) Two (2) air stripping towers, identified as emission units 008 and 009, exhausting to AS-1 and AS-2, constructed in 1992, capacity: 800 gallons per minute, each.~~

* * *

(j) IDEM has determined that the remediation activities located at the source are not part of this source, and will not be included in this permit.

* * *

The lettering for the remainder of Section A.2 has been modified to reflect these changes.

The following changes have been made to the Facility Description Box for Section D.3:

SECTION D.3

FACILITY OPERATION CONDITIONS

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

~~(f) Two (2) air stripping towers, identified as emission units 008 and 009, exhausting to AS-1 and AS-2, constructed in 1992, capacity: 800 gallons per minute, each.~~

~~(h)~~**(g)** Four (4) small spray booths, identified as emission units 012 through 015, exhausting to R-24A, R-24B, R-25, and S-24 respectively, constructed in 1980, for applying adhesive to metal parts, equipped with air atomizer spray guns and dry filters for overspray control, capacity: 88 metal parts per hour, each.

~~(i)~~**(i)** One (1) swabbing operation, identified as emission unit 085, exhausting to P-1, constructed prior to 1980, capacity: 11,680 gallons of solvent and cement per year.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

OAQ Change #1

In OAQ Change #1 thru OAQ Change #4, the limitations and testing requirements for Hazardous Air Pollutants (HAPS) have been removed. The source is only subject to the thresholds established in 326 IAC 2-8, of ten (10) tons per year for a single HAP and twenty-five (25) tons per year for a combination of HAPs. The unrestricted potential emissions of single and combined HAPs are less than ten (10) and twenty-five (25) tons per year, respectively. Therefore, no additional limitations are necessary in this permit. Furthermore, IDEM has determined that no HAP testing is necessary to verify the emission factors used to calculate the potential emissions from this source for HAPs.

The following changes have been made to the Emission Limitations and Standards Section D.2.1:

D.2.1 FESOP Limit [326 IAC 2-8-4]

The VOC emission rate from each mixing line (**identified as 004 and 005**) shall not exceed 0.44 pounds per ton of compounded rubber.

Compliance with the above emission limit in combination with Condition D.4.1 and the potential VOC ~~and HAPs~~ emissions from all the other emissions units at the facility

including insignificant activities shall limit the source-wide VOC emissions to less than 100 tons per twelve (12) consecutive month period. ~~and single HAP, and total HAPs emission to less than 10 and 25 tons per twelve (12) consecutive month period, respectively.~~ Compliance with above conditions will render the requirements of 326 IAC 2-7 (Part 70) not applicable.

OAQ Change #2

The following changes have been made to the Testing Requirements Section D.2.4:

D.2.4 Testing Requirements

Within 180 days after issuance of this FESOP permit F057-21499-00006, in order to demonstrate compliance with Conditions D.2.1 the Permittee shall perform testing to verify the VOC ~~and HAP~~ loss rate for Werner-Pfleiderer mixing line (004) and Banbury mixing line (005), utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

OAQ Change #3

The following changes have been made to the Emission Limitations and Standards Section D.4.1:

D.4.1 FESOP Limit [326 IAC 2-8-4]

-
- (a) The VOC emission rate from rubber compounding operation (003) shall not exceed 0.16 pounds per ton of compounded rubber.
 - (b) The VOC emission rate from curing press (030 through 082) and vulcanizers (086 through 091 and emission units 098 through 100) shall not exceed 1.8 pounds per ton of compounded rubber, each.

Compliance with the above emission limits in combination with Condition D.2.1 and the potential VOC ~~and HAPs~~ emissions from all of the other operations at the facility, including insignificant activities, shall limit the source-wide VOC emissions to less than 100 tons per twelve (12) consecutive month period. ~~and single HAP, and total HAPs emission to less than 10 and 25 tons per twelve (12) consecutive month period, respectively.~~ Compliance with above conditions will render the requirements of 326 IAC 2-7 (Part 70) not applicable

OAQ Change #4

The following changes have been made to the Testing Requirements Section D.4.4:

D.4.4 Testing Requirements

Within 180 days after issuance of this FESOP permit F057-21499-00006, in order to demonstrate compliance with Conditions D.4.1 the Permittee shall perform testing to verify the VOC ~~and HAP~~ loss rate for rubber compounding operation (003), press curing and vulcanizers, utilizing methods as approved by the Commissioner. This test shall be **conducted for one (1) of each kind of unit, and shall be** repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

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

Technical Support Document (TSD) for Federally Enforceable Operating Permit
(FESOP)

Source Background and Description

Source Name:	Firestone Industrial Products Company
Source Location:	1700 Firestone Blvd., Noblesville, Indiana 46060
County:	Hamilton
SIC Code:	3069
Operation Permit No.:	T 057-5997-00006
Operation Permit Issuance Date:	March 29, 2001
Permit No.:	F 057-21499-00006
Permit Reviewer:	Surya Ramaswamy/EVP

The Office of Air Quality (OAQ) has reviewed a FESOP application from Firestone Industrial Products Company relating to the operation of a rubber products manufacturing source. The source was issued Title V Permit No. 057-5997-00006 on March 29, 2001.

History

On June 30, 2005, IDEM, OAQ received an application from Firestone Industrial Products Company requesting a transition from their existing Part 70 Permit No. T057-5997-00006 to a FESOP. The application included the revisions in emission calculations due to new emission factors approved by U.S. EPA for various emission units. This resulted in the potential emissions of less than Title V thresholds for all criteria pollutants except for SO₂. The source has requested to limit the source-wide SO₂ emissions at FESOP levels. Therefore, this permit is being reviewed pursuant to the requirements of 326 IAC 2-8 (FESOP).

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) natural gas boiler, identified as emission unit 001A, exhausting to stack BS-1A, constructed in 1998, using No. 2 fuel oil as backup fuel, rated at 31.38 million British thermal units per hour.
- (b) One (1) natural gas boiler, identified as emission unit 002, exhausting to stack BS-2 constructed in 1942, using No. 2 fuel oil as backup fuel, rated at 20 million British thermal units per hour.
- (c) One (1) rubber compounding operation, identified as emission unit 003, consisting of weighing and conveying raw materials, equipped with a baghouse and exhausting to M-15, constructed in the 1980s, capacity: 1,530 pounds of rubber per hour, 770 pounds of carbon black per hour, and 200 pounds of pigments per hour.
- (d) One (1) Werner-Pfleiderer mixing line, identified as emission unit 004, constructed in 1988, with one (1) mixer exhausting to baghouse J16, one (1) drop mix mill exhausting to baghouse K16 and one (1) slab mill, identified as emission unit 122, exhausting to baghouse K16, capacity: 2,500 pounds of compounded rubber per hour.
- (e) One (1) Banbury mixing line, identified as emission unit 005, constructed in 1937, with one (1) mixer exhausting to baghouse H16, one (1) uncontrolled drop mix mill and one

- (1) slab mill, identified as emission unit 123, exhausting to baghouse K16, capacity: 2,500 pounds of compounded rubber per hour.
- (f) Two (2) air stripping towers, identified as emission units 008 and 009, exhausting to AS-1 and AS-2, constructed in 1992, capacity: 800 gallons per minute, each.
- (g) One (1) manual cement dip operation consisting of three (3) tanks, identified as emission unit 010, constructed in 1980, for applying adhesive to metal parts, exhausting to three (3) stacks, all identified as S-31, capacity: 777 metal parts per hour.
- (h) Four (4) small spray booths, identified as emission units 012 through 015, exhausting to R- 24A, R-24B, R-25, and S-24 respectively, constructed in 1980, for applying adhesive to metal parts, equipped with air atomizer spray guns and dry filters for overspray control, capacity: 88 metal parts per hour, each.
- (i) One (1) product manufacturing operation which (1) consists of the following:
- (1) Fifty-three (53) curing presses, constructed between 1956 to 2001, identified as emission units 030 through 082, total capacity: 1,600 pounds of compounded rubber per hour.
 - (2) One (1) Werner Pfleiderer vertical press, constructed in 1982, identified as emission unit 083, total capacity: 1,600 pounds of compounded rubber per hour.
 - (3) One (1) Werner Pfleiderer horizontal press, constructed in 1982, identified as emission unit 084, total capacity: 1,600 pounds of compounded rubber per hour.
 - (4) Two (2) bag presses, constructed in 1977, identified as emission units 125 and 126, total capacity: 1,600 pounds of compounded rubber per hour.
 - (5) Nine (9) vulcanizers, constructed between 1935 to 2005, identified as emission units 086 through 091 and emission units 098 through 100, estimated total capacity: 900 pounds of compounded rubber per hour.
 - (6) Building, crimping and assembling operations, constructed between 1956 to 1997, estimated capacity: 1,000 pounds of metals and molded rubber parts per hour,
 - (7) 400 pound of calendered gum stock per hour, constructed in 1956; and
 - (8) 440 pounds of calendered fabric per hour, constructed in 1967.
- (j) One (1) swabbing operation, identified as emission unit 085, exhausting to P-1, constructed prior to 1980, capacity: 11,680 gallons of solvent and cement per year.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted emission units operating at this source during this review process.

Emission Units and Pollution Control Equipment Removed From This Source

The following permitted emission units have been removed from this source:

- (a) One (1) automatic cement dip operation consisting of two (2) tanks, for applying adhesive to metal parts, exhausting to two (2) stacks, both identified as S-27, constructed in 1985, capacity: 1,995 metal parts per hour.
- (b) One (1) large cement application booth, exhausting to T-30, constructed in 1980, for applying adhesive to metal parts, equipped with brushes for hand application, capacity: 88 metal parts per hour.
- (c) One (1) spray booth exhausting to S-25, constructed in 1980, for applying adhesive to metal parts, equipped with air atomizer spray guns and dry filters for overspray control, capacity: 88 metal parts per hour.

- (d) Four (4) curing presses, six (6) vulcanizers in the product manufacturing operation.
- (e) Three (3) parts washer units.
- (f) The following emission unit emitting greater than one (1) pound per day, but less than five (5) pounds per day or one (1) ton per year of a single HAP:

One (1) cure oven using dibutyl phthalate.
- (g) One (1) rubber mill mixer, equipped with a baghouse J10, capacity: 118 pounds of compounded rubber per hour.
- (h) Three (3) grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- (i) One (1) cement mix house.
- (j) One (1) devulcanizer; and
- (k) Repair curing presses.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Four (4) parts washer units, identified as emission units 025, 026, 028 and 029. [326 IAC 8-3-2] [326 IAC 8-3-5]
- (b) Two (2) calendering processes, equipped with two (2) calendering lines identified as emission units 110 and 111, constructed in 1971 and 1957, respectively, capacity: 2,700 pounds of compounded rubber per hour, total. Also including four (4) calender warmup mills, identified as emission units 101 through 104, capacity: 5,400 pounds of compounded rubber per hour, total. [326 IAC 6-3-2]
- (c) One (1) extrusion process equipped with five (5) extruder warmup mills, identified as emission units 105 through 109, capacity: 1,800 pounds of compounded rubber per hour, total; and three (3) feed extruders, identified as emission units 112 through 114, capacity: 900 pounds of compounded rubber per hour. [326 IAC 6-3-2]
- (d) One (1) wheelabrator operation, identified as emission unit 20, controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.01 grains per actual cubic foot and a gas flow rate less than or equal to 4500 cubic feet per minute, including the following: deburring, buffing, polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- (e) Degreasing operations that do not exceed 145 gallons per twelve (12) months, except if subject to 326 IAC 20-6.
- (f) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to one percent (1%) by volume.

- (g) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (h) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]
- (i) On-site fire and emergency response training approved by the department.
- (j) Other emergency equipment as follows: stationary fire pumps.
- (k) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilo Pascals measured at 38°C).
- (l) A laboratory as defined in 326 IAC 2-7-1(21)(D).
- (m) One (1) No. 2 fuel oil storage tank, identified as emission unit 115, with a capacity of 25,000 gallons.
- (n) Two (2) process oil storage tanks identified as emission units 118 and 119, with a capacity of 15,000 gallons and 10566.9 gallons respectively.
- (o) Research and Development activities as defined in 326 IAC 2-7-1(21)(E).

Existing Approvals

The source was issued a Part 70 Operating Permit No. T057-5997-00006 on March 29, 2001. The source has since received the following:

- (a) First Administrative Amendment 057-15021-00006, issued October 23, 2001.
- (b) Second Administrative Amendment 057-15251-00006, issued January 12, 2002.
- (c) Third Administrative Amendment 057-16276-00006, issued November 21, 2002; and
- (d) Fourth Administrative Amendment 057-20564-00006, issued August 3, 2005.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous permits are superseded by this permit.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A, pages 1 through 10 of this document for detailed emission calculations.

County Attainment Status

The source is located in Hamilton County.

Pollutant	Status
PM2.5	Basic Nonattainment

PM-10	Attainment
SO ₂	Attainment
NO ₂	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

(a) U.S. EPA in Federal Register Notice 70 FR 943 dated January 5, 2005 has designated Hamilton County as nonattainment for PM_{2.5}. On March 7, 2005 the Indiana Attorney General's Office on behalf of IDEM filed a law suit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of non-attainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for violation of the Clean Air Act, the OAQ is following the U.S. EPA's guidance to regulate PM₁₀ emissions as a surrogate for PM_{2.5} emissions pursuant to the Non-attainment New Source Review requirements. See the State Rule Applicability – Entire Source section.

(b) Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC emissions and NO_x emissions are considered when evaluating the rule applicability relating to ozone.

On November 8, 2007, a temporary emergency rule took effect redesignating Hamilton County to attainment for the eight-hour ozone standard. The Indiana Air Pollution Control Board has begun the process for a permanent rule revision to incorporate these changes into 326 IAC 1-4-1. The permanent revision to 326 IAC 1-4-1 should take effect prior to the expiration of the emergency rule. Therefore, VOC emissions and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

(c) Hamilton County has been classified as attainment or unclassifiable in Indiana for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

(d) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.

(e) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD or Emission Offset applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Process/emission unit	Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Boilers (001A & 002)	3.21	3.21	114.13	1.24	18.90	32.15	0.43
Rubber Compounding Operation (003)	6.34	6.34	0.00	0.90	0.00	0.00	0.21
Werner-Pfleiderer Mixing Line (004)	8.80	8.80	0.00	2.42	0.00	0.00	0.37
Banbury Mixing Line (005)	8.80	8.80	0.00	2.42	0.00	0.00	0.37
Press Curing	0.00	0.00	0.00	6.40	0.00	0.00	1.77
Vulcanizers	0.00	0.00	0.00	3.70	0.00	0.00	0.90
Two (2) Air Stripping Towers (008 & 009)	0.00	0.00	0.00	3.30	0.00	0.00	1.60
Manual Cement Dip (010)	0.00	0.00	0.00	2.69	0.00	0.00	0.96
Four (4) Small Spray Booths (012-015)	1.95	1.95	0.00	23.23	0.00	0.00	13.15
Part Washers	0.00	0.00	0.00	0.30	0.00	0.00	0.00
Swabbing Operation (081)	0.00	0.00	0.00	35.30	0.00	0.00	1.74
Insignificant Activities	0.00	0.00	0.00	5.86	0.00	0.00	0.55
Total PTE	29.10	29.10	114.13	87.76	18.90	32.15	22.05

Notes:

Boilers 002 and 001A use natural gas as the primary fuel and No. 2 fuel oil as backup. The total represents the worst case emissions for each pollutant.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of SO₂ is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7. However, the source has agreed to limit its SO₂ emissions to less than Title V levels; therefore, the source will be issued a FESOP.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants are less than 100 tons per year.
- (c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year.
- (d) Fugitive Emissions
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are not counted toward the determination of Part 70 applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2003 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	6.0
PM-10	6.0
SO ₂	0.0
VOC	86.0
CO	5.0
NO _x	6.0
HAP	--

-- No emissions data reported.

Potential to Emit After Issuance

The source has opted to be a FESOP source. The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of this FESOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/emission unit	Limited Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	Total HAPs
Boilers (001A & 002)	2.79	2.79	98.90*	1.24	18.90	32.15	0.43
Rubber Compounding Operation (003)	0.63	0.63	0.00	0.90	0.00	0.00	0.21
Werner-Pfleiderer Mixing Line (004)	0.88	0.88	0.00	2.42	0.00	0.00	0.37
Banbury Mixing Line (005)	0.88	0.88	0.00	2.42	0.00	0.00	0.37
Press Curing	0.00	0.00	0.00	6.40	0.00	0.00	1.77
Vulcanizers	0.00	0.00	0.00	3.70	0.00	0.00	0.90
Two (2) Air Stripping Towers (008 & 009)	0.00	0.00	0.00	3.30	0.00	0.00	1.60
Manual Cement Dip (010)	0.00	0.00	0.00	2.69	0.00	0.00	0.96
Four (4) Small Spray Booths (012-015)	0.20	0.20	0.00	23.23	0.00	0.00	13.15
Part Washers	0.00	0.00	0.00	0.30	0.00	0.00	0.00
Swabbing Operation (085)	0.00	0.00	0.00	35.30	0.00	0.00	1.74
Insignificant Activities	0.00	0.00	0.00	5.86	0.00	0.00	0.55
Total PTE	5.38	5.38	98.90	87.76	18.90	32.15	22.05

* SO₂ emissions reflect the limited emissions from Boilers 002 and 001A based on the No.2 fuel oil usage limitation of 2,875,000 gallons per year, to render the requirement of the 326 IAC 2-7 not applicable.

Federal Rule Applicability

(a) 40 CFR 64 – Compliance Assurance Monitoring:

This source does not involve a pollutant-specific emissions unit as defined in 40 CFR 64.1:

- (1) With the potential to emit before controls equal to or greater than the major source threshold;
- (2) that is subject to an emission limitation or standard; and
- (3) that uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard.

Therefore, the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable to this source and not included in this permit.

(b) 40 CFR 60.40, 60.40a, 60.40b, and 60.40c, NSPS Subparts D, Da, Db, and Dc:

The requirements of the New Source Performance Standards, 326 IAC 12, (40 CFR 60.40, 60.40a, 60.40b, and 60.40c), Subparts D, Da, Db, and Dc are not included in the permit for the one (1) natural gas fired boiler, using No. 2 fuel oil as backup fuel, identified as emission unit 002, because it was constructed prior to August 17, 1971, which is the earliest applicability date of these rules.

The requirements of the New Source Performance Standards, 326 IAC 12, (40 CFR 60.40, 60.40a, and 60.40b), Subparts D, Da, and Db are not included in the permit because the one (1) natural gas fired boiler, using No. 2 fuel oil as backup fuel, identified as emission unit 001A, has a capacity less than 100 million British thermal units per hour. However the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40c - 60.48c, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units) are included in this permit because it was constructed after the rule applicability date of June 9, 1989, and has a maximum design heat input capacity greater than 10 MMBtu per hour and less than 100 MMBtu per hour.

Non applicable portions of the NSPS will not be included in the permit. The boiler, identified as 001A is subject to the following portions of Subpart Dc.

- (1) 40 CFR 60.40c (a), (b) & (c)
- (2) 40 CFR 60.41c
- (3) 40 CFR 60.42c (d), (e) (2), (f), (g), (h) (1), (i) & (j)
- (4) 40 CFR 60.43c (c) & (d)
- (5) 40 CFR 60.44c (a), (b), (c), (e), (f) (2), (g), (h) & (j)
- (6) 40 CFR 60.45c (a), (c) & (d)
- (7) 40 CFR 60.46c (a), (b), (c), (d), (e) & (f)
- (8) 40 CFR 60.47c (a), (b), (c) & (d)
- (9) 40 CFR 60.48c (a), (b), (d), (e), (f) (1), (g), (h), (i) & (j)

(c) 40 CFR 60.114, 60.114a, and 60.114b, NSPS Subpart K, Ka, and Kb :

The requirements of the New Source Performance Standards, 326 IAC 12, (40 CFR 60.114 and 60.114b), Subparts K and Kb are not included in this permit because the No. 2 fuel oil storage tank, identified as emission unit 115 was constructed after May 19, 1978 and prior to July 23, 1984. The requirements of the New Source Performance Standards, 326 IAC 12, (40 CFR 60.114a), Subpart Ka are also not included in this permit because the No. 2 fuel oil storage tank, identified as emission unit 115, has a capacity of 25,000 gallons, which is less than 40,000 gallons.

The requirements of the New Source Performance Standards, 326 IAC 12, (40 CFR 60.114a and 60.114b), Subparts Ka and Kb are not included in this permit because the process oil storage tank, identified as emission unit 118 was constructed prior to May 19, 1978. The requirements of the New Source Performance Standards, 326 IAC 12, (40 CFR 60.114), Subpart K are also not included in the permit for the process oil storage tank, identified as emission unit 118 because it has a capacity of 15,000 gallons, which is less than 40,000 gallons.

The requirements of the New Source Performance Standards, 326 IAC 12, (40 CFR 60.114 and 60.114a), Subparts K and Ka are not included in this permit because the process oil storage tank, identified as emission unit 119 was constructed after July 23, 1984. The requirements of the New Source Performance Standards, 326 IAC 12, (40 CFR 60.114b), Subpart Kb are not included in this permit for the process oil storage tank, identified as emission unit 119 because it has a capacity of 7370 gallons, which is less than 10566.9 gallons.

- (d) 40 CFR 63, Subpart DDDDD – Standards for Industrial, Commercial, and Institutional Boilers and Process Heaters:

The natural gas-fired boilers, identified as emission unit 002 and 001A would have been subject to the requirements of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD. However, on June 8, 2007, the United States Court of appeals for the District of Columbia Circuit (in NRDC v. EPA, no. 04-1386) vacated in its entirety the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD. Additionally, since the state rule at 326 IAC 20-95 incorporated the requirements of the NESHAP 40 CFR 63, Subpart DDDDD by reference, the requirements of 326 IAC 20-95 are no longer effective. Therefore, the requirements of 40 CFR 63, Subpart DDDDD and 326 IAC 20-95 are not included in the permit.

- (e) 40 CFR 63, Subpart MMMM – Standards for Surface Coating of Miscellaneous Metal Parts and Products:

The requirements of National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR 63, Subpart MMMM (National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Miscellaneous Metal Parts and Products) are not included in this permit because this source is not a major source of HAP.

- (f) 40 CFR 63, Subpart XXXX – Standards for Rubber Tire Manufacturing:

The requirements of the New Source Performance Standards, 326 IAC 12, (40 CFR 60.541), Subpart XXXX are not included in this permit because this source manufactures rubber air springs, not rubber tires.

- (g) 40 CFR Part 63, Subpart T (National Emissions Standards for Halogenated Solvent Cleaning)

The requirement of the National Emission Standards for Hazardous Air Pollutants, 326 IAC 14, (40 CFR 63.460), Subpart T are not included in this permit for the swabbing operation, identified as emission unit 085, because it does not contain any halogenated solvents.

The requirement of the National Emission Standards for Hazardous Air Pollutants, 326 IAC 14, (40 CFR 63.460), Subpart T are not included in this permit for the insignificant degreasing operations because the operations consist of only aqueous alkaline cleaners.

None of the four (4) parts washer units, identified as emission units 025, 026, 028, and 029 uses a solvent containing halogenated HAPs, the total concentration of halogenated HAPs is less than five percent (5%) by weight. Therefore, the requirements of 40 CFR Part 63.460, Subpart T, are not applicable to any of the parts washers. Therefore, this NESHAP is not included in the permit.

- (h) 40 CFR Part 63, Subpart ZZZZ (National Emissions Standards for Reciprocating Internal Combustion Engines)

The requirement of Subpart ZZZZ (National Emissions Standards for Reciprocating Internal Combustion Engines) is not included in the permit. Pursuant to 40 CFR 63.6590, the fire pumps are exempt from the requirements of Subpart ZZZZ because the maximum site rating for the RICE (Fire Pumps) is less than 500 brake horsepower (BHP).

State Rule Applicability – Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This existing source was constructed prior to the August 7, 1977 rule applicability date. This source is not considered a major source because it is not one of the 28 listed source categories and it has the potential to emit after controls of less than 250 tons per year of any criteria pollutant. As a FESOP source, the source wide PTE of SO₂ shall be limited to less than 100 tons per year (see 326 IAC 2-8-4 (FESOP) below for details of emission limits). Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration, PSD) shall not apply.

326 IAC 2-4.1 (New Source Toxics Control)

Since all facilities, with the exception of one (1) boiler, were constructed prior to July 27, 1997, the requirements of 326 IAC 2-4.1-1 are not included in the permit. The one (1) boiler constructed after July 27, 1997 is not a major source of hazardous air pollutants, therefore the requirements of 326 IAC 2-4.1-1 are not applicable.

326 IAC 2-8-4 (FESOP)

This source is subject to 326 IAC 2-8-4 (FESOP). Pursuant to this rule, the following conditions shall apply:

(a) Boilers (001A and 002):

- (1) The total input of No. 2 fuel oil and No. 2 fuel oil equivalents to Boilers 002 and 001A, shall be limited to less than 2,875,000 U.S. gallons per twelve (12) consecutive month period with compliance determined at the end of each month. This usage limit is required to limit the potential to emit sulfur dioxide (SO₂) from the boilers to less than 98.9 tons per 12 consecutive month period, with compliance determined at the end of each month.
- (2) Sulfur content of No. 2 distillate fuel oil shall not exceed 0.5% by weight.
- (3) For purposes of determining compliance with paragraph (1) of this condition, the following shall apply:

Every 1,000 gallons of No. 2 distillate fuel oil burned shall be equivalent to 8.45 MMCF of natural gas based on SO₂ emissions, such that the total usage of No. 2 distillate fuel oil with a maximum sulfur content of 0.5% and No. 2 oil equivalent input does not exceed the limit specified.

Compliance with above conditions shall limit the source-wide SO₂ emissions to less than 100 tons per twelve consecutive month period with compliance determined at the end of each month, respectively. Therefore, the requirements of 326 IAC 2-7 (Part 70) do not apply.

(b) Rubber compounding operation (003), Mixing Line (004 and 005), Curing press (030 through 082) and vulcanizers (086 through 091 and emission units 098 through 100):

- (1) The VOC emission rate from each mixing line (004 and 005) shall not exceed 0.44 pounds per ton of compounded rubber.
- (2) The VOC emission rate from rubber compounding operation (003) shall not exceed 0.16 pounds per ton of compounded rubber.

- (3) The VOC emission rate from curing press (030 through 082) and vulcanizers (086 through 091 and emission units 098 through 100) shall not exceed 1.8 pounds per ton of compounded rubber, each.

Compliance with the above emission limits in combination with the potential VOC and HAPs emission from all the other emissions units at the facility including insignificant activities shall limit the sourcewide VOC emissions to less than 100 tons per twelve (12) consecutive month period and single HAP, and total HAPs emission to less than 10 and 25 tons per twelve (12) consecutive month period, respectively. Compliance with above conditions will render the requirements of 326 IAC 2-7 (Part 70) not applicable.

326 IAC 2-1.1-5 (Non-attainment New Source Review)

U.S. EPA in Federal Register Notice 70 FR 943 dated January 5, 2005 has designated Hamilton County as nonattainment for PM_{2.5}. On March 7, 2005 the Indiana Attorney General's Office on behalf of IDEM filed a law suit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of non-attainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for violation of the Clean Air Act, the OAQ is following the U.S. EPA's guidance to regulate PM₁₀ emissions as surrogate for PM_{2.5} emissions pursuant to the Non-attainment New Source Review (NSR) requirements. This source is not subject to the Non-attainment NSR requirements because potential PM₁₀ emissions from this source are less than 100 tons per year.

326 IAC 2-6 (Emission Reporting)

Pursuant to 326 IAC 2-6-1, this source is not subject to this rule because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter or LaPorte counties, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in the permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

Pursuant to OP 29-01-94-0150, issued on January 30, 1990, the roof cleaning plan, as detailed in a November 3, 1987 letter from Mr. A.P. Pustinger, Environmental Engineer, to Mr. Andy Cate, IDEM, OAQ, be followed. A log of roof cleaning shall be kept and be available for inspection upon request. This plan was developed as a result of a complaint IDEM received in October 1987 (See Attachment A to this permit).

State Rule Applicability – Individual Facilities

326 IAC 6-2-2 (Particulate Emissions Limitations for Sources of Indirect Heating Facilities Constructed prior to September 21, 1983 in Specified Counties)

The one (1) boiler, identified as emission unit 002, constructed prior to September 21, 1983, in Hamilton County must comply with requirement of 326 IAC 6-2-2. The emission limitation is based on the following equation given in 326 IAC 6-2-2:

$$Pt = 0.87/Q^{0.16}$$

Where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

The heat input capacities of the boiler is 20.0 million British thermal units per hour.

$$Pt = 0.87 / (20)^{0.16} = 0.54 \text{ lb/MMBtu heat input}$$

Based on Appendix A, the potential PM emission rate is larger when using No. 2 fuel oil, and is:

$$1.25 \text{ tons/yr} \times (2000 \text{ lbs/ton} / 8760 \text{ hrs/yr}) = 0.285 \text{ lb/hr}$$

$$(0.285 \text{ lb/hr} / 20.0 \text{ MMBtu/hr}) = 0.014 \text{ lb PM per MMBtu}$$

Therefore, the one (1) boiler, 002, constructed in 1942, will be able to comply with this rule.

326 IAC 6-2-4 (Particulate Emissions Limitations for Facilities Constructed after September 21, 1983)

The one (1) boiler, identified as 001A, constructed after September 21, 1983, in Hamilton County, must comply with the requirements of 326 IAC 6-2-4. The emission limitations are based on the following equation as given in 326 IAC 6-2-4:

$$Pt = 1.09/Q^{0.16}$$

Where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

The heat input capacity of boiler 001A is 51.38 million British thermal units per hour. There was one (1) boiler rated at 20.0 million British thermal units per hour in operation at the source when this boiler was constructed.

$$Pt = 1.09 / (51.38)^{0.16} = 0.39 \text{ lb/MMBtu heat input}$$

Based on Appendix A, the potential PM emission rate is greater when using No. 2 fuel oil, and is:

$$1.96 \text{ tons/yr} \times (2000 \text{ lbs/ton} / 8760 \text{ hrs/yr}) = 0.448 \text{ lb/hr}$$

$$(0.448 \text{ lb/hr} / 31.38 \text{ MMBtu/hr}) = 0.014 \text{ lb PM per MMBtu}$$

Therefore, the one (1) boiler, 001A, constructed in 1998, will be able to comply with this rule.

326 IAC 6-3-2(d) (Particulate emission limitations, work practices, and control technologies)
 Pursuant to 326 IAC 6-3-2(d), particulate from the four (4) small spray booths, identified as emission units 012 through 015, shall be controlled by a dry particulate filter and the Permittee shall operate the control device in accordance with manufacturer's specifications.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

(a) Pursuant to 326 IAC 6-3-2(e) (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the following facilities shall not exceed the limits as stated when operating at the respective process weight rates:

The pounds per hour limitations were calculated with the following equation:

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

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

Emission Unit	Process Rate (tons/hr)	Allowable PM Emissions Pursuant to 326 IAC 6-3-2 (lb/hr)	Potential Emissions (lbs/hr)	Able to Comply
Mixer at Werner-Pfleiderer mixing line	2500	4.76	1.00	Yes
Drop Mix Mill at Werner-Pfleiderer mixing line	2500	4.76	1.00	Yes
Mixer at Banbury mixing line	2500	4.76	1.00	Yes
Drop Mix Mill at Banbury mixing line	2500	4.76	1.00	Yes
Rubber Compounding Operation	3600	6.07	1.44	Yes

The facilities listed above will be able to comply with the rule without any control since the uncontrolled potential PM emissions are less than the allowable emissions.

(b) Insignificant Activities

The potential to emit of particulate emissions from the insignificant activities including the two (2) calendaring processes, identified as 110 and 111, one (1) extrusion process, one (1) grinding and machining operations, and one (1) wheelabrator operation are less than 0.551 pounds per hour, each. Pursuant to 326 IAC 6-3-1(b)(14), all these units are exempt from particulate emission limitations for manufacturing processes.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

The two (2) natural gas-fired boilers (002 and 001A) using No. 2 fuel oil as back-up fuel are subject to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations) because the potential to emit SO₂ from each boiler is greater than twenty-five (25) tons per year, when operating on No. 2 fuel oil. Pursuant to 326 IAC 7-1.1-2, sulfur dioxide emissions from the two (2) boilers using No. 2 fuel oil shall be limited to 0.5 pounds per million BTU heat input when using No. 2 fuel oil. This equates to a fuel oil sulfur content limit of 0.50%. The facility will comply with this rule by limiting distillate oil sulfur content to 0.50% or less pursuant to 326 IAC 2-8 (FESOP).

326 IAC 7-2-1 (Sulfur Dioxide Reporting Requirements)

Pursuant to this rule, the source shall submit reports of calendar month average sulfur content, heat content, fuel consumption, and sulfur dioxide emission rate (pounds SO₂ per MMBtu), to the OAQ upon request.

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

- (a) The total potential to emit VOC from the Werner-Pfleiderer mixing line, identified as emission unit 004, is 2.42 tons per year. Since the potential to emit VOC is less than twenty-five (25) tons per year, the requirements of 326 IAC 8-1-6 do not apply.
- (b) The total potential to emit VOC from the Banbury mixing line, identified as emission unit 005 and constructed in 1937, is 2.42 tons per year. Since the potential to emit VOC is less than twenty-five (25) tons per year and the Banbury mixing line was constructed prior to 1980, the requirements of 326 IAC 8-1-6 do not apply.
- (c) The potential to emit VOC from the manual cement dip operations, identified as emission unit 010, is 2.69 tons per year. Since the potential to emit VOC is less than twenty-five (25) tons per year, the requirements of 326 IAC 8-1-6 do not apply.
- (d) The total potential to emit VOC from the four (4) small spray booths, identified as emission units 012 through 015, is 23.23 tons per year. Since each small spray booth operates independently of the others, the spray booths are considered separate facilities. Firestone Industrial Products Company indicated that the total potential to emit of the four (4) small spray booths is divided equally among the booths. Therefore, the potential to emit VOC at each booth is 5.8 tons per year, which is less than twenty-five (25) tons per year, and the requirements of 326 IAC 8-1-6 are not applicable.
- (e) The total potential to emit VOC from the curing and vulcanizing at the one (1) product manufacturing operation is 10.1 tons per year. Since all curing and vulcanizing operates independently of the others, the curing units and vulcanizers are considered separate facilities. The potential to emit VOC from the vulcanizers (086 through 100) is less than twenty-five (25) tons per year. Therefore, the potential to emit VOC from each vulcanizer and each curing press is less than 25 tons per year and the requirements of 326 IAC 8-1-6 are not applicable.
- (f) The total combined potential to emit VOC from the two (2) air stripping towers, identified as emission units 008 and 009 is 3.3 tons per year. Since the potential to emit VOC is less than twenty-five (25) tons per year, the requirements of 326 IAC 8-1-6 do not apply.
- (g) The swabbing operation, identified as emission unit 085, was constructed prior to 1980. Therefore, the requirements of 326 IAC 8-1-6 do not apply.

326 IAC 8-3-2 (Cold Cleaner Operations)

The swabbing operations were constructed prior to 1980. The insignificant degreasing operations use only aqueous alkaline cleaners. Therefore, the requirements of 326 IAC 8-3 are not applicable to swabbing operations and insignificant degreasing operations.

The cold cleaning operation listed as insignificant activities, identified as emission units 025, 026, 028 and 029, is subject to the requirements of 326 IAC 8-3-2 (Cold cleaner operation) since each unit was constructed after January 1, 1980. Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations) for cold cleaning operations the owner or operator shall:

- (1) Equip the cleaner with a cover;
- (2) Equip the cleaner with a facility for draining cleaned parts;
- (3) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (5) Provide a permanent, conspicuous label summarizing the operation requirements;
- (6) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)

The cold cleaning operation listed as insignificant activities, is subject to the requirements of 326 IAC 8-3-5 since each unit was constructed after July 1, 1990. Pursuant to this rule, the Permittee shall comply with the following requirements for cold cleaner degreaser operation and control:

- (1) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the Permittee shall ensure that the following control equipment requirements are met:
 - (i) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (ii) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (iii) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (iv) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

- (v) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^oC) (one hundred degrees Fahrenheit (100^oF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^oC) (one hundred twenty degrees Fahrenheit (120^oF)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (2) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:
 - (i) Close the cover whenever articles are not being handled in the degreaser.
 - (ii) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (iii) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

326 IAC 8-6 (Organic Solvent Emission Limitations)

This source is not subject to the requirements of 326 IAC 8-6. Provisions of 326 IAC 8-6 (Organic Solvent Emission Limitations) apply to units commencing operation after October 7, 1974, and prior to January 1, 1980, with potential emissions of 100 tons per year or greater of VOC, and not limited by any other 326 IAC 8 rules. None of the operations with VOC emissions at the source were constructed between the rule applicability date of October 7, 1974 and January 1, 1980, and no individual facility has VOC emissions greater than 100 tons per year; therefore, the rule does not apply.

Testing Conditions

Within 180 days after issuance of this FESOP permit No. F057-21499-00006, the Permittee shall perform testing to verify the VOC and HAP loss rate for rubber compounding operation (003), Werner-Pfleiderer mixing line (004), Banbury mixing line (005), curing press (030 through 082) and vulcanizers (086 through 091 and emission units 098 through 100) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

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

The compliance monitoring requirements applicable to this source are as follows:

1. Two (2) Boilers identified as 001A and 002 have applicable compliance monitoring conditions as specified below:
 - (a) Visible emission notations of each boiler's stack (BS-1A and BS-2) exhaust shall be performed once per day during normal daylight operations when combusting fuel oil. A trained employee shall record whether emissions are normal or abnormal.
 - (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
 - (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
 - (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
 - (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

These monitoring conditions are necessary to ensure compliance with 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating) and 326 IAC 2-8-4.

2. The one (1) Werner-Pfleiderer mixing line, identified as emission unit 004, and one (1) Banbury mixing line, identified as emission unit 005, have applicable compliance monitoring conditions as specified below:

- (a) Visible emission notations of the baghouse stack exhausts shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.
- (f) The Permittee shall record the pressure drop across the baghouses (J16, K16, and H16) used in conjunction with the mixing lines, at least once weekly when the mixing lines are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 6.0 and 9.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

- (g) In the event that bag failure has been observed:
 - (1) For a single compartment baghouse controlling emissions from a process operated continuously, failed units and the associated process shall be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
 - (2) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed units have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

These monitoring conditions are necessary because the baghouse for the mixing lines must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), and to make 326 IAC 2-2 (PSD) not applicable.

3. The four (4) small spray booths, identified as emission units 012 through 015, have applicable compliance monitoring conditions as specified below:
 - (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters for four (4) small cement spray booths, identified as emission units 012 through 015. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks R-24A, R-24B, R-25, and S-24 while one or more of the booths are in operation. If a condition exists which should result in a response step, the permittee failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.
 - (b) Monthly inspections shall be performed of the particulate emissions from the stacks and the presence of overspray on the rooftops and the nearby ground. When there is a noticeable change in overspray emissions, or when evidence of overspray emissions is observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

These monitoring conditions are necessary because the dry filters for the spray booth operations must operate properly to ensure compliance with 326 IAC 6-3.

4. The one (1) rubber compounding operation, identified as emission unit 003, has applicable compliance monitoring conditions as specified below:
 - (a) Visible emission notations of the baghouse exhausted to M-15 stack exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
 - (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
 - (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
 - (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
 - (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

- (f) The Permittee shall record the pressure drop across the baghouse used in conjunction with the rubber compounding operation, at least once per day when the process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 12.0 and 17.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit. The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.
- (g) In the event that bag failure has been observed:
- (1) For a single compartment baghouse controlling emissions from a process operated continuously, failed units and the associated process shall be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
 - (2) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed units have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

These monitoring conditions are necessary because the baghouse for the rubber compounding must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes).

Recommendation

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

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

An application for the purposes of this review was received on June 30, 2005.

Conclusion

The operation of this rubber products manufacturing source shall be subject to the conditions of the attached proposed **FESOP Permit No. F057-21499-00006**.

Appendix A: Emissions Calculations

Company Name: Firestone Industrial Products Company
 Address City IN Zip: 1700 Firestone Blvd., Noblesville, Indiana 46060
 FESOP: F057-21499-00006
 Plt ID: 057-00006
 Reviewer: Surya Ramaswamy / EVP
 Date: 01/29/08

Process/emission unit	Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	Total HAPs
Boilers (001A & 002)	3.21	3.21	114.13	1.24	18.90	32.15	0.43
Rubber Compounding Operation (003)	6.34	6.34	0.00	0.90	0.00	0.00	0.21
Werner-Pfleiderer Mixing Line (004)	8.80	8.80	0.00	2.42	0.00	0.00	0.37
Banbury Mixing Line (005)	8.80	8.80	0.00	2.42	0.00	0.00	0.37
Press Curing	0.00	0.00	0.00	6.40	0.00	0.00	1.77
Vulcanizers	0.00	0.00	0.00	3.70	0.00	0.00	0.90
Two (2) Air Stripping Towers (008 & 009)	0.00	0.00	0.00	3.30	0.00	0.00	1.60
Manual Cement Dip (010)	0.00	0.00	0.00	2.69	0.00	0.00	0.96
Four (4) Small Spray Booths (012-015)	1.95	1.95	0.00	23.23	0.00	0.00	13.15
Part Washers	0.00	0.00	0.00	0.30	0.00	0.00	0.00
Swabbing Operation (085)	0.00	0.00	0.00	35.30	0.00	0.00	1.74
Insignificant Activities	0.00	0.00	0.00	5.86	0.00	0.00	0.55
Total PTE	29.10	29.10	114.13	87.76	18.90	32.15	22.05

Process/emission unit	Limited Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	Total HAPs
Boilers (001A & 002)	2.79	2.79	98.90	1.24	18.90	32.15	0.43
Rubber Compounding Operation (003)	0.63	0.63	0.00	0.90	0.00	0.00	0.21
Werner-Pfleiderer Mixing Line (004)	0.88	0.88	0.00	2.42	0.00	0.00	0.37
Banbury Mixing Line (005)	0.88	0.88	0.00	2.42	0.00	0.00	0.37
Press Curing	0.00	0.00	0.00	6.40	0.00	0.00	1.77
Vulcanizers	0.00	0.00	0.00	3.70	0.00	0.00	0.90
Two (2) Air Stripping Towers (008 & 009)	0.00	0.00	0.00	3.30	0.00	0.00	1.60
Manual Cement Dip (010)	0.00	0.00	0.00	2.69	0.00	0.00	0.96
Four (4) Small Spray Booths (012-015)	0.20	0.20	0.00	23.23	0.00	0.00	13.15
Part Washers	0.00	0.00	0.00	0.30	0.00	0.00	0.00
Swabbing Operation (085)	0.00	0.00	0.00	35.30	0.00	0.00	1.74
Insignificant Activities	0.00	0.00	0.00	5.86	0.00	0.00	0.55
Total PTE	5.38	5.38	98.90	87.76	18.90	32.15	22.05

**Boilers
MM BTU/HR <100**

Company Name: Firestone Industrial Products Company
Address City IN Zip: 1700 Firestone Blvd., Noblesville, Indiana 46060
FESOP: F057-21499-00006
Plt ID: 057-00006
Reviewer: Surya Ramaswamy / EVP
Date: 01/29/08

**** general facility information ****

This source has two boilers, identified as 001A and 002 with heat input ratings of 31.38, and 20 MMBtu/hr, respectively. Each boilers is capable of burning both natural gas and No. 2 fuel oil.

****Boilers 001A and 002 burning natural gas****

The following calculations determine the amount of emissions created by natural gas combustion, from the boilers (001A and 002), based on 8,760 hours of operation US EPA's AP-42, 5th Edition, Section 1.4 - Natural Gas and Combustion, Tables 1.4-1, and 1.4-2.

Criteria Pollutant:	51.38	MMBtu/hr * 8,760 hr/yr	* Ef (lb/MMcf) = (ton/yr)
	1000	MMBtu/MMcf * 2,000 lb/ton	

P M:	1.9 lb/MMcf =	0.43 ton/yr
P M-10:	7.6 lb/MMcf =	1.71 ton/yr
S O 2:	0.6 lb/MMcf =	0.14 ton/yr
N O x:	100.0 lb/MMcf =	22.50 ton/yr
V O C:	5.5 lb/MMcf =	1.24 ton/yr
C O:	84.0 lb/MMcf =	18.90 ton/yr

Total natural gas potential emissions

P M:	0.43
P M-10:	1.71
S O 2:	0.14
N O x:	22.50
V O C:	1.24
C O:	18.90

****Boilers 001A and 002 burning No. 2 fuel oil****

The following calculations determine the amount of 0.5 % sulfur, from the boilers (001A and 002), based on 8,760 hours of use and US EPA's AP-42, 5th Edition, Section 1.3 - Fuel Oil Combustion, Tables 1.3-1, 1.3-3, and 1.3-7. distillate fuel oil @

Criteria Pollutant:	51.38	MMBtu/hr * 8,760 hr/yr	* Ef (lb/1,000 gal) = (ton/yr)
	140,000	Btu/gal * 2,000 lb/ton	

P M:	2.0 lb/1000 gal =	3.21 ton/yr
P M-10:	2.0 lb/1000 gal =	3.21 ton/yr
S O 2:	71.0 lb/1000 gal =	114.13 ton/yr
N O x:	20.0 lb/1000 gal =	32.15 ton/yr
V O C:	0.20 lb/1000 gal =	0.32 ton/yr
C O:	5.0 lb/1000 gal =	8.04 ton/yr

Total No. 2 fuel oil potential emissions

P M:	3.21
P M-10:	3.21
S O 2:	114.13
N O x:	32.15
V O C:	0.32
C O:	8.04

Worst Case Potential Emissions

Criteria Pollutant:		Worst Case Fuel
P M:	3.21 ton/yr	No. 2 Residual Fuel Oil
P M-10:	3.21 ton/yr	No. 2 Residual Fuel Oil
S O 2:	114.13 ton/yr	No. 2 Residual Fuel Oil
N O x:	32.15 ton/yr	No. 2 Residual Fuel Oil
V O C:	1.24 ton/yr	Natural Gas
C O:	18.90 ton/yr	Natural Gas

In order to qualify for the FESOP program, this source must limit SO2 emissions to less than 100 tons per year. Consequently, SO2 emissions from the boilers must be limited to 99 tons per year

** source usage limitations **

The following calculations determine the amount of emissions created by natural gas combustion based on a fuel usage limitation of 4.50E+02 MMcf

Natural Gas:	<u>450.089 MMcf/yr</u>	* Ef (lb/MMcf) = (ton/yr)
	2,000 lb/ton	
P M:	1.9 lb/MMcf =	0.43 ton/yr *
P M-10:	7.6 lb/MMcf =	1.71 ton/yr *
S O 2:	0.6 lb/MMcf =	0.14 ton/yr
N O x:	100.0 lb/MMcf =	22.50 ton/yr
V O C:	5.5 lb/MMcf =	1.24 ton/yr
C O:	84.0 lb/MMcf =	18.90 ton/yr

The source has requested to limit the annual No.2 fuel oil usage to less than 2785 kgal/yr

The following calculations determine the amount of emissions created by No.2 distillate fuel oil @ 0.5 % sulfur based on a fuel usage limitation of 2,785,000 gal/yr requested by the source:

No. 2 Distillate Oil:	<u>2,785,000 gal/yr</u>	* Ef (lb/1,000 gal) = (ton/yr)
	2,000 lb/ton	
P M:	2.0 lb/1000 gal =	2.79 ton/yr
P M-10:	2.0 lb/1000 gal =	2.79 ton/yr
S O 2:	71.0 lb/1000 gal =	98.87 ton/yr
N O x:	20.0 lb/1000 gal =	27.85 ton/yr
V O C:	0.20 lb/1000 gal =	0.28 ton/yr
C O:	5.0 lb/1000 gal =	6.96 ton/yr

Worst Case Emissions

		Worst Case Fuel
Criteria Pollutant:	P M: 2.79 ton/yr	No. 2 Residual Fuel Oil
	P M-10: 2.79 ton/yr	No. 2 Residual Fuel Oil
	S O 2: 98.87 ton/yr	No. 2 Residual Fuel Oil
	N O x: 22.50 ton/yr	Natural Gas
	V O C: 1.24 ton/yr	Natural Gas
	C O: 18.90 ton/yr	Natural Gas

** Fuel Equivalence**

Fuel equivalence limit for natural gas based on SO2 emissions from #2 distillate fuel oil:

$$\frac{0.14 \text{ n.g. potential emissions (ton/yr)}}{450.09 \text{ n.g. potential usage (MMCF/yr)}} \div \frac{114.13 \text{ #2 fuel oil potential emissions (ton/yr)}}{3.21\text{E}+06 \text{ #2 fuel oil potential usage (kgal/yr)}}$$

$$= 8.451\text{E}+00 \frac{\text{MMCF n.g. burned}}{\text{No. 2 distillate fuel oil (kgals)}}$$

**** All boilers burning #2 fuel oil****

The following calculations determine the amount of HAP emissions created by the combustion of distillate fuel oil before & after controls @ 0.3% sulfur, from the boilers (S-1, S-2, and S-27), based on 8760 hours of use and US EPA's AP-42, 5th Edition, Section 1.3 - Fuel Oil Combustion, Table 1.3-11.

	Potential (kgal/yr)	Limited (kgal/yr)
No. 2 fuel oil usage	3,215	2,785
		Potential To Emit
Arsenic	4.00E-06 lb/MMBtu =	9.00E-04 ton/yr
Beryllium:	3.00E-06 lb/MMBtu =	6.75E-04 ton/yr
Cadmium:	3.00E-06 lb/MMBtu =	6.75E-04 ton/yr
Chromium:	3.00E-06 lb/MMBtu =	6.75E-04 ton/yr
Lead:	9.00E-06 lb/MMBtu =	2.03E-03 ton/yr
Manganese:	6.00E-06 lb/MMBtu =	1.35E-03 ton/yr
Mercury:	3.00E-06 lb/MMBtu =	6.75E-04 ton/yr
Nickel:	3.00E-06 lb/MMBtu =	6.75E-04 ton/yr
Selenium:	1.50E-05 lb/MMBtu =	3.38E-03 ton/yr
Total HAPs =		1.10E-02 ton/yr
		Limited Emissions
		7.80E-04 ton/yr
		5.85E-04 ton/yr
		5.85E-04 ton/yr
		5.85E-04 ton/yr
		1.75E-03 ton/yr
		1.17E-03 ton/yr
		5.85E-04 ton/yr
		5.85E-04 ton/yr
		2.92E-03 ton/yr
Total HAPs =		9.55E-03 ton/yr

**** All boilers burning natural gas ****

The following calculations determine the amount of emissions created by natural gas combustion, from all boilers, based on 8,760 hours of operation and US EPA's AP-42, 5th Edition, Section 1.4 - Natural Gas Combustion, Tables 1.4-1, and 1.4-2.

	Potential (MMcf/yr)	Potential Emissions
Natural gas usage	4.50E+02	
Benzene:	2.1E-03 lb/MMcf =	4.73E-04 ton/yr
Dichlorobenzene:	1.2E-03 lb/MMcf =	2.70E-04 ton/yr
Formaldehyde:	7.5E-02 lb/MMcf =	1.69E-02 ton/yr
Hexane:	1.8E+00 lb/MMcf =	4.05E-01 ton/yr
Toluene:	3.4E-03 lb/MMcf =	7.65E-04 ton/yr
Lead:	5.0E-04 lb/MMcf =	1.13E-04 ton/yr
Cadmium:	1.1E-03 lb/MMcf =	2.48E-04 ton/yr
Chromium:	1.4E-03 lb/MMcf =	3.15E-04 ton/yr
Manganese:	3.8E-04 lb/MMcf =	8.55E-05 ton/yr
Nickel:	2.1E-03 lb/MMcf =	4.73E-04 ton/yr
1.89E+00 Total HAPs =		4.25E-01 ton/yr

**** summary of source HAP emissions potential to emit ****

Arsenic	9.00E-04 ton/yr
Beryllium:	6.75E-04 ton/yr
Cadmium:	9.23E-04 ton/yr
Chromium:	9.90E-04 ton/yr
Lead:	2.14E-03 ton/yr
Manganese:	1.44E-03 ton/yr
Mercury:	6.75E-04 ton/yr
Nickel:	1.15E-03 ton/yr
Selenium:	3.38E-03 ton/yr
Benzene:	4.73E-04 ton/yr
Dichlorobenzene:	2.70E-04 ton/yr
Formaldehyde:	1.69E-02 ton/yr
Hexane:	4.05E-01 ton/yr
Toluene:	7.65E-04 ton/yr
Total:	4.36E-01 ton/yr

**** summary of source HAP limited emissions ****

Arsenic	7.80E-04 ton/yr
Beryllium:	5.85E-04 ton/yr
Cadmium:	8.32E-04 ton/yr
Chromium:	9.00E-04 ton/yr
Lead:	1.87E-03 ton/yr
Manganese:	1.26E-03 ton/yr
Mercury:	5.85E-04 ton/yr
Nickel:	1.06E-03 ton/yr
Selenium:	2.92E-03 ton/yr
Benzene:	4.73E-04 ton/yr
Dichlorobenzene:	2.70E-04 ton/yr
Formaldehyde:	1.69E-02 ton/yr
Hexane:	4.05E-01 ton/yr
Toluene:	7.65E-04 ton/yr
Total:	4.34E-01 ton/yr

**Appendix A: Emission Calculations
Process Operations**

Company Name: Firestone Industrial Products Company
Address City IN Zip: 1700 Firestone Blvd., Noblesville, Indiana 46060
FESOP: F057-21499-00006
Plt ID: 057-00006
Reviewer: Surya Ramaswamy / EVP
Date: 01/29/08

Emission Unit	Rubber Throughput lbs/hr	Emission Factor lb/lb	Potential Emissions (tons/yr)	Controlled Emissions (tons/yr)	Control Efficiency
Mixing and Milling (mixer (004))	2500	4.02E-04	4.402	0.44	90.0%
Mixing and Milling (mixer (005))	2500	4.02E-04	4.402	0.44	90.0%
Mixing and Milling (drop mix mill (004))	2500	4.02E-04	4.402	0.44	90.0%
Mixing and Milling (drop mix mill (005))	2500	4.02E-04	4.402	0.44	90.0%
One (1) Slap mill (004)	2500	0.00	0.00	0.00	90.0%
One (1) Slap mill (005)	2500	0.00	0.00	0.00	90.0%
Rubber compounding (003)	3600	4.02E-04	6.339	0.63	90.0%

Methodology

Emissions (tons/yr) = Emissions (lbs/hr) * 8760 hrs/yr / 2000 lbs/ton
 Allowable Emissions (lbs/hr) = 4.10 x (Process weight (lbs/hr) / 2000 lbs/ton)^{0.67} [326 IAC 6-3-2]

Other Emissions from Rubber Parts Manufacturing

	Rubber Throughput (lbs/hr)	VOC Emission Factor (lbs/lb rubber)	VOC (lbs/hr)	VOC (tons/yr)	Total HAPs Emission Factor (lbs/lb rubber)	HAPs (lbs/hr)	HAPs (tons/yr)	PM Emission Factor (lbs/lb rubber)	PM (lbs/hr)	PM (tons/yr)
Press Curing (030 - 082)	1600	9.19E-04	1.47	6.4	2.52E-04	0.40	1.77	See above	See above	See above
Rubber Compounding Operation (003)	3600	5.53E-05	0.20	0.9	1.33E-05	0.05	0.21	See above	See above	See above
Vulcanizers (086 - 091 and 098 - 100)	900	9.36E-04	0.84	3.7	2.25E-04	0.20	0.9	See above	See above	See above
Mixing and Milling (mixer (004))	2500	5.53E-05	0.14	0.61	1.33E-05	0.033	0.15	See above	See above	See above
Mixing and Milling (mixer (005))	2500	5.53E-05	0.14	0.61	1.33E-05	0.033	0.15	See above	See above	See above
Mixing and Milling (drop mix mill (004))	2500	5.53E-05	0.14	0.61	1.33E-05	0.033	0.15	See above	See above	See above
Mixing and Milling (drop mix mill (005))	2500	5.53E-05	0.14	0.61	1.33E-05	0.033	0.15	See above	See above	See above
One (1) Slap mill (004)	2500	1.10E-04	0.28	1.20	6.39E-06	0.016	0.070	See above	See above	See above
One (1) Slap mill (005)	2500	1.10E-04	0.28	1.20	6.39E-06	0.016	0.070	See above	See above	See above
Insignificant Activities										
Calendering	2700	5.59E-05	0.151	0.66	1.27E-05	0.034	0.150	1.12E-07	3.02E-04	1.32E-03
Extrusion	900	2.97E-05	0.027	0.117	2.24E-05	0.020	0.088	1.12E-07	1.01E-04	4.42E-04
Milling only (5 mills at extrusion line)	1800	3.14E-04	0.57	2.48	2.17E-05	0.039	0.171	N/A	N/A	N/A
Milling only (4 mills at calendering)	5400	1.10E-04	0.59	2.6	6.39E-06	0.035	0.15	N/A	N/A	N/A
Totals:			5.0	22		0.9	4.1		0.00	0.0

Emission Factors from Tables 4.12-6, 4.12-8 and 4.12-4 of AP-42 draft Section 4.12
 Emission factors are for the worst case compound for each pollutant.

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations**

Company Name: Firestone Industrial Products Company
Address City IN Zip: 1700 Firestone Blvd., Noblesville, Indiana 46060
FESOP: F057-21499-00006
Pit ID: 057-00006
Reviewer: Surya Ramaswamy / EVP
Date: 01/29/08

Material	Density (lbs/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
Manual Cement Dip Unit (010)																
Chemlok 205	7.81	75.70%	0.0%	75.70%	0.0%	13.10%	1.45E-06	5000.000	5.91	5.91	0.04	1.03	0.19	0.00	45.13	100%
Chemlock 252X	7.99	77.00%	0.0%	77.00%	0.0%	13.70%	1.62E-06	5000.000	6.15	6.15	0.05	1.20	0.22	0.00	44.91	100%
Xylene	7.22	100.00%	0.0%	100.00%	0.0%	0.00%	3.38E-06	5000.000	7.22	7.22	0.12	2.93	0.53	0.00	n/a	100%
MEK	6.70	100.00%	0.0%	100.00%	0.0%	0.00%	1.19E-05	5000.000	6.70	6.70	0.40	9.57	1.75	0.00	n/a	100%
Four (4) Small Spray Booths (012 - 015)																
Chemlok 205	7.81	75.70%	0.0%	75.70%	0.0%	13.10%	3.63E-05	4000.000	5.91	5.91	0.86	20.60	3.76	1.03	45.13	15%
Chemlock 252X	7.99	77.00%	0.0%	77.00%	0.0%	13.70%	3.38E-05	4000.000	6.15	6.15	0.83	19.96	3.64	0.93	44.91	15%
Xylene	7.22	100.00%	0.0%	100.00%	0.0%	0.00%	4.34E-05	4000.000	7.22	7.22	1.25	30.08	5.49	0.00	n/a	15%
MEK	6.70	100.00%	0.0%	100.00%	0.0%	0.00%	8.81E-05	4000.000	6.70	6.70	2.36	56.67	10.34	0.00	n/a	15%

Potential Emissions	Add worst case coating to all solvents	Control Efficiency	90.00%				
		Uncontrolled		5.9	142	25.9	1.95
		Controlled		5.9	142	25.9	0.195

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lbs/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lbs/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

**Appendix A: Emission Calculations
HAP Emission Calculations**

**Company Name: Firestone Industrial Products Company
Address City IN Zip: 1700 Firestone Blvd., Noblesville, Indiana 46060
FESOP: F057-21499-00006
Pit ID: 057-00006
Reviewer: Surya Ramaswamy / EVP
Date: 01/29/08**

Material	Density (lbs/gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Hexane	Weight % Xylene	Weight % Ethyl Benzene	Weight % MIBK	Xylene Emissions (tons/yr)	Ethyl Benzene Emissions (tons/yr)	MIBK Emissions (tons/yr)
Manual Cement Dip Unit (010)										
Chemlok 205	7.81	1.45E-06	5000	0.00%	15.00%	3.00%	60.00%	0.04	0.01	0.15
Chemlock 252X	7.99	1.62E-06	5000	0.00%	65.00%	15.00%	0.00%	0.18	0.04	0.00
Xylene	7.22	3.38E-06	5000	0.00%	80.00%	20.00%	0.00%	0.43	0.11	0.00
Four (4) Small Spray Booths (012 - 015)										
Chemlok 205	7.81	3.63E-05	4000	0.00%	15.00%	3.00%	60.00%	0.75	0.15	2.98
Chemlock 252X	7.99	3.38E-05	4000	0.00%	65.00%	15.00%	0.00%	3.08	0.71	0.00
Xylene	7.22	4.34E-05	4000	0.00%	80.00%	20.00%	0.00%	4.39	1.10	0.00
Totals								8.9	2.11	3.13

Lead is not included in HAP calculations for dipping operations, because lead is a particulate and will not be emitted unless there is overspray.

Material	Density (lbs/gal)	Gallons of Material (gal/year)	Weight % Xylene	Weight % Ethyl Benzene	Weight % Trichloro Ethylene	Weight % Toluene	Xylene Emissions (tons/yr)	Ethyl Benzene Emissions (tons/yr)	Trichloro ethylene Emissions (tons/yr)	Toluene Emissions (tons/yr)
Swabbing Operation										
Tol-U-Sol	6.2	10247	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
Toluene	7.2	483	0.00%	0.00%	0.00%	100.00%	0.00	0.00	0.00	1.74
Parts Washers										
Safety Kleen Premium Solvent (3 units)	6.8	100	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
Totals							0.000	0.000	0.000	1.74

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lbs/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

gallons = 3.7854118 liters

**Appendix A: Emissions Calculations
VOC
From Solvent Usage**

**Company Name: Firestone Industrial Products Company
Address City IN Zip: 1700 Firestone Blvd., Noblesville, Indiana 46060
FESOP: F057-21499-00006
Plt ID: 057-00006
Reviewer: Surya Ramaswamy / EVP
Date: 01/29/08**

Material	Density (lb/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Max Usage (gal/yr)	Potential VOC pounds per year	Potential VOC tons per year
One (1) swabbing operation							
Tol-U-Sol	6.2	100.00%	0.0%	100.0%	10247.0	63224	31.6
Toluene	7.2	100.00%	0.0%	100.0%	483.0	3487	1.7
MEK	6.7	100.00%	0.0%	100.0%	580.0	3886	1.9
Parts Washers							
Safety Kleen Premium Solvent (3 units)	6.8	100.00%	0.0%	100.0%	100.0	680	0.3
Total						71277	35.6

Methodology

Potential VOC Pounds per Year = Solvent Density (lbs/gallon) * weight % volatiles * solvent consumption (gallons/Year)

Potential VOC Tons per Year = Potential VOC Pounds per Year * (1 ton/2000 lbs)

Capacity (L/min) = Capacity (gal/min) x 3.7854 L/gal

VOC Concentration (mg/L) is the maximum VOC concentration detected in ground water as supplied by the applicant.

VOC concentration (lbs/L) = VOC concentration (mg/L) x 2.2046E-6 lbs/mg

Potential VOC (lbs/hour) = Capacity (L/min) x VOC concentration (lbs/L) x 60 min/hour

Potential VOC (lbs/day) = Potential VOC lbs/hour x 24 hours/day

Potential VOC tons per year = Potential VOC lbs/hour x 8760 hours/year/ 2000 lbs/ton