DATE: May 22, 2008 Certified Mail No.: **7007 0710 0005 3965 7500**

TO: Interested Parties / Applicant

RE: Firestone Building Products Company / M097-23189-00140

FROM: Timothy J. Method
Environmental Coordinator
Department of Public Works

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, Room 501, Indianapolis, IN 46204, **within fifteen (15) calendar days of the receipt 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 Indianapolis Office of Environmental Services, Air Permits at (317) 327-2234.

Enclosures

Department of Public Works
Office of Environmental Services
2700 Belmont Avenue
Indianapolis, IN 46221
317-327-2234
Fax 327-2274
TDD 327-5186
indygov.org/dpw

Minor Source Operating Permit Renewal
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
AND OFFICE OF ENVIRONMENTAL SERVICES

Firestone Building Products Company
3525 S. Arlington Avenue
Indianapolis, Indiana 46203

(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.

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 Minor Source Operating Permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with the conditions listed on the attached pages.

Operation Permit No.: M097-23189-00140	
Issued by: ORIGINAL SIGNED BY Timothy J. Method Environmental Coordinator	Issuance Date: May 22, 2008 Expiration Date: May 22, 2018

Department of Public Works
Office of Environmental Services
2700 Belmont Avenue
Indianapolis, IN 46221
317-327-2234
Fax 327-2274
TDD 327-5186
indygov.org/dpw

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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) and Office of Environmental Services (OES). The information describing the source contained in conditions A.1 through A.2 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 2-5.1-3(c)][326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary facility for manufacturing asphalt roofing materials.

Source Address:	3525 S. Arlington Avenue, Indianapolis, IN 46203
Mailing Address:	3525 S. Arlington Avenue, Indianapolis, IN 46203
General Source Phone Number:	(317) 784-1161
SIC Code:	2952
County Location:	Marion
Source Location Status:	Nonattainment for PM-2.5 Attainment for all other criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules

A.2 Emission Units and Pollution Control Equipment Summary

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

(a) One (1) modified bitumen asphalt roofing line (Line 1), identified as EU-01, constructed in 1990, with a maximum capacity of 18,836 pounds of asphalt compound per hour, and 11,218 pounds of limestone filler per hour. The system consists of three (3) 12-ton capacity mix tanks, one (1) 10-ton capacity mix tank, one (1) 15-ton use tank, and one (1) two section impregnation vat. The system uses one (1) 11,300 cfm Monsanto Mist Eliminator (MME) identified as CE-01 for control, and exhausts to Stack 1.

(b) One (1) Built Up Roofing (BUR) system (Line 2), identified as EU-12, constructed in 1998, with a maximum capacity of 14,182 pounds of asphalt compound per hour, and 13,091 pounds of limestone filler per hour. The system consists of one (1) mixing screw and surge tank, one (1) saturator, or coater, where heated bitumen with limestone filler will be applied to continuously-fed fiberglass, and one (1) sand application process which will apply sand to the surface of the roll roofing (asphalt-saturated fiberglass substrate). The system uses one (1) 11,300 cfm Monsanto Mist Eliminator (MME) identified as CE-08 for control, and exhausts to Stack 4.

(c) One (1) 100-ton storage silo for calcium carbonate filler material, identified as EU-02, constructed in 1990. Control equipment consists of one (1) Whirl Airflow dust collector identified as CE-04 for control, and exhausts to Stack 2.

(d) One (1) 50-ton capacity sand storage silo, identified as EU-07, handling 78,465 tons of sand per year, constructed in 1994. The silo is equipped with an Ultra Industries baghouse identified as CE-07 for control, and exhausts to Stack 7.

(e) One (1) limestone receiving bin, identified as EU-14, constructed in 2001, with a maximum capacity of 23,360 tons of limestone usage per year, using one (1) Whirl Airflow 600 cfm dust collector identified as CE-02 for control, and exhausting to Stack 5.

(f) One (1) natural gas fired Heatec Thermal Fluid Heater, identified as EU-13, installed in 1989, with a capacity of 6 million Btu per hour, using no controls, and venting to Stack 13.

(g) One (1) natural gas fired Heatec Thermal Fluid Heater, identified as EU-03, installed in 1989, with a capacity of 6 million Btu per hour, using no controls, and venting to Stack 3.

(h) One (1) natural gas fired Inferno Therm Polyolefin (APP) Heater, identified as EU-08, installed in 1989, with a capacity of 0.8 million Btu per hour, using no controls, and venting to Stack 8.

(i) Two (2) 3,470 cubic foot (98.25 cubic meters) asphalt storage tanks, installed in 1990, using one (1) 11,300 cfm Monsanto Mist Eliminator (MME), identified as CE-01 for control, and exhausting to Stack 1.

(j) One (1) 3,470 cubic foot (98.25 cubic meter) oxidized asphalt storage tank, installed in 1998, using one (1) 11,300 cfm Monsanto Mist Eliminator, (MME) identified as CE-08 for control, and exhausting to Stack 4, or one (1) 11,300 cfm Monsanto Mist Eliminator (MME), identified as CE-01 for control, and exhausting to Stack 1.

(k) One (1) 3,370 cubic foot (95.41 cubic meters) liquid polypropylene storage tank, installed in 1990, using no controls.

(l) Fourteen (14) seasonally used natural gas space heaters, with a combined maximum capacity of 15.2 MMBtu/hour.

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-1.1-1]

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 2-1.1-1) shall prevail.

B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

(a) This permit, M097-23189-00140, 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 and OES, 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

(a) 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 and OES, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

(b) Unless otherwise stated, all terms and conditions in this permit that are local requirements, including any provisions designed to limit the sources potential to emit, are enforceable by OES.

B.5 Severability

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

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

B.7 Duty to Provide Information

(a) The Permittee shall furnish to IDEM, OAQ and OES, within a reasonable time, any information that IDEM, OAQ and OES 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 and OES 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

(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 Notification [326 IAC 2-6.1-5(a)(5)]

(a) An annual notification shall be submitted by an authorized individual to IDEM, OAQ and OES stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) The annual notice shall be submitted in the format attached no later than March 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, 46204-2251

and

Office of Environmental Services
Administration Building
2700 South Belmont Avenue
Indianapolis, IN 46221

(c) The notification 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 and OES on or before the date it is due.

B.10 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) 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.

(b) A copy of the PMPs shall be submitted to IDEM, OAQ and OES upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ and OES. IDEM, OAQ and OES 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.11 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to M097-23189-00371 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.12 Termination of Right to Operate [326 IAC 2-6.1-7(a)]

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 ninety (90) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.13 Deviations from Permit Requirements and Conditions

(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

and

Office of Environmental Services
Administration Building
2700 South Belmont Avenue
Indianapolis, IN 46221

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.14 Permit Renewal [326 IAC 2-6.1-7]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and OES and shall include the information specified in 326 IAC 2-6.1-7. Such information shall be included in the application for each emission unit at this source. 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

and

Office of Environmental Services
Administration Building
2700 South Belmont Avenue
Indianapolis, IN 46221

(b) A timely renewal application is one that is:

(1) Submitted at least ninety (90) days 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, and OESon 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 2-6.1 until IDEM, OAQ and OES 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 and OES any additional information identified as being needed to process the application.

B.15 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]

(a) Permit amendments and revision are governed by the requirements of 326 IAC 2-6.1-6 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

and

Office of Environmental Services
Administration Building
2700 South Belmont Avenue
Indianapolis, IN 46221

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

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.16 Source Modification Requirement

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

B.17 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC13-17-3-2][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, and OES or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a permitted 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.18 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 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

and

Office of Environmental Services
Administration Building
2700 South Belmont Avenue
Indianapolis, IN 46221

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 notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

B.19 Annual Fee Payment [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to OES within thirty (30) calendar days of receipt of a billing.

(b) The Permittee may call the following telephone number: 317-327-2234 (ask for OES Air Compliance), to determine the appropriate permit fee.

B.20 Credible Evidence [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 2-6.1-5(a)(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 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, and OES the fact that continuance of this permit is not consistent with purposes of this article.

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 thirty percent (30%) 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

and

Office of Environmental Services
Administration Building
2700 South Belmont Avenue
Indianapolis, IN 46221

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 Licensed 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 Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-6.1-5(a)(2)]

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

and

Office of Environmental Services
Administration Building
2700 South Belmont Avenue
Indianapolis, IN 46221

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, and OES 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 and OES not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, and OES if the Permittee submits to IDEM, OAQ, and OES 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 2-6.1-5(a)(2)]

C.10 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required 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]

(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

C.13 Response to Excursions or Exceedances

(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records;

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test

(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, and OES 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, and OES that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ, and OES may extend the retesting deadline.

(c) IDEM, OAQ, and OES 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 2-6.1-5(a)(2)]

C.15 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ), OES, or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ and OES, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.16 General Record Keeping Requirements[326 IAC 2-6.1-5]

(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 IDEM Commissioner or OES Administrator makes a request for records to the Permittee, the Permittee shall furnish the records to the IDEM Commissioner or OES Administrator 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.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) 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

and

Office of Environmental Services
Administration Building
2700 South Belmont Avenue
Indianapolis, IN 46221

(b) 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, and OES on or before the date it is due.

(c) 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).

(d) 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.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

(a) One (1) modified bitumen asphalt roofing line (Line 1), identified as EU-01, constructed in 1990, with a maximum capacity of 18,836 pounds of asphalt compound per hour, and 11,218 pounds of limestone filler per hour. The system consists of three (3) 12-ton capacity mix tanks, one (1) 10-ton capacity mix tank, one (1) 15-ton use tank, and one (1) two section impregnation vat. The system uses one (1) 11,300 cfm Monsanto Mist Eliminator (MME) identified as CE-01 for control, and exhausts to Stack 1.

(b) One (1) Built Up Roofing (BUR) system (Line 2), identified as EU-12, constructed in 1998, with a maximum capacity of 14,182 pounds of asphalt compound per hour, and 13,091 pounds of limestone filler per hour. The system consists of one (1) mixing screw and surge tank, one (1) saturator, or coater, where heated bitumen with limestone filler will be applied to continuously-fed fiberglass, and one (1) sand application process which will apply sand to the surface of the roll roofing (asphalt-saturated fiberglass substrate). The system uses one (1) 11,300 cfm Monsanto Mist Eliminator (MME) identified as CE-08 for control, and exhausts to Stack 4.

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

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

D.1.1 Particulate Emissions Limitations for Manufacturing Processes [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the:

(a) Modified bitumen asphalt roofing line (EU-01) shall not exceed 23.61 lb/hr when operating at a process weight rate of 30,054 lb/hr (15.02 tons/hr).

(b) Built Up Roofing (BUR) system (EU-12) shall not exceed 25.18 lb/hr when operating at a process weight rate of 27,273 lb/hr (13.64 tons/hr).

The allowable particulate emission rates above 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 the 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

D.1.2 VOC General Reduction Requirements [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6, the Permittee shall employ Best Available Control Technology (BACT) for emission unit EU-12. Pursuant to CP-097-0140-01, issued on November 17, 1997, BACT for emission unit EU-12 has been determined to be less than 29 tons of VOC emissions per twelve (12) consecutive month period.

D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B, Preventive Maintenance Plan, of this permit, is required for Line 1 operations (EU-01), Line 2 operations (EU-12), and control devices.

Compliance Determination Requirements

D.1.4 Particulate Matter (PM)

In order to comply with D.1.1:

(a) The Monsanto Mist Eliminator (CE-01) shall be in operation and control emissions from Line 1 operations (EU-01) at all times that Line 1 (EU-01) is operating.

(b) The Monsanto Mist Eliminator (CE-08) shall be in operation to control emissions from Line 2 operations (EU-12) at all times that Line 2 (EU12) is operating.

D.1.5 Volatile Organic Compounds (VOC)

In order to comply with D.1.2, VOC emissions from Line 2 operations (EU-12) shall be determined by the following equation:

VOC tons per month = EF x A

Where EF = 0.31 pounds per ton, or an emission factor determined from the most recent stack test.

A = Monthly throughput of rolled roofing in tons

D.1.6 Testing Requirements [326 IAC 2-1.1-11]

In order to determine PM, PM10, and VOC emission factors, the Permittee shall perform PM, PM10, and VOC testing no later than 180 days after issuance of this permit on the modified bitumen asphalt roofing line (Line 1), identified as EU-01, and on the Built Up Roofing (BUR) system (Line 2), identified as EU-12, using methods as approved by the IDEM, OAQ and OES. PM10 includes filterable and condensable PM10. Testing shall be conducted in accordance with Section C - Performance Testing, and repeated every 5 years from the date of the most recent compliance determination.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)][326 IAC 2-6.1-5(a)(2)]

D.1.7 Visible Emissions Notations

(a) Visible emission notations of the CE-01 and CE-08 stack exhausts shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal. A notation of abnormal visible emissions is not a deviation from this permit.

(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 Exceedences. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedences shall be considered a deviation from this permit.

D.1.8 Monsanto Mist Eliminator Parameter Monitoring

(a) The Permittee shall record the pressure drop across the Monsanto Mist Eliminators (CE-01 and CE-08) used in conjunction with either Line 1 or Line 2 at least once per day when the roofing lines are in operation. When for any one reading, the pressure drop across the Monsanto Mist Eliminator is outside the normal range of three (3) and twelve (12) inches of water, or a range established during the most recent 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.

(b) 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 OES, and shall be calibrated at least once every six (6) months.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.9 Record Keeping Requirements

(a) To document compliance with Condition D.1.2, the Permittee shall maintain records of monthly throughput of rolled roofing in tons on Line 2 and the associated VOC emissions per month.

(b) To document compliance with Condition D.1.7, the Permittee shall maintain a record of the daily visible emission notations of the CE-01 stack 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, (e.g., the process did not operate that day).

(c) To document compliance with Condition D.1.8, the Permittee shall maintain a daily record of the pressure drop across the Monsanto Mist Eliminators (CE-01 and CE-08). 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, (e.g., the process did not operate that day).

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

D.1.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.2 shall be submitted to the addresses 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.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

(c) One (1) 100-ton storage silo for calcium carbonate filler material, identified as EU-02, constructed in 1990. Control equipment consists of one (1) Whirl Airflow dust collector identified as CE-04 for control, and exhausts to Stack 2.

(d) One (1) 50-ton capacity sand storage silo, identified as EU-07, handling 78,465 tons of sand per year, constructed in 1994. The silo is equipped with an Ultra Industries baghouse identified as CE-07 for control, and exhausts to Stack 7.

(e) One (1) limestone receiving bin, identified as EU-14, constructed in 2001, with a maximum capacity of 23,360 tons of limestone usage per year, using one (1) Whirl Airflow 600 cfm dust collector identified as CE-02 for control, and exhausting to Stack 5.

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

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

D.2.1 Particulate Emissions Limitations for Manufacturing Processes [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the:

(a) Calcium carbonate storage (EU-02) shall not exceed 6.03 lb/hr when operating at a process weight rate of 3,560 lb/hr (1.78 tons/hr).

(b) Sand storage silo (EU-07) shall not exceed 4.52 lb/hr when operating at a process weight rate of 2,330 lb/hr (1.16 tons/hr).

(c) Limestone receiving bin (EU-14) shall not exceed 7.89 lb/hr when operating at a process weight rate of 5,333 lb/hr (2.66 tons/hr).

The allowable particulate emission rates above 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 the 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

D.2.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for EU-02, EU-07, EU-14, and their control devices.

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

(f) One (1) natural gas fired Heatec Thermal Fluid Heater, identified as EU-13, installed in 1989, with a capacity of 6 million Btu per hour, using no controls, and venting to Stack 13.

(g) One (1) natural gas fired Heatec Thermal Fluid Heater, identified as EU-03, installed in 1989, with a capacity of 6 million Btu per hour, using no controls, and venting to Stack 3.

(h) One (1) natural gas fired Inferno Therm Polyolefin (APP) Heater, identified as EU-08, installed in 1989, with a capacity of 0.8 million Btu per hour, using no controls, and venting to Stack 8.

(l) Fourteen (14) seasonally used natural gas space heaters, with a combined maximum capacity of 15.2 MMBtu/hour.

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

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

D.3.1 Particulate Matter Emissions (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Indirect Heating), particulate emissions from the EU-03, and EU-13 shall be limited to 0.57 pounds per million British thermal units (lbs/MMBtu) based on the following equation:

$Pt = 1.09 / Q^{0.26}$

Where:

Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.

Q = Total source maximum operating capacity rating in million Btu 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. Q for EU-03 and EU-13 is 12 MMBtu/hr.

SECTION E.1 NSPS REQUIREMENTS

Emission Unit Description: Entire Source

This section applies to the Asphalt Roofing Manufacturing plant.

Under NSPS Subpart UU, the asphalt roofing material facility is considered an affected source. The specific facilities include the following:

(1) One (1) modified bitumen asphalt roofing line (Line 1), identified as EU-01, constructed in 1990, with a maximum capacity of 18,836 pounds of asphalt compound per hour. The system consists of three (3) 12-ton capacity mix tanks, one (1) 10-ton capacity mix tank, one (1) 15-ton use tank, and one (1) two section impregnation vat. The system uses one (1) 11,300 cfm Monsanto Mist Eliminator (MME) identified as CE-01 for control, and exhausts to Stack 1.

(2) One (1) Built Up Roofing (BUR) system (Line 2), identified as EU-12, constructed in 1998, with a maximum capacity of 14,182 pounds of asphalt compound per hour. The system consists of one (1) mixing screw and surge tank with a maximum capacity of 23,360 tons of limestone usage per year, one (1) saturator, or coater, where heated bitumen with limestone filler will be applied to continuously-fed fiberglass, and one (1) sand application process which will apply sand to the surface of the roll roofing (asphalt-saturated fiberglass substrate). The system uses one (1) 11,300 cfm Monsanto Mist Eliminator (MME) identified as CE-08 for control, and exhausts to Stack 4.

(3) One (1) 100-ton storage silo for calcium carbonate filler material, identified as EU-02, constructed in 1990. Control equipment consists of one (1) Whirl Airflow dust collector identified as CE-04 for control, and exhausts to Stack 2.

(4) One (1) 50-ton capacity sand storage silo, identified as EU-07, handling 78,465 tons of sand per year, constructed in 1994. The silo is equipped with an Ultra Industries baghouse identified as CE-07 for control, and exhausts to Stack 7.

(5) One (1) limestone receiving bin, identified as EU-14, constructed in 2001, with a maximum capacity of 23,360 tons of limestone usage per year, using one (1) Whirl Airflow 600 cfm dust collector identified as CE-02 for control, and exhausting to Stack 5.

(6) Two (2) 3,470 cubic foot (98.25 cubic meters) asphalt storage tanks, installed in 1990, using one (1) 11,300 cfm Monsanto Mist Eliminator (MME), identified as CE-01 for control, and exhausting to Stack 1.

(7) One (1) 3,470 cubic foot (98.25 cubic meter) oxidized asphalt storage tank, installed in 1998, using one (1) 11,300 cfm Monsanto Mist Eliminator, (MME) identified as CE-08 for control, and exhausting to Stack 4, or one (1) 11,300 cfm Monsanto Mist Eliminator (MME), identified as CE-01 for control, and exhausting to Stack 1.

(8) One (1) 3,370 cubic foot (95.41 cubic meters) liquid polypropylene storage tank, installed in 1990, using no controls.

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

New Source Performance Standards (NSPS) Requirements

E.1.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the asphalt roofing materials manufacturing facility except as otherwise specified in 40 CFR Part 60, Subpart UU.

E.1.2 Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture [40 CFR 60 Subpart UU] [40 CFR 60.470]

The Permittee which engages in asphalt roofing manufacturing shall comply with the following provisions of 40 CFR 60, Subpart UU (included as Attachment A of this permit):

(1) 40 CFR 60.472 (a)(1)(i)(ii)
(2) 40 CFR 60.472 (a)(2)
(3) 40 CFR 60.472 (a)(3)
(4) 40 CFR 60.472 (b)(1)
(5) 40 CFR 60.472 (b)(2)
(6) 40 CFR 60.472 (b)(3)
(7) 40 CFR 60.472 (b)(4)
(8) 40 CFR 60.472 (b)(5)
(9) 40 CFR 60.472 (c)
(10) 40 CFR 60.472 (d)
(11) 40 CFR 60.473 (a)
(12) 40 CFR 60.473 (b)
(13) 40 CFR 60.473 (c)
(14) 40 CFR 60.473 (d)
(15) 40 CFR 60.474 (a)(1)
(16) 40 CFR 60.474 (a)(2)
(17) 40 CFR 60.474 (a)(3)
(18) 40 CFR 60.474 (b)
(19) 40 CFR 60.474 (c)(1)
(20) 40 CFR 60.474 (c)(2)
(21) 40 CFR 60.474 (c)(3)
(22) 40 CFR 60.474 (c)(4)(i)
(23) 40 CFR 60.474 (c)(4)(ii)
(24) 40 CFR 60.474 (c)(5)
(25) 40 CFR 60.474 (d)
(26) 40 CFR 60.474 (e)
(27) 40 CFR 60.474 (f)(1)
(28) 40 CFR 60.474 (f)(2)
(29) 40 CFR 60.474 (g)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
and
INDIANAPOLIS OES
AIR COMPLIANCE

MINOR SOURCE OPERATING PERMIT (MSOP)
CERTIFICATION

Source Name: **Firestone Building Products Company**
Source Address: **3525 South Arlington Avenue, Indianapolis, Indiana 46203**
Mailing Address: **3525 South Arlington Avenue, Indianapolis, Indiana 46203**
MSOP No.: **M097-23189-00140**

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 Notification

☐ 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 DATA SECTION
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR QUALITY MANAGEMENT SECTION
DATA COMPLIANCE
MSOP Quarterly Report

Source Name: Firestone Building Products
Source Address: Firestone Building Products
3525 South Arlington Avenue, Indianapolis, Indiana 46203
Mailing Address: Firestone Building Products
3525 South Arlington, Indianapolis, Indiana 46203
MSOP Permit No.: M097-23189-00140
Facility: Line 2 (Including Asphalt Mixer and Surge Tank)
Parameter: VOC emissions
Limit: 29 tons per rolling twelve (12) consecutive month period
VOC tons per month = EF x A,
Where EF = 0.31 pounds per ton, or an emission factor determined from the most recent stack test.
A = Monthly throughput of rolled roofing in tons.

QUARTER_____YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 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
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR QUALITY MANAGEMENT SECTION
DATA COMPLIANCE

MINOR SOURCE OPERATING PERMIT
QUARTERLY COMPLIANCE MONITORING REPORT

Source Name: Firestone Building Products
Source Address: 3525 South Arlington Avenue, Indianapolis, IN 46203
Mailing Address: 3525 South Arlington Avenue, Indianapolis, IN 46203
MSOP No.: M097-23189-00140

Months: _____ to _____ Year: _____

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

Compliance Monitoring Requirement (e.g. Permit Condition D.1.3)	**Number of Deviations**	**Date of each Deviation**

Form Completed By:
Title/Position:
Date:
Phone:

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Office of Air Quality
COMPLIANCE DATA SECTION
and
CITY OF INDIANAPOLIS
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	**Firestone Building Products Company**
Address:	**3525 South Arlington Avenue**
City:	**Indianapolis, Indiana, 46203**
Phone #:	**317-784-1161**
MSOP #:	**M097-23189-00140**

I hereby certify that Firestone Building Products Company is 9 still in operation.
9 no longer in operation.

I hereby certify that Firestone Building Products Company is:
9 in compliance with the requirements of MSOP 097-23189-00140.
9 not in compliance with the requirements of MSOP 097-23189-00140.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-6865

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY:_____PHONE NO. ( )_____
LOCATION: (CITY AND COUNTY)_____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP:_____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND
REASON:_____
_____

DATE/TIME MALFUNCTION STARTED: _____/_____/ 20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:_____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

_____

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____

_____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES:_____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:_____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:_____
INTERIM CONTROL MEASURES: (IF APPLICABLE)_____
_____
_____

MALFUNCTION REPORTED BY:_____TITLE:_____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY:_____DATE:_____TIME:_____

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

_____

_____

Attachment A

Subpart UU—Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture

Source: 47 FR 34143, Aug. 6, 1982, unless otherwise noted.

§ 60.470 Applicability and designation of affected facilities.

(a) The affected facilities to which this subpart applies are each saturator and each mineral handling and storage facility at asphalt roofing plants; and each asphalt storage tank and each blowing still at asphalt processing plants, petroleum refineries, and asphalt roofing plants.

(b) Any saturator or mineral handling and storage facility under paragraph (a) of this section that commences construction or modification after November 18, 1980, is subject to the requirements of this subpart. Any asphalt storage tank or blowing still that processes and/or stores asphalt used for roofing only or for roofing and other purposes, and that commences construction or modification after November 18, 1980, is subject to the requirements of this subpart.

Any asphalt storage tank or blowing still that processes and/or stores only nonroofing asphalts and that commences construction or modification after May 26, 1981, is subject to the requirements of this subpart.

§ 60.471 Definitions.

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

Afterburner (A/B) means an exhaust gas incinerator used to control emissions of particulate matter.

Asphalt processing means the storage and blowing of asphalt.

Asphalt processing plant means a plant which blows asphalt for use in the manufacture of asphalt products.

Asphalt roofing plant means a plant which produces asphalt roofing products (shingles, roll roofing, siding, or saturated felt).

Asphalt storage tank means any tank used to store asphalt at asphalt roofing plants, petroleum refineries, and asphalt processing plants. Storage tanks containing cutback asphalts (asphalts diluted with solvents to reduce viscosity for low temperature applications) and emulsified asphalts (asphalts dispersed in water with an emulsifying agent) are not subject to this regulation.

Blowing still means the equipment in which air is blown through asphalt flux to change the softening point and penetration rate.

Catalyst means a substance which, when added to asphalt flux in a blowing still, alters the penetrating-softening point relationship or increases the rate of oxidation of the flux.

Coating blow means the process in which air is blown through hot asphalt flux to produce coating asphalt. The coating blow starts when the air is turned on and stops when the air is turned off.

Electrostatic precipitator (ESP) means an air pollution control device in which solid or liquid particulates in a gas stream are charged as they pass through an electric field and precipitated on a collection surface.

High velocity air filter (HVAF) means an air pollution control filtration device for the removal of sticky, oily, or liquid aerosol particulate matter from exhaust gas streams.

Mineral handling and storage facility means the areas in asphalt roofing plants in which minerals are unloaded from a carrier, the conveyor transfer points between the carrier and the storage silos, and the storage silos.

Saturator means the equipment in which asphalt is applied to felt to make asphalt roofing products. The term saturator includes the saturator, wet looper, and coater.

[47 FR 34143, Aug. 6, 1982, as amended at 65 FR 61762, Oct. 17, 2000]

§ 60.472 Standards for particulate matter.

(a) On and after the date on which §60.8(b) requires a performance test to be completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any saturator:

(1) Particulate matter in excess of:

(i) 0.04 kg/Mg (0.08 lb/ton) of asphalt shingle or mineral-surfaced roll roofing produced, or

(ii) 0.04 kg/Mg (0.08 lb/ton) of saturated felt or smooth-surfaced roll roofing produced;

(2) Exhaust gases with opacity greater than 20 percent; and

(3) Any visible emissions from a saturator capture system for more than 20 percent of any period of consecutive valid observations totaling 60 minutes. Saturators that were constructed before November 18, 1980, and that have not been reconstructed since that date and that become subject to these standards through modification are exempt from the visible emissions standard. Saturators that have been newly constructed or reconstructed since November 18, 1980 are subject to the visible emissions standard.

(b) On and after the date on which §60.8(b) requires a performance test to be completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any blowing still:

(1) Particulate matter in excess of 0.67 kg/Mg (1.3 lb/ton) of asphalt charged to the still when a catalyst is added to the still; and

(2) Particulate matter in excess of 0.71 kg/Mg (1.4 lb/ton) of asphalt charged to the still when a catalyst is added to the still and when No. 6 fuel oil is fired in the afterburner; and

(3) Particulate matter in excess of 0.60 kg/Mg (1.2 lb/ton) of asphalt charged to the still during blowing without a catalyst; and

(4) Particulate matter in excess of 0.64 kg/Mg (1.3 lb/ton) of asphalt charged to the still during blowing without a catalyst and when No. 6 fuel oil is fired in the afterburner; and

(5) Exhaust gases with an opacity greater than 0 percent unless an opacity limit for the blowing still when fuel oil is used to fire the afterburner has been established by the Administrator in accordance with the procedures in §60.474(g).

(c) Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any asphalt storage tank exhaust gases with opacity greater than 0 percent, except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for clearing. The control device shall not be bypassed during this 15-minute period. If, however, the emissions from any asphalt storage tank(s) are ducted to a control device for a saturator, the combined emissions shall meet the emission limit contained in paragraph (a) of this section during the time the saturator control device is operating. At any other time the asphalt storage tank(s) must meet the opacity limit specified above for storage tanks.

(d) Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any mineral handling and storage facility emissions with opacity greater than 1 percent.

[47 FR 34143, Aug. 6, 1982, as amended at 65 FR 61762, Oct. 17, 2000]

§ 60.473 Monitoring of operations.

(a) The owner or operator subject to the provisions of this subpart, and using either an electrostatic precipitator or a high velocity air filter to meet the emission limit in §60.472(a)(1) and/or (b)(1) shall continuously monitor and record the temperature of the gas at the inlet of the control device. The temperature monitoring instrument shall have an accuracy of ±15 °C (±25 °F) over its range.

(b) The owner or operator subject to the provisions of this subpart and using an afterburner to meet the emission limit in §60.472(a)(1) and/or (b)(1) shall continuously monitor and record the temperature in the combustion zone of the afterburner. The monitoring instrument shall have an accuracy of ±10 °C (±18 °F) over its range.

(c) An owner or operator subject to the provisions of this subpart and using a control device not mentioned in paragraphs (a) or (b) of this section shall provide to the Administrator information describing the operation of the control device and the process parameter(s) which would indicate proper operation and maintenance of the device. The Administrator may require continuous monitoring and will determine the process parameters to be monitored.

(d) The industry is exempted from the quarterly reports required under §60.7(c). The owner/operator is required to record and report the operating temperature of the control device during the performance test and, as required by §60.7(d), maintain a file of the temperature monitoring results for at least two years.

[47 FR 34143, Aug. 6, 1982, as amended at 65 FR 61762, Oct. 17, 2000]

§ 60.474 Test methods and procedures.

(a) For saturators, the owner or operator shall conduct performance tests required in §60.8 as follows:

(1) If the final product is shingle or mineral-surfaced roll roofing, the tests shall be conducted while 106.6-kg (235-lb) shingle is being produced.

(2) If the final product is saturated felt or smooth-surfaced roll roofing, the tests shall be conducted while 6.8-kg (15-lb) felt is being produced.

(3) If the final product is fiberglass shingle, the test shall be conducted while a nominal 100-kg (220-lb) shingle is being produced.

(b) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).

(c) The owner or operator shall determine compliance with the particulate matter standards in §60.472 as follows:

(1) The emission rate (E) of particulate matter shall be computed for each run using the following equation:

$E=(c_s Q_{sd})/(PK)$

where:

E=emission rate of particulate matter, kg/Mg (lb/ton).

c_s=concentration of particulate matter, g/dscm (gr/dscf).

Q_{sd}=volumetric flow rate of effluent gas, dscm/hr (dscf/hr).

P=asphalt roofing production rate or asphalt charging rate, Mg/hr (ton/hr).

K=conversion factor, 1000 g/kg [7000 (gr/lb)].

(2) Method 5A shall be used to determine the particulate matter concentration (c_s) and volumetric flow rate (Q_{sd}) of the effluent gas. For a saturator, the sampling time and sample volume for each run shall be at least 120 minutes and 3.00 dscm (106 dscf), and for the blowing still, at least 90 minutes or the duration of the coating blow or non-coating blow, whichever is greater, and 2.25 dscm (79.4 dscf).

(3) For the saturator, the asphalt roofing production rate (P) for each run shall be determined as follows: The amount of asphalt roofing produced on the shingle or saturated felt process lines shall be obtained by direct measurement. The asphalt roofing production rate is the amount produced divided by the time taken for the run.

(4) For the blowing still, the asphalt charging rate (P) shall be computed for each run using the following equation:

$P=(Vd)/(K' \Theta)$

where:

P=asphalt charging rate to blowing still, Mg/hr (ton/hr).

V=volume of asphalt charged, m^3 (ft^3).

d=density of asphalt, kg/m^3 (lb/ft^3).

K′=conversion factor, 1000 kg/Mg (2000 lb/ton).

Θ=duration of test run, hr.

(i) The volume (V) of asphalt charged shall be measured by any means accurate to within 10 percent.

(ii) The density (d) of the asphalt shall be computed using the following equation:

$$d = K_1 - K_2 T_i$$

Where:

d = Density of the asphalt, kg/m^3 (lb/ft^3)

K_1= 1056.1 kg/m^3 (metric units)

= 64.70 lb/ft^3 (English Units)

K_2= 0.6176 $kg/(m^3 \cdot °C)$ (metric units)

= 0.0694 $lb/(ft^3 \cdot °F)$ (English Units)

T_i= temperature at the start of the blow, °C (°F)

(5) Method 9 and the procedures in §60.11 shall be used to determine opacity.

(d) The Administrator will determine compliance with the standards in §60.472(a)(3) by using Method 22, modified so that readings are recorded every 15 seconds for a period of consecutive observations during

representative conditions (in accordance with §60.8(c)) totaling 60 minutes. A performance test shall consist of one run.

(e) The owner or operator shall use the monitoring device in §60.473 (a) or (b) to monitor and record continuously the temperature during the particulate matter run and shall report the results to the Administrator with the performance test results.

(f) If at a later date the owner or operator believes that the emission limits in §60.472(a) and (b) are being met even though one of the conditions listed in this paragraph exist, he may submit a written request to the Administrator to repeat the performance test and procedure outlined in paragraph (c) of this section.

(1) The temperature measured in accordance with §60.473(a) is exceeding that measured during the performance test.

(2) The temperature measured in accordance with §60.473(b) is lower than that measured during the performance test.

(g) If fuel oil is to be used to fire an afterburner used to control emissions from a blowing still, the owner or operator may petition the Administrator in accordance with §60.11(e) of the General Provisions to establish an opacity standard for the blowing still that will be the opacity standard when fuel oil is used to fire the afterburner. To obtain this opacity standard, the owner or operator must request the Administrator to determine opacity during an initial, or subsequent, performance test when fuel oil is used to fire the afterburner. Upon receipt of the results of the performance test, the Administrator will make a finding concerning compliance with the mass standard for the blowing still. If the Administrator finds that the facility was in compliance with the mass standard during the performance test but failed to meet the zero opacity standard, the Administrator will establish and promulgate in the Federal Register an opacity standard for the blowing still that will be the opacity standard when fuel oil is used to fire the afterburner. When the afterburner is fired with natural gas, the zero percent opacity remains the applicable opacity standard.

[54 FR 6677, Feb. 14, 1989, as amended 54 FR 27016, June 27, 1989; 65 FR 61762, Oct. 17, 2000]

Indiana Department of Environmental Management
Office of Air Quality
and
City of Indianapolis
Office of Environmental Services

Addendum to the Technical Support Document for a Minor Source Operating Permit Renewal

Source Background and Description

Source Name:	**Firestone Building Products Company**
Source Location:	**3525 South Arlington, Indianapolis, Indiana 46203**
County:	**Marion**
SIC Code:	**2952**
Permit Renewal No.:	**M097-23189-00140**
Permit Reviewer:	**Monica Doyle**

On April 18, 2008, the Office of Air Quality (OAQ) and the Office of Environmental Services (OES) had a notice published in the Indianapolis Star, Indianapolis, Indiana, stating that Firestone Building Products Company had proposed to renew a Minor Source Operating Permit (MSOP) to operate a stationary facility for manufacturing asphalt roofing materials. The notice also stated that OAQ and OES proposed to issue a permit 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.

On May 8, 2008, Firestone Building Products Company submitted comments on the draft MSOP. Upon further review, the OAQ and OES have decided to make the following revisions to the MSOP. The TSD will remain as it originally appeared when published. Changes to the permit or technical support material that occur after the permit has published for public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. Bolded language has been added and the language with strikeout has been deleted.

The comments and responses, including changes to the permit, are as follows:

Comment 1:

Section D.1 contains three errors in the identification of the control devices.

Response 1:

The identifications of the control devices have been corrected as requested.

D.1.8 Monsanto Mist Eliminator Parameter Monitoring

(a) The Permittee shall record the pressure drop across the Monsanto Mist Eliminators (~~CD-01~~ **CE-01** and CE-08) used in conjunction with either Line 1 or Line 2 at least once per day when the roofing lines are in operation. When for any one reading, the pressure drop across the Monsanto Mist Eliminator is outside the normal range of three (3) and twelve (12) inches of water, or a range

established during the most recent 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.

(b) 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 OES, and shall be calibrated at least once every six (6) months.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.9 Record Keeping Requirements

(a) To document compliance with Condition D.1.2, the Permittee shall maintain records of monthly throughput of rolled roofing in tons on Line 2 and the associated VOC emissions per month.

(b) To document compliance with Condition D.1.7, the Permittee shall maintain a record of the daily visible emission notations of the CE-01 stack 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, (e.g., the process did not operate that day).

(c) To document compliance with Condition D.1.8, the Permittee shall maintain a daily record of the pressure drop across the Monsanto Mist Eliminators (~~EU-01 and EU-08~~ **CE-01 and CE-08**). 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, (e.g., the process did not operate that day).

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES

Technical Support Document (TSD) for a Minor Source Operating Permit Renewal

Source Background and Description

Source Name:	**Firestone Building Products Company**
Source Location:	**3525 South Arlington, Indianapolis, Indiana 46203**
County:	**Marion**
SIC Code:	**2952**
Permit Renewal No.:	**M097-23189-00140**
Permit Reviewer:	**Monica Doyle**

The Indiana Department of Environmental Management (IDEM) Office of Air Quality (OAQ) and Indianapolis Office of Environmental Services (OES) have reviewed a Minor Source Operating Permit (MSOP) renewal application from Firestone Building Products Company relating to the operation of a stationary facility for manufacturing asphalt roofing materials.

History

On June 5, 2006, Firestone Building Products Company submitted applications to the OAQ requesting to renew its operating permit. Firestone Building Products Company was issued a Minor Source Operating Permit, M097-12488-00140, on September 6, 2001.

Permitted Emission Units and Pollution Control Equipment

(a) One (1) modified bitumen asphalt roofing line (Line 1), identified as EU-01, constructed in 1990, with a maximum capacity of 18,836 pounds of asphalt compound per hour, and 11,218 pounds of limestone filler per hour. The system consists of three (3) 12-ton capacity mix tanks, one (1) 10-ton capacity mix tank, one (1) 15-ton use tank, and one (1) two section impregnation vat. The system uses one (1) 11,300 cfm Monsanto Mist Eliminator (MME) identified as CE-01 for control, and exhausts to Stack 1.

(b) One (1) Built Up Roofing (BUR) system (Line 2), identified as EU-12, constructed in 1998, with a maximum capacity of 14,182 pounds of asphalt compound per hour, and 13,091 pounds of limestone filler per hour. The system consists of one (1) mixing screw and surge tank, one (1) saturator, or coater, where heated bitumen with limestone filler will be applied to continuously-fed fiberglass, and one (1) sand application process which will apply sand to the surface of the roll roofing (asphalt-saturated fiberglass substrate). The system uses one (1) 11,300 cfm Monsanto Mist Eliminator (MME) identified as CE-08 for control, and exhausts to Stack 4.

(c) One (1) 100-ton storage silo for calcium carbonate filler material, identified as EU-02, constructed in 1990. Control equipment consists of one (1) Whirl Airflow dust collector identified as CE-04 for control, and exhausts to Stack 2.

(d) One (1) 50-ton capacity sand storage silo, identified as EU-07, handling 78,465 tons of sand per year, constructed in 1994. The silo is equipped with an Ultra Industries baghouse identified as CE-07 for control, and exhausts to Stack 7.

(e) One (1) limestone receiving bin, identified as EU-14, constructed in 2001, with a maximum capacity of 23,360 tons of limestone usage per year, using one (1) Whirl Airflow 600 cfm dust collector identified as CE-02 for control, and exhausting to Stack 5.

(f) One (1) natural gas fired Heatec Thermal Fluid Heater, identified as EU-13, installed in 1989, with a capacity of 6 million Btu per hour, using no controls, and venting to Stack 13.

(g) One (1) natural gas fired Heatec Thermal Fluid Heater, identified as EU-03, installed in 1989, with a capacity of 6 million Btu per hour, using no controls, and venting to Stack 3.

(h) One (1) natural gas fired Inferno Therm Polyolefin (APP) Heater, identified as EU-08, installed in 1989, with a capacity of 0.8 million Btu per hour, using no controls, and venting to Stack 8.

(i) Two (2) 3,470 cubic foot (98.25 cubic meters) asphalt storage tanks, installed in 1990, using one (1) 11,300 cfm Monsanto Mist Eliminator (MME), identified as CE-01 for control, and exhausting to Stack 1.

(j) One (1) 3,470 cubic foot (98.25 cubic meter) oxidized asphalt storage tank, installed in 1998, using one (1) 11,300 cfm Monsanto Mist Eliminator, (MME) identified as CE-08 for control, and exhausting to Stack 4, or one (1) 11,300 cfm Monsanto Mist Eliminator (MME), identified as CE-01 for control, and exhausting to Stack 1.

(k) One (1) 3,370 cubic foot (95.41 cubic meters) liquid polypropylene storage tank, installed in 1990, using no controls.

(l) Fourteen (14) seasonally used natural gas space heaters, with a combined maximum capacity of 15.2 MMBtu/hour.

Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit

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

Existing Approvals

The source has been operating under the following previous approvals:

(a) MSOP 097-12488-00140, issued on September 6, 2001; and

(b) Notice-Only Change M097-20139-00140, issued on June 2, 2005; and

(c) Notice-Only Change M097-21857-00140, issued on December 8, 2005.

All conditions from previous approvals were incorporated into this MSOP Renewal except the following:

(1) Condition D.4.3 Record Keeping Requirement [326 IAC 12][40 CFR 60.116b]

Pursuant to the New Source Performance Standard 40 CFR Part 60.116b Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction or Modification Commenced after July 23, 1984, the

Permittee shall keep readily accessible records showing the dimension or tank capacities of these tanks. These records shall be kept for the life of the source.

And

(2) Condition D.4.4 Reporting Requirement [326 IAC 12][40 CFR 60.116b]

Pursuant to the New Source Performance Standard 40 CFR Part 60.116b Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction or Modification Commenced after July 23, 1984, the Permittee shall notify IDEM, OAQ, and OES within thirty (30) days when the maximum true vapor pressure of the liquid being stored in any tank exceeds 27.6 kiloPascals (kPa). Available data on the maximum true vapor pressure of the liquid being stored shall be in accordance with 40 CFR Part 60.116b(e). The report submitted by the Permittee requires the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Reason not incorporated: Pursuant to 40 CFR 60.110, Subpart Kb storage vessels with a capacity greater than 75 cubic meters and less than 151 cubic meters, with a maximum true vapor pressure less than 15.0 kilopascals, are exempt from the requirements of this subpart. The three (3) 98.25 cubic meter asphalt storage tanks each have a true maximum vapor pressure less than 15.0 kilopascals.

(3) Condition D.1.2 VOC General Reduction Requirements [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6, the Permittee shall employ Best Available Control Technology (BACT) for emission unit EU-12. Pursuant to CP-097-0140-01, issued on November 17, 1997, BACT for emission unit EU-12 has been determined to be 29 tons per twelve (12) consecutive month period.

Reason modified: Based upon a BACT determination on Line 2 (EU-12) prior to CP-097-0140-01, the VOC emissions were limited to 29 tons per year. In the initial MSOP, 097-12488-00140, issued on September 6, 2001, this limit was incorrectly changed to 42.2 tons per year. This limit will be corrected to reflect 29 tons per year. There have been no exceedences reported to OES.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (deg F)
1	EU-01	27	2.66	10,000	114
2	EU-02	44	1	660	Ambient
3	EU-03	18	1.5	1,900	550
4	EU-12; Mixing & Surge Tank; Oxidized Asphalt Storage Tanks; Asphalt Storage Tank	27	2.66	10,000	114
5	Limestone Receiving Bin	34	0.75	600	Ambient
7	Sand Silo	42	0.5	650	Ambient
8	APP Tank Heater	16	0.75	1,100	290
13	Heatec Asphalt Heater	18	1.5	1,900	550

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Marion County

Pollutant	Designation
SO_2	Better than national standards.
CO	Attainment effective February 18, 2000, for the part of the city of Indianapolis bounded by 11th Street on the north; Capitol Avenue on the west; Georgia Street on the south; and Delaware Street on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of Indianapolis and Marion County.
O_3	Attainment effective October 19, 2007, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Attainment effective July 10, 2000, for the part of Franklin Township bounded by Thompson Road on the south; Emerson Avenue on the west; Five Points Road on the east; and Troy Avenue on the north. Attainment effective July 10, 2000, for the part of Wayne Township bounded by Rockville Road on the north; Girls School Road on the east; Washington Street on the south; and Bridgeport Road on the west. The remainder of the county is not designated.
[1]Attainment effective October 18, 2000, for the 1-hour ozone standard for the Indianapolis area, including Marion County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X*. The 1-hour designation was revoked effective June 15, 2005. Basic Nonattainment effective April 5, 2005 for PM2.5.	

(a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) 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 NOx emissions are considered when evaluating the rule applicability relating to ozone.

On November 8, 2007, a temporary emergency rule took effect redesignating Marion 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 NOx 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.

(b) Marion County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. Until U.S. EPA adopts specific New Source Review rules for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions, pursuant to the Non-attainment New Source Review requirements. See the State Rule Applicability for the source section.

(c) Marion County has been classified as attainment or unclassifiable in Indiana for PM10, SO_2, NO_2, CO, and Lead. Therefore, these 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.

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

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	Potential To Emit (tons/year)
PM	25.34
PM10[(1)]	14.43
SO_2	0.00
NO_x	12.30
VOC	37.02
CO	10.30

(1) Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

HAPs	Potential To Emit (tons/year)
Single	<10
Combined	<25

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM, PM10 and VOC is greater than 25 tons per year and less than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. An MSOP will be issued.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants is less than 100 tons per year. The source is not subject to the provisions of 326 IAC 2-7. Therefore, the source will be issued an MSOP.

(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/or 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.

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	not reported
PM-10	1.94
SO_2	not reported
VOC	9.89
CO	not reported
NO_x	not reported
HAP	not reported

Potential to Emit After Issuance

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 MSOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

	Potential To Emit (tons/year)						
Process/emission unit	**PM**	**PM-10**	**SO_2**	**VOC**	**CO**	**NO_x**	**HAPs**
EU-01	3.44	3.44	-	12.79	-	-	-
EU-02	5.61	1.93	-	-	-	-	-
EU-07	3.67	1.26	-	-	-	-	-
EU-12	4.01	4.01	-	9.63	-	-	-
EU-03, EU-08, EU-13	0.10	0.40	-	0.30	4.70	5.60	-
EU-14	8.41	2.89	-	-	-	-	-
Fourteen (14) seasonally used space heaters	0.10	0.50	-	0.40	5.60	6.70	-
Total	**25.34**	**14.43**	-	**37.02**	**10.30**	**12.30**	-

(a) This existing stationary source is not major for PSD because the emissions of each criteria pollutant are less than two hundred fifty (<250) tons per year, and it is not one of the twenty-eight (28) listed source categories.

(b) Fugitive Emissions
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 there is no applicable New Source Performance Standard that was in effect on August 7, 1980, therefore fugitive emissions are counted toward the determination of PSD and Emission Offset applicability.

Federal Rule Applicability

(a) Pursuant to 40 CFR 60.470, the affected source that is subject to the requirements of 40 CFR 60, Subpart UU, consists of all facilities located at the source engaged in the following operations: each saturator, each mineral handling and storage facility at asphalt roofing plants; and each asphalt storage tank and each blowing still at asphalt processing plants, and asphalt roofing plants. The source is not a petroleum refinery. The specific facilities include the following:

(1) One (1) modified bitumen asphalt roofing line (Line 1), identified as EU-01, constructed in 1990, with a maximum capacity of 18,836 pounds of asphalt

compound per hour, and 11,218 pounds of limestone filler per hour. The system consists of three (3) 12-ton capacity mix tanks, one (1) 10-ton capacity mix tank, one (1) 15-ton use tank, and one (1) two section impregnation vat. The system uses one (1) 11,300 cfm Monsanto Mist Eliminator (MME) identified as CE-01 for control, and exhausts to Stack 1.

(2) One (1) Built Up Roofing (BUR) system (Line 2), identified as EU-12, constructed in 1998, with a maximum capacity of 14,182 pounds of asphalt compound per hour, and 13,091 pounds of limestone filler per hour.. The system consists of one (1) mixing screw and surge tank, one (1) saturator, or coater, where heated bitumen with limestone filler will be applied to continuously-fed fiberglass, and one (1) sand application process which will apply sand to the surface of the roll roofing (asphalt-saturated fiberglass substrate). The system uses one (1) 11,300 cfm Monsanto Mist Eliminator (MME) identified as CE-08 for control, and exhausts to Stack 4.

(3) One (1) 100-ton storage silo for calcium carbonate filler material, identified as EU-02, constructed in 1990. Control equipment consists of one (1) Whirl Airflow dust collector identified as CE-04 for control, and exhausts to Stack 2.

(4) One (1) 50-ton capacity sand storage silo, identified as EU-07, handling 78,465 tons of sand per year, constructed in 1994. The silo is equipped with an Ultra Industries baghouse identified as CE-07 for control, and exhausts to Stack 7.

(5) One (1) limestone receiving bin, identified as EU-14, constructed in 2001, with a maximum capacity of 23,360 tons of limestone usage per year, using one (1) Whirl Airflow 600 cfm dust collector identified as CE-02 for control, and exhausting to Stack 5.

(6) Two (2) 3,470 cubic foot (98.25 cubic meters) asphalt storage tanks, installed in 1990, using one (1) 11,300 cfm Monsanto Mist Eliminator (MME), identified as CE-01 for control, and exhausting to Stack 1.

(7) One (1) 3,470 cubic foot (98.25 cubic meter) oxidized asphalt storage tank, installed in 1998, using one (1) 11,300 cfm Monsanto Mist Eliminator, (MME) identified as CE-08 for control, and exhausting to Stack 4, or one (1) 11,300 cfm Monsanto Mist Eliminator (MME), identified as CE-01 for control, and exhausting to Stack 1.

(8) One (1) 3,370 cubic foot (95.41 cubic meters) liquid polypropylene storage tank, installed in 1990, using no controls.

The existing affected source associated with the manufacturing of asphalt roofing materials is subject to the following portions of 40 CFR 60, Subpart UU:

(1) 40 CFR 60.472 (a)(1)(i)(ii)
(2) 40 CFR 60.472 (a)(2)
(3) 40 CFR 60.472 (a)(3)
(4) 40 CFR 60.472 (b)(1)
(5) 40 CFR 60.472 (b)(2)
(6) 40 CFR 60.472 (b)(3)
(7) 40 CFR 60.472 (b)(4)
(8) 40 CFR 60.472 (b)(5)
(9) 40 CFR 60.472 (c)
(10) 40 CFR 60.472 (d)
(11) 40 CFR 60.473 (a)

(12) 40 CFR 60.473 (b)
(13) 40 CFR 60.473 (c)
(14) 40 CFR 60.473 (d)
(15) 40 CFR 60.474 (a)(1)
(16) 40 CFR 60.474 (a)(2)
(17) 40 CFR 60.474 (a)(3)
(18) 40 CFR 60.474 (b)
(19) 40 CFR 60.474 (c)(1)
(20) 40 CFR 60.474 (c)(2)
(21) 40 CFR 60.474 (c)(3)
(22) 40 CFR 60.474 (c)(4)(i)
(23) 40 CFR 60.474 (c)(4)(ii)
(24) 40 CFR 60.474 (c)(5)
(25) 40 CFR 60.474 (d)
(26) 40 CFR 60.474 (e)
(27) 40 CFR 60.474 (f)(1)
(28) 40 CFR 60.474 (f)(2)
(29) 40 CFR 60.474 (g)

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

(b) The requirements of the New Source Performance Standard for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, 40 CFR 60.110, Subpart Kb are not included in the permit because each storage vessel with a capacity greater than 75 cubic meters has a maximum true vapor pressure less than 15.0 kilopascals.

(c) The requirements of the National Emission Standards for Hazardous Air Pollutants for Asphalt Processing and Asphalt Roofing Manufacturing, 40 CFR 63.8680, Subpart LLLLL are not included in the permit because the source is not a major source of HAPs.

(d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this MSOP permit.

State Rule Applicability - Entire Source

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

This source is not major under nonattainment NSR because it has the potential to emit less than 100 tons of PM10 (as a surrogate for PM2.5). Therefore, the Non-attainment New Source Review requirements are not applicable.

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

This source is not a major source. This source is not one (1) of the twenty-eight (28) listed source categories. The potential to emit each criteria pollutant from the entire source is less than 250 tons per year. Therefore, this source is a minor source and the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) are not applicable.

326 IAC 2-4.1 (Hazardous Air Pollutants)

This source will emit less than ten (10) tons per year of a single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

Pursuant to 326 IAC 2-6-1(a)(1), (2), and (3), this source is not subject to 326 IAC 2-6 (Emission Reporting) because, as an MSOP source, it is not required to have an operating permit under 326 IAC 2-7, it does not emit lead into the ambient air at levels equal to or greater than five (5) tons per year, and it is not located in Lake, Porter, or LaPorte Counties.

326 IAC 5-1 (Opacity Limitations)

The Opacity regulation 326 IAC 5-1 is generally applicable to all point sources of emissions. Since the source is located in Marion County, and is not located in the areas of Marion County referred to in 326 IAC 5-1-5, 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 thirty percent (30%) 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 6-4 (Fugitive Dust Emissions)

This source is subject to 326 IAC 6-4. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), fugitive dust may not be visibly crossing the property lines of the source, except as provided in 326 IAC 6-4-6.

326 IAC 6.5-1-2 (Particulate Matter Limitations Except Lake County) and 326 IAC 6.5-6 (Marion County)

This source has the potential to emit particulate of less than one hundred (100) tons per year and has actual emissions less than ten (10) tons per year (see Actual Calculations section). Firestone Building Products Company is not specifically identified in 326 IAC 6.5-6 (Marion County). Therefore, 326 IAC 6.5-1-2 (Particulate Matter Limitations Except Lake County) and 326 IAC 6.5-6 (Marion County) does not apply to this source.

326 IAC 8-5-2 (Miscellaneous operations: asphalt paving)

This facility is not subject to 326 IAC 8-5-2 (Miscellaneous operations: asphalt paving), because the source does not produce asphalt paving.

State Rule Applicability – Individual Facilities

326 IAC 6-2-4 (Indirect Heating)

326 IAC 6-2-4 applies to the 6 MMBtu/hr thermal fluid heaters (EU-03) and (EU-13) since it is IDEM=s policy to apply the definition of Acombustion for indirect heating@ found in 326 IAC 1-2-19 to heaters which heat an intermediate fluid for heat transfer. In the case of the thermal fluid heaters, the intermediate fluid is the thermal fluid, and that fluid is used to heat the asphalt in the tanks through another heat exchanger. Since the 0.8 MMBtu/hr polyolefin (APP) heater (EU-08) is simply a single heat exchanger inside a tank that does not heat an intermediate fluid, 326 IAC 6-2-4 does not apply to it. 326 IAC 6-2-4 does not apply to the 3 MMBtu/hr warehouse space heater since it does not meet the definition in 326 IAC 1-2-19. Pursuant to 326 IAC 6-2-4 the PM emissions from EU-03 and EU-13 are limited by the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where: Pt = Pounds of particulate matter emitted per million Btu heat input.

Q = Total source maximum operating capacity rating in million Btu per hour heat input. As each new indirect heater is added to the plant Q will increase.

The value of Q for this facility is 12 (6+6), therefore the facility is limited to 0.57 pounds of particulate matter per million Btu input. Based on the potential to emit, the source is able to comply with this limit.

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

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the emission units listed in the table below shall not exceed the emission rate calculated using the following 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

The following table sets forth the current maximum process weight rate for specific emission units and the allowable rate of emissions calculated for that process weight rate.

Emission Unit	P = Current Max Process Weight Rate (tons/hr)	E = Calculated Rate of Emission (lb/hr)	Uncontrolled PM PTE (lbs/hr)
Line 1 Operations (EU-01)	13.64	23.61	0.79
Line 2 Operations (EU-12)	15.02	25.18	0.92
Calcium Carbonate Silo (EU-02)	1.78	6.03	1.28
Sand Silo (EU-07)	1.16	4.52	0.84
Limestone Receiving Bin (EU-14)	2.66	7.89	1.92

The limits set for EU-01 and EU-12 are subject to a more stringent emissions limitation pursuant to 40 CFR 60.470, Subpart UU.

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

Line 2 operations (EU-12) were subject to 326 IAC 8-1-6 (New Facilities; General Reduction Requirements), because the facility had potential emissions of 25 tons or more of VOCs per year which were not otherwise regulated by other provisions of Article 8. Pursuant to CP-097-0140-01, issued on November 17, 1997, a BACT analysis on the Asphalt felt coating line including coater (which vents to the Monsanto Mist Eliminator) was performed, and the BACT control was determined to be the no-control option. Further, the BACT analysis was performed using potential VOC emissions of 29 tons from the asphalt felt coating line. Therefore, BACT was determined to be a limit of 29 tons per year of VOC. This is the equivalent of 0.31 lb. VOC emitted from the Monsanto Mist Eliminator per ton of product from the asphalt felt coating line.

On April 2, 2008, the source clarified the amount of maximum potential throughput for the asphalt compound. Based upon this correction, Line 2 operations (EU-12) do not have potential emissions of 25 tons per year of VOC. Pursuant to 326 IAC 8-1-1, once a facility becomes

subject to a rule within this article under any rule applicability section in this article, such facility shall remain subject to such rule notwithstanding any subsequent decrease in VOC emissions unless the provisions of subsections (b) through (d) are met.

326 IAC 8-1-6 does not apply to any other facility at the source, since the Potential to Emit VOC is less than 25 tons per year for all other facilities within the source.

Compliance Determination, Monitoring and Testing Requirements

(a) The compliance determination and monitoring requirements applicable to this source are as follows:

Emission Unit/Control	Operating Parameters	Frequency
Monsanto Mist Eliminator	Pressure Drop (3 to 12 inches of water)	Once per day
CE-01	Visible Emission Notation	Once per day
CE-08	Visible Emission Notation	Once per day

(b) The testing requirements applicable to this source are as follows:

Testing Requirements				
Emission Unit	Control Device	Pollutant	Timeframe for Testing	Frequency of Testing
EU-01	CE-01	PM, PM10, VOC	180 days after permit issuance	Every five years
EU-12	CE-08	PM, PM10, VOC	180 days after permit issuance	Every five years

Testing Requirements

In order to determine PM, PM10, and VOC emission factors, the Permittee shall perform PM, PM10, and VOC testing no later than 180 days after issuance of this permit on the modified bitumen asphalt roofing line (Line 1), identified as EU-01, and on the Built Up Roofing (BUR) system (Line 2), identified as EU-12, using methods as approved by the IDEM, OAQ and OES. PM10 includes filterable and condensable PM10. Testing shall be conducted in accordance with Section C - Performance Testing, and repeated every 5 years from the date of the most recent compliance determination.

Recommendation

The staff recommends to the Commissioner that the MSOP Renewal 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 5, 2006. Additional information was received on July 18, 2007.

Conclusion

The operation of this facility for manufacturing asphalt roofing materials shall be subject to the conditions of the attached proposed Minor Source Operating Permit Renewal M097-23189-00140.

Potential Emissions of VOC and PM/PM10

Company Name: Firestone Building Products Company
Address: 3525 S. Arlington Avenue, Indianapolis, IN 46203
MSOP No.: 097-23189-00140
Reviewer: Monica Doyle
Date: April 2, 2008

Emission Unit ID	Emission Unit Description	Stack ID	Control Device	Control	Max. throughput Asphalt Compound			Flow Rate		Temp.	AP-42	VOC Site Specific Emission Factor	PTE VOC (before control)			Max. throughput Limestone Filler			PM/PM10 Site Specific Emission Factor	PTE PM/PM10 (before control)			PTE PM/PM10 (after control)
				Efficiency	lb/hr	ton/hr	ton/yr	acfm	scfm	oF	Em. Factor		lb/hr	lb/day	ton/yr	lb/hr	ton/hr	ton/yr		lb/hr	lb/day	ton/yr	ton/yr
				%							lb/ton	lb/ton							lb/ton				
1	Line 1 (EU-01)	1	Mesh	57.0%	18,836	9.42	82,502	10,000	8,013	114	N/A	0.31	2.92	70.07	12.79	11,218	5.61	49,135	0.14	0.79	18.85	3.44	1.48
12	Line 2 (EU-12)	4	Mesh	57.0%	14,182	7.09	62,117	10,300	8,253	114	N/A	0.31	2.20	52.76	9.63	13,091	6.55	57,339	0.14	0.92	21.99	4.01	1.73
													5.12	122.83	22.42					1.70	40.84	7.45	3.20

Methodology

Site specific emission factors from 1998 Stack Test, observed by OES.

PTE before control (lb/hour) = Maximum throughput (tons/year) x emission factor (lbs/ton) x 1 year/8760 hours
PTE before control (tons/year) = PTE before control (lbs/hour) x 8760 hours x 1 ton/2000 lbs
PTE after control (tons/year) = PTE before control (tons/year) x 1 - control efficiency (%

Potential Emissions of PM and PM10
Storage Silos

Company Name: **Firestone Building Products Company**
Address: **3525 S. Arlington Avenue, Indianapolis, IN 46203**
MSOP No.: **097-23189-00140**
Reviewer: **Monica Doyle**
Date: **September 20, 2007**

Emission Unit	Emission Unit Description	Stack ID	Control Device	Control Efficiency	Maximum Throughput		AP-42 Emission Factors		PM PTE (before control)		PM PTE (after control)	PM-10 PTE (before control)		PM-10 PTE (after control)
					lbs/hr	tons/year	PM (lbs/ton)	PM-10 (lbs/ton)	lbs/hr	tons/year	tons/year	lbs/hr	tons/year	tons/year
2	Calcium Carbonate Silo	2	Baghouse	99%	3,560	15,593	0.72	0.48	1.28	5.61	0.021	0.85	1.93	0.019
7	Sand Silo	7	Baghouse	99%	2,330	10,205	0.72	0.48	0.84	3.67	0.014	0.56	1.26	0.013
14	Limestone Receiving Bin	5	Baghouse	99%	5,333	23,360	0.72	0.48	1.92	8.41	0.031	1.28	2.89	0.290
										17.70	0.07	2.69	6.08	0.32

Methodology

Emission factors are derived from AP-42, Table 11.12-2 (Cement/fly ash Storage Silos)

PTE before control (lb/hour) = Maximum throughput (tons/year) x emission factor (lbs/ton) x 1 year/8760 hours
PTE before control (tons/year) = PTE before control (lbs/hour) x 8760 hours x 1 ton/2000 lbs
PTE after control (tons/year) = PTE before control (tons/year) x 1 - control efficiency (%)

Appendix A: Emissions Calculations
Emission Calculations

Company Name: Firestone Building Products Company
Address: 3525 S. Arlington Avenue, Indianapolis, IN 46203
MSOP No.: 097-23189-00140
Reviewer: Monica Doyle
Date: September 20, 2007

Limestone Receiving Bin Emissions (14)	PM & PM10	
Previously Determined Emission Factor from CP	0.72	lbs/ton
Maximum Limestone Usage Rate	23,360.00	tons/year
Potential To Emit	8.4096	tons/year
Limestone Receiving Bin Dust Collector	PM &PM10	
Maximum Particulate Capacity	8.4096	tons/year
Control Efficiency	99%	
Controlled PTE for Limestone Receiving Bin	0.084096	tons/year

Methodology
Potential to emit (tons/year) = Maximum usage rate (tons/year) x emission factor, or mass loading rate (lbs/ton) x 1 ton / 2000 lbs.
PTE after control (tons/year) = PTE before control (tons/year) x 1 - control efficiency (%)

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
EU-03, EU-08, EU-13

Company Name: **Firestone Building Products Company**
Address: **3525 S. Arlington Avenue, Indianapolis, IN 46203**
MSOP No.: **097-23189-00140**
Reviewer: **Monica Doyle**
Date: **September 20, 2007**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
12.8	112.1

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/	0.1	0.4	0.0	5.6	0.3	4.7

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology
All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Potential Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBt
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006
(SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 5 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler
HAPs Emissions

Company Name: **Firestone Building Products Company**
Address: **3525 S. Arlington Avenue, Indianapolis, IN 46203**
MSOP No.: **097-23189-00140**
Reviewer: **Monica Doyle**
Date: **September 20, 2007**

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMc	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/	1.177E-04	6.728E-05	4.205E-03	1.009E-01	1.906E-04

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMc	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/	2.803E-05	6.167E-05	7.849E-05	2.130E-05	1.177E-04

Methodology is the same as page 4.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Seasonally Used Space Heaters

Company Name: **Firestone Building Products Company**
Address: **3525 S. Arlington Avenue, Indianapolis, IN 46203**
MSOP No.: **097-23189-00140**
Reviewer: **Monica Doyle**
Date: **September 20, 2007**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
15.2	133.2

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/	0.1	0.5	0.0	6.7	0.4	5.6

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology
All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Potential Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBt
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
See page 7 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler
HAPs Emissions

Company Name: **Firestone Building Products Company**
Address: **3525 S. Arlington Avenue, Indianapolis, IN 46203**
MSOP No.: **097-23189-00140**
Reviewer: **Monica Doyle**
Date: **September 20, 2007**

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.398E-04	7.989E-05	4.993E-03	1.198E-01	2.264E-04

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	3.329E-05	7.323E-05	9.321E-05	2.530E-05	1.398E-04

Methodology is the same as page 6.
The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1

Appendix A: Emission Calculations
Summary

Company Name: **Firestone Building Products Company**
Address: **3525 S. Arlington Avenue, Indianapolis, IN 46203**
MSOP No.: **097-23189-00140**
Reviewer: **Monica Doyle**
Date: **September 20, 2007**

Potential to Emit

Emission Unit	PM	PM10	SO_2	NO_x	VOC	CO	HAPs
EU-01	3.44	3.44	0.00	0.00	12.79	0.00	neg.
EU-02	5.61	1.93	0.00	0.00	0.00	0.00	neg.
EU-07	3.67	1.26	0.00	0.00	0.00	0.00	neg.
EU-12	4.01	4.01	0.00	0.00	9.63	0.00	neg.
EU-03, EU-08, EU-13	0.10	0.40	0.00	5.60	0.30	4.70	neg.
EU-14	8.41	2.89	0.00	0.00	0.00	0.00	neg.
Fourteen (14) seasonally used space heaters	0.10	0.50	0.00	6.70	0.40	5.60	neg.
Total	**25.34**	**14.43**	**0.00**	**12.30**	**23.12**	**10.30**	**neg.**