INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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100 North Senate Avenue
Indianapolis, Indiana 46204
MC 61-53 IGCN 1003
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant

DATE: October 23, 2007

RE: Building Materials Manufacturing Corporation / 129-23419-00011

FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER.dot 03/23/06

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FEDERALLY ENFORCEABLE STATE OPERATING PERMIT RENEWAL
OFFICE OF AIR QUALITY

Building Materials Manufacturing Corporation
901 Givens Road
Mount Vernon, Indiana 47620

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

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

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

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

Operation Permit No.: F129-23419-00011	
Issued by: *Original signed by Matt Stuckey for* Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: October 23, 2007 Expiration Date: October 23, 2012

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SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary asphalt roofing manufacturing plant.

Source Address:	901 Givens Road, Mount Vernon, IN 47620
Mailing Address:	901 Givens Road, Mount Vernon, IN 47620
General Source Phone Number:	(812) 833-2309
SIC Code:	2952
County Location:	Posey
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

(a) One (1) modified bitumen production line with a maximum production rate of 12.9 tons per hour, installed in 1986, and exhausting through Stack S3.

Under the Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture NSPS (40 CFR Part 60, Subpart UU), the modified bitumen production line is considered an affected facility.

(b) Storage and handling of bulk material operations, consisting of the following:

(1) Shingle and modified bitumen granules handling operations, with a maximum throughput of 30.60 tons per hour and exhausting through Stacks S13, S14, S27, S28, S29 and S30. Construction of the shingle granules handling operation commenced in December 1972. Construction of the modified bitumen granules handling operation commenced in January 1986;

(2) Shingle and modified bitumen filler handling operations, with a maximum throughput of 32.00 tons per hour, utilizing a baghouse for particulate matter control, and exhausting through Stacks S8, S9, S10, S11, S19, S20, S21, S22, S23, S24, and S46. Construction of the shingle filler handling operation commenced in December 1972. Construction of the modified bitumen filler handling operation commenced in January 1986;

(3) Talc handling operations, with a maximum throughput of 0.09 tons per hour, utilizing a baghouse for particulate matter control, and exhausting through Stacks S18 and S25; and

(4) Shingle and modified bitumen sand handling operations, with a maximum throughput of 4.63 tons per hour, and exhausting through Stacks S12, S15, S17 and S26.

Under the Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture NSPS (40 CFR Part 60, Subpart UU), the modified bitumen granules handling and filler handling, talc handling, and sand handling operations are considered affected facilities.

(c) One (1) asphalt blowing operation, consisting of three (3) blowstills, with a maximum blowing rate of 40,000 pounds per hour with emissions controlled by two (2) afterburners (boilers No. 1 and No. 2), and exhausting though Stack S32. Construction of each blowstill commenced in December 1972.

(d) One (1) shingles and rolls production line with a maximum production rate of 73 tons per hour, installed in 1972 and exhausting through stacks S5 and S7, including the following:

(1) shingle coater dip pan; and
(2) lamination section for production of laminated shingles.

(e) One (1) No. 6 fuel oil fired boiler, identified as boiler No. 1, with a maximum heat input capacity of 29.15 MMBtu/hr, installed in 1972, and exhausting through stack S32. Boiler No. 1 serves as a primary boiler.

(f) One (1) natural gas-fired boiler, identified as boiler No. 2, with a maximum heat input capacity of 29.15 MMBtu/hr, using No. 6 fuel oil as a backup fuel, installed in 1972, and exhausting through stack S32. Boiler No. 2 serves as a backup unit.

(g) One (1) natural gas-fired combustion unit, identified as flux heater, with a maximum heat input capacity of 7.0 MMBtu/hr, with a spare unit fired by No. 6 fuel oil (standby), and exhausting through Stacks S35 and S36.

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

This stationary source also includes the following insignificant activities:

(a) Two (2) storage tanks, identified as T-8 (self-seal asphalt) and T-16 (self-seal asphalt slate line), each installed in 1989 and each with a maximum storage capacity of 14,000 gallons.

(b) Two (2) storage tanks, identified as T-17 (cooling package asphalt) and M-5 (mod-bit mixed material-hold tank), each installed in 1985 and with maximum storage capacities of 12,000 and 6,500 gallons, respectively.

(c) Two (2) storage tanks, identified as T-20 (liquid APP plasticizer) and T-18 (holding tank package asphalt), installed in 1986 and 1985, respectively, and each with a maximum storage capacity of 30,000 gallons.

Under the Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture NSPS (40 CFR Part 60, Subpart UU), asphalt storage tanks T-8, T-16, T-17, M-5, T-20, and T-18 are considered affected facilities.

(d) One (1) bulk asphalt flux main storage tank, identified as T-1, installed in 1972 and with a maximum storage capacity of 1,000,000 gallons of asphalt.

(e) Five (5) storage tanks, identified as T-3 (flux preheat tank), T-4 (SBS/AC-5/weather watch), T-5 (AC-5 asphalt), T-6 (coating asphalt) and T-7 (coating asphalt), each installed in 1972 and each with a maximum storage capacity of 30,000 gallons of asphalt.

(f) One (1) storage tank, identified as T-9 (steep asphalt), installed in 1977, with a maximum storage capacity of 8,000 gallons.

(g) One (1) No. 6 fuel oil storage tank, identified as T-22, installed in 1990 with a maximum storage capacity of 38,000 gallons.

(h) One (1) No. 6 fuel oil fired combustion unit, identified as mill oil heater # 2, with a maximum heat input capacity of 2.5 MMBtu/hr, and exhausting through Stack S33. [326 IAC 2-8-4]

(i) One (1) No. 6 fuel oil fired combustion unit, identified as coating heater, with a maximum heat input capacity of 4.5 MMBtu/hr, and exhausting through Stack S34. [326 IAC 2-8-4]

(j) One (1) natural gas-fired combustion unit, identified as mod-bit hot oil heater, with a maximum heat input capacity of 5.2 MMBtu/hr, using No. 6 fuel as a backup fuel, and exhausting through Stack S2. [326 IAC 2-8-4]

(k) One (1) natural gas-fired combustion unit, identified as filler heater hot oil heater, with a maximum heat input capacity of 6.0 MMBtu/hr, using No. 6 fuel oil as a backup fuel, and exhausting through Stack S4.

(l) One (1) natural gas-fired combustion unit, identified as liquid asphalt storage heater, with a maximum heat input capacity of 3.0 MMBtu/hr, using propane as a backup fuel, and exhausting through Stack S1. [326 IAC 2-8-4]

(m) One (1) No. 2 fuel oil fired combustion unit, identified as mill oil heater # 1, with a maximum heat input capacity of 1.5 MMBtu/hr, and exhausting through Stack S31.

(n) One (1) propane fired combustion unit, identified as mat heater, with a maximum heat input capacity of 1.0 MMBtu/hr.

(o) One (1) propane fired combustion unit, identified as flame bar, with a maximum heat input capacity of 1.0 MMBtu/hr.

(p) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 10,500 gallons.

(q) A day tank for the storage of laminating adhesive, with a storage capacity of 1200 gallons, with emissions below exemption levels in 326 IAC 2-1.1-3(d)(1).

(r) Water related activities including:

(1) Production of hot water for on-site personal use not related to any industrial or production process;

(2) Steam traps, vents, leaks and safety relief valves;

(3) Laundry operations using only water solutions of bleach or detergents; and

(4) Boiler water treatment operations, not including cooling towers.

(s) Combustion activities including the following:

(1) Combustion emissions from propulsion of mobile sources;

(2) Tobacco smoking rooms and areas; and

(3) Indoor and outdoor kerosene heaters.

(t) Ventilation and venting related equipment including the following:

(1) Ventilation exhaust, central chiller water systems, refrigeration and air conditioning equipment, not related to any industrial or production process, including natural draft hoods or ventilating systems that do not remove air pollutants;

(2) Stack and vents from plumbing traps used to prevent the discharge of sewer gases, handling domestic sewage only, excluding those at wastewater treatment plants or those handling any industrial waste; and

(3) Air vents from air compressors.

(u) Activities related to routine fabrication, maintenance and repair of buildings, structures, equipment or vehicles at the source where air emissions from those activities would not be associated with any commercial production process including the following:

(1) Non-asbestos insulation installation or removal.

(v) Housekeeping and janitorial activities and supplies including the following:

(1) Rest rooms and associated cleanup operations and supplies; and

(2) Mobile floor sweepers and floor scrubbers.

(w) Office related activities including the following:

(1) Office supplies and equipment;

(2) Photocopying equipment and associated supplies; and

(3) Paper shredding.

(x) Lawn care and landscape maintenance activities and equipment, including the storage, spraying or application of insecticides, pesticides and herbicides.

(y) Storage equipment and activities including:

(1) Pressurized storage tanks and associated piping for the following:

(A) Acetylene;
(B) Liquid natural gas (LNG) (propane); and
(C) Liquid petroleum gas (LPG).

(2) Storage tanks, vessels, and containers holding or storing liquid substances that do not contain any VOCs or HAPs;

(3) Storage tanks, reservoirs, and pumping and handling equipment of any size containing soap, wax, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized; and

(4) Storage of drums containing maintenance raw materials.

(z) Emergency and standby equipment including:

(1) Safety and emergency equipment, except engine driven fire pumps, including fire suppression systems and emergency road flares; and

(2) Process safety relief devices installed solely for the purpose of minimizing injury to persons or damage to equipment which could result from abnormal process operating conditions, including the following:

(A) Safety relief valves.

(aa) Use of consumer products and equipment where the product or equipment is used at a source in the same manner as normal consumer use and is not associated with any production process.

(bb) Activities associated with production including the following:

(1) Application equipment for hot melt adhesives with no VOC in the adhesive formulation;

(2) Air compressors and pneumatically operated equipment, including hand tools; and

(3) Compressor or pump lubrication and seal oil systems.

(cc) Miscellaneous equipment, but not emissions associated with the process for which the equipment is used, and activities including the following:

(1) Manual loading and unloading operations.

(dd) The following VOC and HAP storage containers:

(1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons; and

(2) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.

(ee) Noncontact cooling tower systems with either of the following:

(1) Natural draft cooling towers not regulated under a NESHAP.

(ff) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(gg) Heat exchanger cleaning and repair.

(hh) Process vessel degassing and cleaning to prepare for internal repairs.

(ii) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(jj) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.

(kk) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.

(ll) One (1) diesel-fired emergency fire pump with a maximum capacity of 255 HP and one (1) electric emergency fire pump with a maximum capacity of 200 HP. Both fire pumps were installed in 1972.

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

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

SECTION B GENERAL CONDITIONS

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

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

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

(a) This permit, F129-23419-00011, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

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

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

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

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

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

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

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

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

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

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

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

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

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

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

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

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

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

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

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

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall 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 upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and Southwest Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

Southwest Regional Office Phone Number: (812) 380-2305;
Southwest Regional Office Facsimile Number: (812) 380-2304.

and

Southwest Regional Office
1120 N. Vincennes Avenue
P.O. Box 128
Petersburg, Indiana 47567-0128

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

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

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

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

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

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

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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

(a) All terms and conditions of permits established prior to F129-23419-00011 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted

(b) All previous registrations and permits are superseded by this permit.

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

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

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

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

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

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

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

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

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

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

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

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

Request for renewal shall be submitted to:

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

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

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

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

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

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

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

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d) without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-8-11.1 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

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

and

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

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b) through (d). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

(b) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

(c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

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

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

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

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

(a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

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

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

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

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

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

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

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

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

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

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

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

(2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

(3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

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

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

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

C.3 Opacity [326 IAC 5-1]

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

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

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

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

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

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

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

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

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

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using ambient air quality modeling pursuant to 326 IAC 1-7-4.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

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

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

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

C.9 Performance Testing [326 IAC 3-6]

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

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

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

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

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

C.11 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

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

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

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

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

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

C.12 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.13 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

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

C.14 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

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

C.15 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

(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; and/or

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

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

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

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

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

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

C.17 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

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

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

C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

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

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

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

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

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

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

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

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

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-8-4(10)]:

(a) One (1) modified bitumen production line with a maximum production rate of 12.9 tons per hour, installed in 1986, and exhausting through Stack S3.

Under the Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture NSPS (40 CFR Part 60, Subpart UU), the modified bitumen production line is considered an affected facility.

(b) Storage and handling of bulk material operations, consisting of the following:

(1) Shingle and modified bitumen granules handling operations, with a maximum throughput of 30.60 tons per hour and exhausting through Stacks S13, S14, S27, S28, S29 and S30. Construction of the shingle granules handling operation commenced in December 1972. Construction of the modified bitumen granules handling operation commenced in January 1986;

(2) Shingle and modified bitumen filler handling operations, with a maximum throughput of 32.00 tons per hour, utilizing a baghouse for particulate matter control, and exhausting through Stacks S8, S9, S10, S11, S19, S20, S21, S22, S23, S24, and S46. Construction of the shingle filler handling operation commenced in December 1972. Construction of the modified bitumen filler handling operation commenced in January 1986;

(3) Talc handling operations, with a maximum throughput of 0.09 tons per hour, utilizing a baghouse for particulate matter control, and exhausting through Stacks S18 and S25; and

(4) Shingle and modified bitumen sand handling operations, with a maximum throughput of 4.63 tons per hour, and exhausting through Stacks S12, S15, S17 and S26.

Under the Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture NSPS (40 CFR Part 60, Subpart UU), the modified bitumen granules handling and filler handling, talc handling, and sand handling operations are considered affected facilities.

(c) One (1) asphalt blowing operation, consisting of three (3) blowstills, with a maximum blowing rate of 40,000 pounds per hour with emissions controlled by two (2) afterburners (boilers No. 1 and No. 2), and exhausting though Stack S32. Construction of each blowstill commenced in December 1972.

(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 2-8-4(1)]

D.1.1 Particulate [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from the following facilities shall be limited as follows:

The pound per hour limitations were calculated using the following equation:

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

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

Emissions Unit	Process Weight Rate (tons/hr)	Allowable PM Emissions (326 IAC 6-3-2) (lbs/hr)
Sand Handling	4.63	11.45
Asphalt Blowing Operation	20.00	30.51

(b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from the following facilities shall be limited as follows:

The pound per hour limitations were calculated using the following equation:

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

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour.

Emissions Unit	Process Weight Rate (tons/hr)	Allowable PM Emissions (326 IAC 6-3-2) (lbs/hr)
Shingle and Roll Production Line	73.00	48.17
Granules Handling	30.60	40.13
Filler Handling	32.00	40.52

D.1.2 PM-10 Limit [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4, PM-10 emissions from the asphalt blowing operation shall be less than 12.28 pounds per hour.

Compliance with this PM-10 limit, in combination with the PM-10 emissions from other emission units at this source will render the requirements of 326 IAC 2-7 and 326 IAC 2-2 not applicable.

D.1.3 PSD Minor Limit (PM) [326 IAC 2-2]

Particulate matter (PM) emissions from the asphalt blowing operation shall be less than 13.20 pounds per hour.

Compliance with this PM limit, in combination with the potential emissions of PM from other emission units at this source, will render the requirements of 326 IAC 2-2 (PSD) not applicable.

D.1.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the shingle and roll production line, the shingle and modified bitumen granules handling, and filler handling operations and any control devices.

Compliance Determination Requirements

D.1.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

During the period between 30 to 36 months after issuance of this permit, the Permittee shall perform testing for the asphalt blowing operation, modified bitumen production line, and the modified bitumen granules and filler handling, talc handling, and sand handling operations utilizing methods as approved by the Commissioner and as described below:

(a) In order to demonstrate compliance with the particulate emission limitations in permit Condition D.1.11 for the modified bitumen production line, the Permittee shall perform PM testing utilizing methods per 40 CFR Part 60 Appendix A, Method 5A.

(b) In order to demonstrate compliance with the particulate emission limitations (PM/PM-10) in permit Conditions D.1.1, D.1.2, and D.1.3 for the asphalt blowing operation, the Permittee shall perform PM and PM-10 testing utilizing methods per 40 CFR Part 60 Appendix A, Method 5A.

(c) In order to demonstrate compliance with the opacity limitation in permit Condition D.1.11, the Permittee shall perform opacity testing for the modified bitumen production line, the modified bitumen granules and filler handling, talc handling, and sand handling operations utilizing 40 CFR Part 60 Appendix A, Method 9.

These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C-Performance Testing.

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

D.1.6 Particulate Control (PM and PM-10)

In order to comply with Conditions D.1.1 and D.1.2, and D.1.3, one (1) of the two (2) afterburners (identified as boilers No.: 1 and No.: 2) for PM and PM-10 control shall be in operation at all times that the asphalt blowing operation is in use.

D.1.7 Afterburner

The afterburners (boilers No.: 1 and No.: 2) for controlling emissions from asphalt blowing operation, shall maintain a minimum operating temperature of 1,500ºF or a temperature determined in the most recent compliance stack tests to ensure that the minimum destruction efficiency of 90% is achieved. The temperature of the combustion chamber shall be continuously monitored and recorded by the temperature monitoring instrument whenever the asphalt blowing operation is in use.

D.1.8 Visible Emissions Notations

(a) Visible emission notations of the modified bitumen production line operation exhaust stack (S3), the modified bitumen granules handling exhaust stacks (S13, S14, S27, S28, S29, and S30), the modified bitumen filler handling exhaust stacks (S8, S9, S10, S11, S19, S20, S21, S22, S23, S24, and S4), the talc handling exhaust stacks (S18 and S25), the sand handling exhaust stacks (S12, S15, S17, and S26), and the asphalt blowing operation exhaust stack (S32) shall be performed daily during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.9 Record Keeping Requirements

(a) To document compliance with Condition D.1.8, the Permittee shall maintain a daily record of visible emission notations of the modified bitumen production line operation, the modified bitumen granules handling, the modified bitumen filler handling, the talc handling, the sand handling, and the asphalt blowing operation 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).

(b) To document compliance with Condition D.1.7, the permittee shall:

(1) Maintain daily records of the exhaust temperature of the afterburners, and
(2) Continuously record the temperature in the combustion zone of the afterburners, (boiler No.: 1 and/or boiler No.: 2, using the temperature monitoring instrument.

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

New Source Performance Standards (NSPS) Requirements [326 IAC 12-1]

D.1.10 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR Part 60, Subpart A]

Pursuant to 40 CFR Part 60, Subpart UU, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1-1, for the modified bitumen production line, the modified bitumen granules handling and filler handling, talc handling, and sand handling operations as specified in Appendix A of 40 CFR Part 60, in accordance with the schedule in 40 CFR Part 60, Subpart UU.

D.1.11 NSPS (Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture) Requirements [40 CFR Part 60, Subpart UU] [326 IAC 12-1]

The Permittee shall comply with the provisions of 40 CFR Part 60, Subpart UU, which are incorporated by reference as 326 IAC 12-1, for the modified bitumen production line, the modified bitumen granules handling and filler handling, talc handling, and sand handling operations as specified as follows:

§ 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 suface.

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.

...

(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]

...

§ 60.474 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.

(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.

...

(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:

$E=(c_sQ_{sd})/(PK)$

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.

...

(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.

...

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

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-8-4(10)]:

(d) One (1) shingles and rolls production line with a maximum production rate of 73 tons per hour, installed in 1972 and exhausting through Stacks S5 and S7, including the following:

(1) shingle coater dip pan; and
(2) lamination section for production of laminated shingles.

(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 2-8-4(1)]

D.2.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from the following facility shall be limited as follows:

The pounds per hour limitation was calculated using the following equations:

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

$E = 55.0 P^{0.11} - 40$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour.

Emissions Unit	Process Weight Rate (tons/hr)	Allowable PM Emissions (326 IAC 6-3-2) (lb/hr)
Shingle and Roll Production Line	73.00	48.17

D.2.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the shingle and roll production line and any control devices.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

(e) One (1) No. 6 fuel oil fired boiler, identified as boiler No. 1, with a maximum heat input capacity of 29.15 MMBtu/hr, installed in 1972, and exhausting through stack S32. Boiler No. 1 serves as a primary boiler.

(f) One (1) natural gas-fired boiler, identified as boiler No. 2, with a maximum heat input capacity of 29.15 MMBtu/hr, using No. 6 fuel oil as a backup fuel, installed in 1972, and exhausting through stack S32. Boiler No. 2 serves as a backup unit.

(g) One (1) natural gas-fired combustion unit, identified as flux heater, with a maximum heat input capacity of 7.0 MMBtu/hr, with a spare unit fired by No. 6 fuel oil (standby), and exhausting through Stacks S35 and S36.

Insignificant Activities

(h) One (1) No. 6 fuel oil fired combustion unit, identified as mill oil heater # 2, with a maximum heat input capacity of 2.5 MMBtu/hr, and exhausting through Stack S33. [326 IAC 2-8-4]

(i) One (1) No. 6 fuel oil fired combustion unit, identified as coating heater, with a maximum heat input capacity of 4.5 MMBtu/hr, and exhausting through Stack S34. [326 IAC 2-8-4]

(j) One (1) natural gas-fired combustion unit, identified as mod-bit hot oil heater, with a maximum heat input capacity of 5.2 MMBtu/hr, using No. 6 fuel as a backup fuel, and exhausting through Stack S2. [326 IAC 2-8-4]

(k) One (1) natural gas-fired combustion unit, identified as filler heater hot oil heater, with a maximum heat input capacity of 6.0 MMBtu/hr, using No. 6 fuel oil as a backup fuel, and exhausting through Stack S4. [326 IAC 2-8-4]

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

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

D.3.1 Particulate [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3 (a) (Particulate Emission Limitations for Sources of Indirect Heating), the PM emissions from each of the two (2) 29.15 MMBtu per hour heat input boilers, identified as Boiler No. 1 and Boiler No. 2 and each installed in 1972, shall not exceed 0.6 pounds per MMBtu heat input.

D.3.2 Sulfur Dioxide (SO_2) [326 IAC 7-1.1-1] [326 IAC 7-2-1]

(a) Pursuant to 326 IAC 7-1.1, the sulfur dioxide (SO_2) emissions from the two (2) 29.15 MMBtu per hour oil-fired boilers, identified as Boiler No. 1 and Boiler No. 2, shall not exceed 1.6 pounds per million BTU heat input when using No. 6 fuel oil. This equates to a fuel oil sulfur content limit of 1.6%.

(b) Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average.

D.3.3 Sulfur Dioxide (SO_2) Emissions [326 IAC 2-8-4]

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

(a) The combined usage of No. 6 fuel oil in the two boilers (Boiler No. 1 and Boiler No. 2), the mill heater #2, the coating heater, flux heater, mod-bit and filler hot oil heaters shall be limited to 1,504,800 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) The sulfur content of the No. 6 fuel oil used in the two boilers (Boiler No. 1 and Boiler No. 2), the mill heater #2, the coating heater, flux heater, mod-bit and filler hot oil heaters shall not exceed 0.8 percent (%).

These limits restrict source-wide emissions of SO_2 to less than 100 tons per year. Compliance with these limits will satisfy 326 IAC 2-8-4 (FESOP). Therefore, Part 70 rules (326 IAC 2-7) do not apply. Compliance the fuel usage limit in paragraph (a) will also limit emissions of NOx to less than 100 tons per year.

D.3.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the two boilers (Boiler No. 1 and Boiler No. 2).

Compliance Determination Requirements

D.3.5 Sulfur Dioxide Emissions and Sulfur Content

In order to demonstrate compliance with Conditions D.3.2 and D.3.3, the Permittee shall utilize one of the following options:

(a) The Permittee shall demonstrate that the sulfur content of the No. 6 fuel oil does not exceed 0.8% sulfur by weight:

(1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification; or

(2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.

(A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and

(B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

(b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the two boilers (Boiler No. 1 and Boiler No. 2), the mill heater #2, the coating heater, flux heater, mod-bit and filler hot oil heaters, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

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

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

D.3.6 Visible Emissions Notations

(a) Visible emission notations of the boilers (Boiler No. 1 and Boiler No. 2) exhaust stack (S32) shall be performed daily during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.3.7 Record Keeping Requirements

(a) To document compliance with Conditions D.3.2 and D.3.3, the Permittee shall maintain records in accordance with (1) through (6) below.

(1) Calendar dates covered in the compliance determination period;

(2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;

(3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period, the natural gas fired boiler certification does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1); and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

(4) Fuel supplier certifications;

(5) The name of the fuel supplier; and

(6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

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

(b) To document compliance with Condition D.3.6, the Permittee shall maintain a daily record of visible emission notations of the boilers (Boiler No. 1 and Boiler No. 2) stack exhaust. 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) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.8 Reporting Requirements

(a) The natural gas boiler certification for boiler No. 2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or its equivalent, within thirty (30) days after the end of the six (6) month period being reported. The natural gas-fired boiler certification does require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1.

(b) A quarterly summary of the information to document compliance with Condition D.3.3(a) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1.

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

Insignificant Activities

(a) Two (2) storage tanks, identified as T-8 (self-seal asphalt) and T-16 (self-seal asphalt slate line), each installed in 1989 and each with a maximum storage capacity of 14,000 gallons.

(b) Two (2) storage tanks, identified as T-17 (cooling package asphalt) and M-5 (mod-bit mixed material-hold tank), each installed in 1985 and with maximum storage capacities of 12,000 and 6,500 gallons, respectively.

(c) Two (2) storage tanks, identified as T-20 (liquid APP plasticizer) and T-18 (holding tank package asphalt), installed in 1986 and 1985, respectively, and each with a maximum storage capacity of 30,000 gallons.

Under the Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture NSPS (40 CFR Part 60, Subpart UU), asphalt storage tanks T-8, T-16, T-17, M-5, T-20, and T-18 are considered affected facilities.

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

New Source Performance Standards (NSPS) Requirements [326 IAC 12-1]

D.4.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR Part 60, Subpart A]

Pursuant to 40 CFR Part 60, Subpart UU, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1-1, for tanks T-8, T-16, T-17, M-5, T-20, and T-18 as specified in Appendix A of 40 CFR Part 60, in accordance with the schedule in 40 CFR Part 60, Subpart UU.

D.4.2 NSPS (Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture) Requirements [40 CFR Part 60, Subpart UU] [326 IAC 12-1]

The Permittee shall comply with the provisions of 40 CFR Part 60, Subpart UU, which are incorporated by reference as 326 IAC 12-1, for tanks T-8, T-16, T-17, M-5, T-20, and T-18 as specified as follows:

§ 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 suface.

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.

...

(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.

...

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

...

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Building Materials Manufacturing Corporation
Source Address: 901 Givens Road, Mount Vernon, Indiana 47620
Mailing Address: 901 Givens Road, Mount Vernon, IN 47620
FESOP Permit No.: F129-23419-00011

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

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify)_____

☐ Report (specify)_____

☐ Notification (specify)_____

☐ Affidavit (specify)_____

☐ Other (specify)_____

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

Signature:

Printed Name:

Title/Position:

Date:

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

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: Building Materials Manufacturing Corporation
Source Address: 901 Givens Road, Mount Vernon, Indiana 47620
Mailing Address: 901 Givens Road, Mount Vernon, IN 47620
FESOP Permit No.: F129-23419-00011

This form consists of 2 pages **Page 1 of 2**

□ This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16

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

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

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

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

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

Source Name: Building Materials Manufacturing Corporation
Source Address: 901 Givens Road, Mount Vernon, Indiana 47620
Mailing Address: 901 Givens Road, Mount Vernon, IN 47620
FESOP Permit No.: F129-23419-00011

□ Natural Gas Only □ Alternate Fuel burned From:_____ To:_____

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

Attach a signed certification to complete this report.

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

FESOP Quarterly Report

Source Name: Building Materials Manufacturing Corporation
Source Address: 901 Givens Road, Mount Vernon, Indiana 47620
Mailing Address: 901 Givens Road, Mount Vernon, IN 47620
FESOP Permit No.: F129-23419-00011
Facility: Two boilers (Boiler No. 1 and Boiler No. 2), the mill heater #2, the coating heater, flux heater, mod-bit and filler hot oil heaters
Parameter: No. 6 Fuel Oil Limitations
Limit: The combined usage of No. 6 fuel oil in the two boilers (Boiler No. 1 and Boiler No. 2), the mill heater #2, the coating heater, flux heater, mod-bit and filler hot oil heaters shall be limited to 1,504,800 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month. The sulfur content of the No. 6 fuel oil used shall not exceed 0.8 percent (%).

YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	No. 6 Fuel Oil Usage This Month	No. 6 Fuel Oil Usage Previous 11 Months	No. 6 Fuel Oil Usage 12 Month Total
Month 1			
Month 2			
Month 3			

□ No deviation occurred in this quarter.

□ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

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

Attach a signed certification to complete this report.

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

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Building Materials Manufacturing Corporation
Source Address: 901 Givens Road, Mount Vernon, Indiana 47620
Mailing Address: 901 Givens Road, Mount Vernon, IN 47620
FESOP Permit No.: F129-23419-00011

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

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

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

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

Page 2 of 2

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Federally Enforceable State Operating Permit Renewal

Source Background and Description

Source Name:	Building Materials Manufacturing Corporation
Source Location:	901 Givens Road, Mount Vernon, IN 47620
County:	Posey
SIC Code:	2952
Permit Renewal No.:	F129-23419-00011
Permit Reviewer:	Tanya White/EVP

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Building Materials Manufacturing Corporation relating to the operation of a stationary asphalt roofing manufacturing plant.

History

On July 26, 2006, Building Materials Manufacturing Corporation submitted an application to the OAQ requesting to renew its operating permit. Additionally, on March 26, 2007, Building Materials Manufacturing Corporation submitted a letter to IDEM, OAQ, requesting to revise the description of boiler No. 2 from burning only No. 6 fuel oil to burning natural gas as a primary fuel and No. 6 fuel oil as a back-up fuel. This request will be incorporated into the FESOP renewal.

Permitted Emission Units and Pollution Control Equipment

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

(a) One (1) modified bitumen production line with a maximum production rate of 12.9 tons per hour, installed in 1986, and exhausting through Stack S3.

Under the Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture NSPS (40 CFR Part 60, Subpart UU), the modified bitumen production line is considered an affected facility.

(b) Storage and handling of bulk material operations, consisting of the following:

(1) Shingle and modified bitumen granules handling operations, with a maximum throughput of 30.60 tons per hour and exhausting through Stacks S13, S14, S27, S28, S29 and S30. Construction of the shingle granules handling operation commenced in December 1972. Construction of the modified bitumen granules handling operation commenced in January 1986;

(2) Shingle and modified bitumen filler handling operations, with a maximum throughput of 32.00 tons per hour, utilizing a baghouse for particulate matter control, and exhausting through Stacks S8, S9, S10, S11, S19, S20, S21, S22, S23, S24, and S46. Construction of the shingle filler handling operation commenced in December 1972. Construction of the modified bitumen filler handling operation commenced in January 1986;

(3) Talc handling operations, with a maximum throughput of 0.09 tons per hour, utilizing a baghouse for particulate matter control, and exhausting through Stacks S18 and S25; and

(4) Shingle and modified bitumen sand handling operations, with a maximum throughput of 4.63 tons per hour, and exhausting through Stacks S12, S15, S17 and S26.

Under the Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture NSPS (40 CFR Part 60, Subpart UU), the modified bitumen granules handling and filler handling, talc handling, and sand handling operations are considered affected facilities.

(c) One (1) asphalt blowing operation, consisting of three (3) blowstills, with a maximum blowing rate of 40,000 pounds per hour with emissions controlled by two (2) afterburners (boilers No. 1 and No. 2), and exhausting though Stack S32. Construction of each blowstill commenced in December 1972.

(d) One (1) shingles and rolls production line with a maximum production rate of 73 tons per hour, installed in 1972 and exhausting through stacks S5 and S7, including the following:

(1) shingle coater dip pan; and
(2) lamination section for production of laminated shingles.

(e) One (1) No. 6 fuel oil fired boiler, identified as boiler No. 1, with a maximum heat input capacity of 29.15 MMBtu/hr, installed in 1972, and exhausting through stack S32. Boiler No. 1 serves as a primary boiler.

(f) One (1) natural gas-fired boiler, identified as boiler No. 2, with a maximum heat input capacity of 29.15 MMBtu/hr, using No. 6 fuel oil as a backup fuel, installed in 1972, and exhausting through stack S32. Boiler No. 2 serves as a backup unit.

(g) One (1) natural gas-fired combustion unit, identified as flux heater, with a maximum heat input capacity of 7.0 MMBtu/hr, with a spare unit fired by No. 6 fuel oil (standby), and exhausting through Stacks S35 and S36.

Insignificant Activities

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Two (2) storage tanks, identified as T-8 (self-seal asphalt) and T-16 (self-seal asphalt slate line), each installed in 1989 and each with a maximum storage capacity of 14,000 gallons.

(b) Two (2) storage tanks, identified as T-17 (cooling package asphalt) and M-5 (mod-bit mixed material-hold tank), each installed in 1985 and with maximum storage capacities of 12,000 and 6,500 gallons, respectively.

(c) Two (2) storage tanks, identified as T-20 (liquid APP plasticizer) and T-18 (holding tank package asphalt), installed in 1986 and 1985, respectively, and each with a maximum storage capacity of 30,000 gallons.

Under the Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture NSPS (40 CFR Part 60, Subpart UU), asphalt storage tanks T-8, T-16, T-17, M-5, T-20, and T-18 are considered affected facilities.

(d) One (1) bulk asphalt flux main storage tank, identified as T-1, installed in 1972 and with a maximum storage capacity of 1,000,000 gallons of asphalt.

(e) Five (5) storage tanks, identified as T-3 (flux preheat tank), T-4 (SBS/AC-5/weather watch), T-5 (AC-5 asphalt), T-6 (coating asphalt) and T-7 (coating asphalt), each installed in 1972 and each with a maximum storage capacity of 30,000 gallons of asphalt.

(f) One (1) storage tank, identified as T-9 (steep asphalt), installed in 1977, with a maximum storage capacity of 8,000 gallons.

(g) One (1) No. 6 fuel oil storage tank, identified as T-22, installed in 1990 with a maximum storage capacity of 38,000 gallons.

(h) One (1) No. 6 fuel oil fired combustion unit, identified as mill oil heater # 2, with a maximum heat input capacity of 2.5 MMBtu/hr, and exhausting through Stack S33. [326 IAC 2-8-4]

(i) One (1) No. 6 fuel oil fired combustion unit, identified as coating heater, with a maximum heat input capacity of 4.5 MMBtu/hr, and exhausting through Stack S34. [326 IAC 2-8-4]

(j) One (1) natural gas-fired combustion unit, identified as mod-bit hot oil heater, with a maximum heat input capacity of 5.2 MMBtu/hr, using No. 6 fuel as a backup fuel, and exhausting through Stack S2. [326 IAC 2-8-4]

(k) One (1) natural gas-fired combustion unit, identified as filler heater hot oil heater, with a maximum heat input capacity of 6.0 MMBtu/hr, using No. 6 fuel oil as a backup fuel, and exhausting through Stack S4. [326 IAC 2-8-4]

(l) One (1) natural gas-fired combustion unit, identified as liquid asphalt storage heater, with a maximum heat input capacity of 3.0 MMBtu/hr, using propane as a backup fuel, and exhausting through Stack S1.

(m) One (1) No. 2 fuel oil fired combustion unit, identified as mill oil heater # 1, with a maximum heat input capacity of 1.5 MMBtu/hr, and exhausting through Stack S31.

(n) One (1) propane fired combustion unit, identified as mat heater, with a maximum heat input capacity of 1.0 MMBtu/hr.

(o) One (1) propane fired combustion unit, identified as flame bar, with a maximum heat input capacity of 1.0 MMBtu/hr.

(p) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 10,500 gallons.

(q) A day tank for the storage of laminating adhesive, with a storage capacity of 1200 gallons, with emissions below exemption levels in 326 IAC 2-1.1-3(d)(1).

(r) Water related activities including:

(1) Production of hot water for on-site personal use not related to any industrial or production process;

(2) Steam traps, vents, leaks and safety relief valves;

(3) Laundry operations using only water solutions of bleach or detergents; and

(4) Boiler water treatment operations, not including cooling towers.

(s) Combustion activities including the following:

(1) Combustion emissions from propulsion of mobile sources;

(2) Tobacco smoking rooms and areas; and

(3) Indoor and outdoor kerosene heaters.

(t) Ventilation and venting related equipment including the following:

(1) Ventilation exhaust, central chiller water systems, refrigeration and air conditioning equipment, not related to any industrial or production process, including natural draft hoods or ventilating systems that do not remove air pollutants;

(2) Stack and vents from plumbing traps used to prevent the discharge of sewer gases, handling domestic sewage only, excluding those at wastewater treatment plants or those handling any industrial waste; and

(3) Air vents from air compressors.

(u) Activities related to routine fabrication, maintenance and repair of buildings, structures, equipment or vehicles at the source where air emissions from those activities would not be associated with any commercial production process including the following:

(1) Non-asbestos insulation installation or removal.

(v) Housekeeping and janitorial activities and supplies including the following:

(1) Rest rooms and associated cleanup operations and supplies; and

(2) Mobile floor sweepers and floor scrubbers.

(w) Office related activities including the following:

(1) Office supplies and equipment;

(2) Photocopying equipment and associated supplies; and

(3) Paper shredding.

(x) Lawn care and landscape maintenance activities and equipment, including the storage, spraying or application of insecticides, pesticides and herbicides.

(y) Storage equipment and activities including:

(1) Pressurized storage tanks and associated piping for the following:

(A) Acetylene;
(B) Liquid natural gas (LNG) (propane); and
(C) Liquid petroleum gas (LPG).

(2) Storage tanks, vessels, and containers holding or storing liquid substances that do not contain any VOCs or HAPs;

(3) Storage tanks, reservoirs, and pumping and handling equipment of any size containing soap, wax, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized; and

(4) Storage of drums containing maintenance raw materials.

(z) Emergency and standby equipment including:

(1) Safety and emergency equipment, except engine driven fire pumps, including fire suppression systems and emergency road flares; and

(2) Process safety relief devices installed solely for the purpose of minimizing injury to persons or damage to equipment which could result from abnormal process operating conditions, including the following:

(A) Safety relief valves.

(aa) Use of consumer products and equipment where the product or equipment is used at a source in the same manner as normal consumer use and is not associated with any production process.

(bb) Activities associated with production including the following:

(1) Application equipment for hot melt adhesives with no VOC in the adhesive formulation;

(2) Air compressors and pneumatically operated equipment, including hand tools; and

(3) Compressor or pump lubrication and seal oil systems.

(cc) Miscellaneous equipment, but not emissions associated with the process for which the equipment is used, and activities including the following:

(1) Manual loading and unloading operations.

(dd) The following VOC and HAP storage containers:

(1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons; and

(2) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.

(ee) Noncontact cooling tower systems with either of the following:

(1) Natural draft cooling towers not regulated under a NESHAP.

(ff) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(gg) Heat exchanger cleaning and repair.

(hh) Process vessel degassing and cleaning to prepare for internal repairs.

(ii) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(jj) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.

(kk) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.

(ll) One (1) diesel-fired emergency fire pump with a maximum capacity of 255 HP and one (1) electric emergency fire pump with a maximum capacity of 200 HP. Both fire pumps were installed in 1972.

Existing Approvals

Since the issuance of the FESOP No.: 129-14097-00011 on April 25, 2002, the source has constructed or has been operating under the following approvals:

(a) First Administrative Amendment No.: 129-16891-00011 issued on January 15, 2003;

(b) First Significant Permit Revision No.: 129-18451-00011 issued on April 15, 2004;

(c) Second Significant Permit Revision No.: 129-22068-00011 issued on March 14, 2006; and

(d) Second Administrative Amendment No.: 129-23515-00011 issued on October 30, 2006.

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

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations (pages 1 through 21).

County Attainment Status

The source is located in Posey County.

Pollutant	Status
PM_{10}	Attainment
$PM_{2.5}$	Attainment
SO_2	Attainment
NOx	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

(a) Posey County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions. See the State Rule Applicability – Entire Source section.

(b) 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. Posey County has been designated as attainment or unclassifiable for ozone. 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.

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

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

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	Potential to Emit (tons/year)
PM	673.99
PM-10	586.95
SO_2	309.38
VOC	29.07
CO	24.21
NO_x	137.66

HAPs	Potential to Emit (tons/year)
Hexane	0.40
Total HAPs	0.42

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM-10, SO_2 and NOx is greater than 100 tons per year each. The source is subject to the provisions of 326 IAC 2-7. However, the source has agreed to limit their PM-10, SO_2 and NOx emissions to less than Title V levels, therefore the source will be issued a FESOP.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants is less than 100 tons per year.

(c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year.

Actual Emissions

No previous emissions data has been received from the source.

Potential to Emit After Issuance

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

	Potential To Emit (tons/year)						
Process/Emission Unit	**PM**	**PM-10**	**SO_2**	**VOC**	**CO**	**NO_x**	**Single HAP/Total HAPs**
Boilers No.1 and No. 2	9.08(1)	5.79(1)	94.50(1)	0.85(1)	14.98(2)	41.38(1)	0.23 (Hexane) /0.24(2)
Mill Oil Heater #2 and Coating Heater					1.02(2)		-
Flux Heater, Mod-Bit and Filler Hot Oil Heaters					6.70(2)		0.14 (Hexane) /0.15(2)
Liquid Asphalt Heater	0.06	0.10	0.01	0.07	1.10	1.31	0.02 (Hexane) /0.02
Mill Oil Heater #1	0.09	0.09	3.13	0.02	0.23	0.94	-
Material Heater and Flame Bar	0.04	0.04	-	0.05	0.18	1.30	-
Shingles and Roll Production Line	5.57	19.16	-	9.59	-	-	-
Modified Bitumen Production Line	1.64	2.18	-	1.70	-	-	-
Asphalt Blowing	57.82(3)	53.77(3)	-	1.49	-	-	-
Granule Handling	26.81	4.02	-	-	-	-	-
Filler Handling	0.28	0.04	-	-	-	-	-
Talc Handling	0.001	0.001	-	-	-	-	-
Sand Handling	4.06	0.61	-	-	-	-	-
Total Emissions	105.45	85.80	97.64	13.76	24.21	44.94	0.40 (Hexane) /0.42

Notes:

(1) Based on a fuel usage limitation of 1,504,800 gallons per year of No. 6 fuel oil for boilers No. 1 and No. 2, mill heater #2, coating heater, mod-bit heater, and filler hot oil heater. This fuel usage limitation is required to limit source-wide emissions of SO_2 and NOx to less that Part 70 major source thresholds. Emissions of other criteria pollutants are also restricted based on this fuel usage limitation.

(2) Emissions of CO and HAPs from boiler No. 2, mill heater #2, coating heater, mod-bit heater, and filler hot oil heater are worst-case when burning natural gas (primary fuel) instead of No. 6 fuel oil (back-up fuel).

(3) Based on FESOP and PSD minor limits for PM-10 and PM emissions, respectively.

(a) This existing stationary source is not major for PSD (326 IAC 2-2) because emissions of PM-10, NOx and SO_2 have been limited to less than one hundred (< 100) tons per year each, emissions of PM have been limited to less than two hundred fifty (< 250) tons per year, and emissions of all other criteria pollutants are less than one hundred (< 100) tons per year each, and it is not one of the twenty-eight (28) listed source categories.

Federal Rule Applicability

(a) The two boilers (No. 1 and No. 2), which were constructed in 1972, are not subject the requirements of New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60, Subpart D or Subpart Da) because each boiler has a maximum heat input capacity of less than 250 MMBtu/hr. Therefore, the requirements of 40 CFR Part 60, Subpart D or Subpart Da are not included in this permit.

(b) The two boilers (No. 1 and No. 2), which were constructed in 1972, are not subject the requirements of New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60, Subpart Db) because each boiler has a maximum heat input capacity of less than 100 MMBtu/hr and was constructed prior to the rule applicability date of June 19, 1984. Therefore, the requirements of 40 CFR Part 60, Subpart Db are not included in this permit.

(c) The two boilers (No. 1 and No. 2), which were constructed in 1972, are not subject the requirements of New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60, Subpart Dc) because each boiler was constructed prior to the rule applicability date of June 9, 1989. Therefore, the requirements of 40 CFR Part 60, Subpart Dc are not included in this permit.

(d) The two (2) emergency fire pumps, are not subject to the requirements of the New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines (NSPS) (326 IAC 12 and 40 CFR Part 60, Subpart IIII) because each fire pump was constructed before July 11, 2005 and neither fire pump has been modified since construction. Therefore, the requirements of 40 CFR Part 60, Subpart IIII are not included in this permit.

(e) The requirements of New Source Performance Standard (40 CFR Part 60, Subpart K, Standards of Performance for Volatile Organic Liquid Storage Vessels), apply to volatile organic liquid storage vessels for which construction, reconstruction, or modification commenced after June 11, 1973 and prior to May 19, 1978, with a storage capacity greater than 40,000 gallons. The requirements of this rule are not applicable to any of the tanks as discussed below:

(1) Storage tank T-1 was constructed in 1972, which is prior to the rule applicability date of June 11, 1973;
(2) Storage tanks T-2, T-3, T-4, T-5, T-6, and T-7 were each constructed in 1972, which is prior to the rule applicability date of June 11, 1973. Additionally, each storage tank has a capacity of less than 40,000 gallons;
(3) Storage tanks T-8, T-16, T-18, M-5, T-20, and T-22 were each constructed after the rule applicability date of June 11, 1973 and before May 19, 1978. However, each storage tank has a capacity of less than 40,000 gallons; and
(4) Storage tank T-9 has a capacity of less than 40,000 gallons.

Therefore, the requirements of 40 CFR Part 60, Subpart K are not included in the permit.

(f) The requirements of New Source Performance Standard (40 CFR Part 60, Subpart Ka, Standards of Performance for Volatile Organic Liquid Storage Vessels), apply to volatile organic liquid storage vessels for which construction, reconstruction, or modification commenced after May 18, 1978 and prior to July 23, 1984, with a storage capacity greater than 40,000 gallons. The requirements of this rule are not applicable to any of the tanks as discussed below:

(1) Storage tank T-1 was constructed in 1972, which is prior to the rule applicability date of May 18, 1978;
(2) Storage tanks T-2, T-3, T-4, T-5, T-6, and T-7 were each constructed in 1972, which is prior to the rule applicability date of May 18, 1978. Additionally, each storage tank has a capacity of less than 40,000 gallons;
(3) Storage tanks T-8, T-16, T-18, M-5, T-20, and T-22 were each constructed after the rule applicability date of July 23, 1984 and before July 23, 1984. However, each storage tank has a capacity of less than 40,000 gallons; and
(4) Storage tank T-9 has a capacity of less than 40,000 gallons.

Therefore, the requirements of 40 CFR Part 60, Subpart Ka are not included in the permit.

(g) The requirements of New Source Performance Standard (40 CFR Part 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels), apply to volatile organic liquid storage vessels for which construction, reconstruction, or modification commenced after July 23, 1984, with a storage capacity greater than 75 cubic meters (m^3) (19,813 gallons). Pursuant to 40 CFR 60.110b(b), this subpart does not apply to storage vessels with a capacity greater than or equal to 75 cubic meters (m^3) (19,813 gallons) but less than 151 cubic meters (m^3) (39,890 gallons) storing a liquid with a true vapor pressure less than 15.0 kPa. The requirements of this rule are not applicable to any of the tanks as discussed below:

(1) Storage tank T-1 was constructed in 1972, which is prior to the rule applicability date of July 23, 1984;
(2) Storage tanks T-2, T-3, T-4, T-5, T-6, and T-7 were each constructed in 1972, which is prior to the rule applicability date of July 23, 1984;
(3) Storage tanks T-8, T-16, and M-5 each have a capacity of less than 75 cubic meters (m^3) (19,813 gallons);
(4) Storage tank T-9 has a capacity of less than 75 cubic meters (m^3); and
(5) Storage tanks T-18, T-20, and T-22, were constructed in 1989, 1989, and 1990, respectively, which is after the rule applicability date of July 23, 1984 and each tank has a capacity of 30,000 gallons which is greater than 75 cubic meters (m^3) (approximately 19,813 gallons) but less than 151 cubic meters (m^3) (39,890 gallons). However, since the maximum true vapor pressures of all volatile liquid stored in the tanks are less than 15.0 kPa, the requirements of this rule do not apply.

Therefore, the requirements of 40 CFR Part 60, Subpart Kb are not included in the permit.

(h) The requirements of New Source Performance Standard (40 CFR Part 60, Subpart UU, Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture), apply to each saturator that commences construction or modification after November 18, 1980; each mineral handling and storage facility at asphalt roofing plants that commences construction or modification after November 18, 1980; and each asphalt storage tank and each blowing still at asphalt processing plants, petroleum refineries, and asphalt roofing plants that commences construction or modification after November 18, 1980.

(1) The three asphalt blowstills and shingles and roll production lines are not subject to 40 CFR Part 60, Subpart UU because they were constructed in 1972, which is prior to the rule applicability date of November 18, 1980.

In February 2007, under Administrative Amendment No.: 129-23515-00011, the source replaced one of the three existing blowstill vessels for the asphalt blowing operation. The requirements of 40 CFR Part 60, Subpart UU are applicable to asphalt blowing stills that were modified after November 18, 1980. 40 CFR 60.2 defines a modification as:

Modification means any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted.

Since replacement of the existing blowstill vessel with a new vessel did not result in a change in the vessel capacity, or a net increase in any air pollutant emissions, or emissions of any pollutant that were not previously emitted, the requirements of this rule are not applicable because each blowstill was constructed before the rule applicability date and each blowstill has not undergone any modification as defined under 40 CFR 60.2.

(2) Storage tanks (T-1, T-3, T-4, T-5, T-6, T-7 and T-9), all constructed in 1972, are not subject to the requirements of the 40 CFR Part 60, Subpart UU because each of these tanks was constructed prior to the rule applicability date of November 18, 1980.

(3) Storage tanks (T-8, T-16, T-17, T-18, T-20 and M-5), at this asphalt roofing manufacturing plant, all constructed after the rule applicability date of November 18, 1980, are subject to the requirements of 40 CFR Part 60, Subpart UU.

Pursuant to 40 CFR 60.472(c), the Permittee shall not cause to be discharged into the atmosphere from the asphalt storage tanks T-8, T-16, T-17, T-18, T-20 and M-5 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.

Non-applicable portions of the NSPS will not be included in the permit. These emission units are subject to the following portions of 40 CFR Part 60, Subpart UU:

1. 40 CFR 60.470.
2. 40 CFR 60.471.
3. 40 CFR 60.472(c).

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

(4) The one (1) modified bitumen production line, at this asphalt roofing manufacturing plant, is subject to the requirements of 40 CFR Part 60, Subpart UU because it was constructed after the rule applicability date of November 18, 1980.

Pursuant to 40 CFR 60.472(a), the Permittee shall not cause to be discharged into the atmosphere from the modified bitumen production line 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.

Non-applicable portions of the NSPS will not be included in the permit. This emission unit is subject to the following portions of 40 CFR Part 60, Subpart UU:

1. 40 CFR 60.470.
2. 40 CFR 60.471.
3. 40 CFR 60.472(a)(1)(i) and (ii).
4. 40 CFR 60.472(a)(2).
5. 40 CFR 60.472(a)(3).
6. 40 CFR 60.474(a)(1).
7. 40 CFR 60.474(a)(2).
8. 40 CFR 60.474(b).
9. 40 CFR 60.474(c)(1).
10. 40 CFR 60.474(c)(2).
11. 40 CFR 60.474(c)(3).
12. 40 CFR 60.474(c)(5).
13. 40 CFR 60.474(d).

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

(5) The modified bitumen granules handling, filler handling, talc handling, and sand handling operations, at this asphalt roofing manufacturing plant, are subject to the requirements of 40 CFR Part 60, Subpart UU because each were constructed after the rule applicability date of November 18, 1980.

Pursuant to 40 CFR 60.472(d), the Permittee shall not cause to be discharged into the atmosphere from the modified bitumen granules handling, filler handling, talc handling, and sand handling operations emissions with opacity greater than 1 percent.

Non-applicable portions of the NSPS will not be included in the permit. This emission unit is subject to the following portions of 40 CFR Part 60, Subpart UU:

1. 40 CFR 60.470.
2. 40 CFR 60.471.
3. 40 CFR 60.472(d).
4. 40 CFR 60.474(b).
5. 40 CFR 60.474(c)(5).

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

(i) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20, 40 CFR Part 61, and 40 CFR Part 63) included in this permit for this source.

State Rule Applicability - Entire Source

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

This source is not subject to this rule because potential emissions of NOx, VOC, and CO are each less than 250 tons per year. Additionally, the emissions of PM, PM-10, and SO_2 are each limited to less than 250 tons per year. This source is also not one of the 28 listed source categories under 326 IAC 2-2-1(gg)(1). Therefore, this source is not subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)).

The PSD minor limit for PM for the asphalt blowing operations is as follows:

(a) Particulate matter (PM) emissions from the asphalt blowing operation shall be less than 13.20 pounds per hour, which is equivalent to 57.82 tons per year.

Compliance with this PM limit, in combination with the potential emissions of PM from other emission units at this source, will render the requirements of 326 IAC 2-2 (PSD) not applicable.

Note: Refer to the 326 IAC 2-8-4 (FESOP) discussion below for the SO_2, NOx, and PM-10 limitations.

326 IAC 2-8-4 (FESOP)

(a) Either of the two (2) afterburners identified as boilers No. 1 and No. 2, controlling the asphalt blowing operation shall be in operation at all times that the asphalt blowing operation is in use. The PM-10 emissions from the blowing operation shall not exceed 12.28 pounds per hour, which is equivalent to 53.77 tons per year.

This limit restricts source-wide emissions of PM-10 to less than 100 tons per year. Compliance with this limit will satisfy 326 IAC 2-8-4 (FESOP). Compliance with this limit will make 326 IAC 2-7 (Part 70) and 326 IAC 2-2 (PSD) not applicable.

(b) (1) The combined usage of No. 6 fuel oil in the two boilers (No. 1 and No. 2), the mill heater #2, the coating heater, flux heater, mod-bit and filler hot oil heaters shall be limited to 1,504,800 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(2) The sulfur content of the No. 6 fuel oil used in the two boilers (No. 1 and No. 2), the mill heater #2, the coating heater, flux heater, mod-bit and filler hot oil heaters shall not exceed 0.8 percent (%).

These limits restrict source-wide emissions of SO_2 to less than 100 tons per year. Compliance with these limits will satisfy 326 IAC 2-8-4 (FESOP). Compliance with this limit will make 326 IAC 2-7 (Part 70) and 326 IAC 2-2 (PSD) not applicable. Compliance with the fuel usage limit in paragraph (b)(1) will also limit emissions of NOx to less than 100 tons per year.

Note: Compliance with the fuel usage limitation in paragraph (b)(1) above will limit source-wide emissions of NOx to less than 100 tons per year. Therefore a separate fuel usage limitation was not added to the permit in order to limit NOx. Refer to page 1 of 21 of Appendix A.

326 IAC 2-6 (Emission Reporting)

Pursuant to 326 IAC 2-6-1, this rule applies to sources that are required to have an operating permit under 326 IAC 2-7 (Part 70), sources located in Lake, LaPorte, or Porter Counties that emit greater than twenty-five (25) tons per year of VOC or NOx, and sources that emit greater than five (5) tons per year of lead.

Building Materials Manufacturing Company is located in Posey County and this source is not required to have an operating permit under 326 IAC 2-7 (Part 70) since the FESOP restricts emissions below Part 70 major source thresholds. Additionally, this source has a potential to emit of less than five (5) tons per year of lead. Therefore, the requirements of 326 IAC 2-6 do not apply.

326 IAC 5-1 (Opacity Limitations)

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

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

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

326 IAC 2-4.1-1 (New Source Toxics Control)

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any source that constructs or reconstructs a major source of HAPs, which has the potential to emit (PTE) of 10 tons per year of any single HAP or 25 tons per year of any combination of HAPs, must control emissions from that source using technologies consistent with the Maximum Achievable Control Technology (MACT). This source has a potential to emit of less than 10 tons per year of any single HAP and less than 25 tons per year of combined HAPs. Therefore, this rule does not apply.

State Rule Applicability – Individual Facilities

326 IAC 6-2 (Particulate Emission Limitations for Indirect Sources of Heating)

Pursuant to 326 IAC 6-2-3(a) (Particulate Matter Emission Limitations for Sources of Indirect Heating), particulate emissions from indirect heating units which began operation before September 21, 1983, shall be limited by the following equation:

$$Pt = \frac{C \times a \times h}{76.5 \times Q^{0.75} \times N^{0.25}}$$

Where:

Pt = Pounds of particulate matter emitted per million Btu heat input (lb/MMBtu).
C = Maximum ground level concentration with respect to distance from the point source at the critical" wind speed for level terrain. This shall equal 50 micrograms per cubic meter (μ/m3) for a period not to exceed a sixty (60) minute time period.
Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input.
N = Number of stacks in fuel burning operation.
a = Plume rise factor which is used to make allowance for less than theoretical plume rise. The value 0.67 shall be used for Q less than or equal to 1,000 MMBtu/hr heat input. The value 0.8 shall be used for Q greater than 1,000 MMBtu/hr heat input.

h = Stack height in feet.

The two (2) boilers, identified as No. 1 and No. 2, each with heat input rating of 29.15 MMBtu per hour, and each constructed prior to September 21, 1983, firing natural gas or No. 6 fuel oil, are subject to 326 IAC 6-2-3. Pursuant to this rule, particulate emissions shall be limited by the following equation:

$$Pt = \frac{50 \times 0.67 \times 50}{76.5 \times 58.30^{0.75} \times 2^{0.25}} = 0.87 \text{lb/MMBtu}$$

In this case,

h = Stack height in feet. The stack height for each of the associated boilers, identified as No. 1 and No. 2, is 50 feet.
Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input = 58.30.
N = Number of stacks in fuel burning operation = 2.

The allowable particulate emission rate from each boiler, based on the above equation, is 0.87 pounds per MMBtu heat input. However, pursuant to 326 IAC 6-2-3(e), the allowable particulate emission rate for any facility which has 250 MMBtu per hour heat input or less and which began operation after June 8, 1972, shall not exceed 0.6 pounds per MMBtu heat input. Therefore, the allowable particulate emission rate for each of the two boilers (No. 1 and No. 2) is 0.6 pounds of PM per MMBtu heat input.

Boiler PM Compliance Determination (Natural Gas):
1.9 lb/MMscf * 1/1,020 (scf/btu) = 0.0019 lb PM/MMBtu

Boiler PM Compliance Determination (No. 6 Fuel Oil):
12.07 lb/kgal * 1Kgal/1,000 gal * 1/140,000 gal/btu * 1,000,000 btu/MMBtu = 0.09 lb PM/MMBtu

The boilers (No. 1 and No. 2) emit a maximum of 0.09 pounds of PM per MMBtu heat input each. Therefore, the boilers are able to comply with 326 IAC 6-2-3.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, particulate emissions shall be limited by the following:

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

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

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

or

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

$E = 55.0 P^{0.11} - 40$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

Emissions Unit	Process Weight Rate (tons/hr)	Uncontrolled PM Emissions (lb/hr)	Control Efficiency (%)	Allowable PM Emissions (326 IAC 6-3-2) (lb/hr)	Controlled PM Emissions (lb/hr)
Asphalt Blowing Line	20.00	132.00	90.0	30.51	0.40
Shingle and Roll Production Line	73.00	1.27	0.00	48.17	1.27
Shingle and Modified Bitumen Granules Handling	30.60	6.12	0.00	40.13	6.12
Shingle and Modified Bitumen Filler Handling	32.00	6.40	99.00	40.52	0.06
Sand Handling	4.63	0.93	0.00	11.45	0.93

(a) Talc handling has an uncontrolled potential to emit of PM of 0.023 pounds per hour, which is less than 0.551 pounds per hour. Pursuant to 326 IAC 6-3-1(b)(14), operations that have a PM potential to emit of less than 0.551 lb/hr are exempt from the requirements of 326 IAC 6-3-2.

(b) The modified bitumen production line has an uncontrolled potential to emit of PM of 0.37 pounds per hour, which is less than 0.551 pounds per hour. Pursuant to 326 IAC 6-3-1(b)(14), operations that have a PM potential to emit of less than 0.551 lb/hr are exempt from the requirements of 326 IAC 6-3-2.

(c) The uncontrolled PM emission rate for the shingle and roll production line, shingle and modified bitumen granules handling, shingle and modified bitumen filler handling, sand handling are each less than the allowable PM emission rate calculated under 326 IAC 6-3-2. Therefore, these facilities are able to comply with 326 IAC 6-3-2 without the use of any particulate control devices.

(d) The uncontrolled PM emission rate for the asphalt blowing operation is greater than the allowable PM emission rate calculated under 326 IAC 6-3-2. The controlled PM emission rate for the asphalt blowing operation is less than the allowable PM emission rate calculated under 326 IAC 6-3-2. Therefore, in order to comply with 326 IAC 6-3-2 the afterburners (boilers No.: 1 and No.: 2) shall be in operation at all times that the asphalt blowing operation is in use.

326 IAC 7 (Sulfur Dioxide Rules)

The potential to emit of SO_2 for boiler No. 1, boiler No. 2, and the flux heater are each greater than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 7-1.1 are applicable.

(a) When operating on No. 6 fuel oil, the sulfur dioxide emissions shall be limited to one and six-tenths (1.6) pounds per million British thermal units. Compliance with this limitation shall be accomplished by limiting the weight percent sulfur in the No. 6 fuel oil to no more than one and six-tenths percent (1.6%).

Note: The source is able to comply with this limit by utilizing No. 6 fuel oil with a maximum sulfur content of 0.8% by weight, for boiler No. 1, boiler 2, and the flux heater.

The mill oil heater #2, the coating heater, the mod-bit heater, the filler heater, the liquid asphalt heater, and the mill oil heater #1 are not subject to the requirements of this rule because potential SO_2 emissions from each unit is less than 25 tons per year.

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

This source is subject to 326 IAC 7-2-1 (Reporting Requirements). This rule requires the source to submit to the Office of Air Quality, upon request, records of sulfur content, heat content, fuel consumption, and sulfur dioxide emission rates based on a calendar-month average.

326 IAC 8-4-3 (Petroleum Liquid Storage Facilities)

The requirements of 326 IAC 8-4-3 apply to petroleum liquid storage vessels with capacities greater than 39,000 gallons containing VOCs whose true vapor pressure is greater than 10.5 kPa, which were installed after January 1, 1980. The requirements of 326 IAC 8-4-3 are not applicable to the one (1) No. 6 fuel oil storage tank, identified as T-22, which was constructed in 1990 because the tank has a capacity of the less than 39,000 gallons. Therefore the requirements of 326 IAC 8-4-3 are not included in the permit.

326 IAC 8-1-6 (New facilities: General Reduction Requirements)

The requirements of 326 IAC 8-1-6 are applicable to facilities constructed after January 1, 1980 and which have the potential to emit of 25 tons per year or more of VOCs. The only emission unit at this source that has a potential to emit of greater than 25 tons per year is the shingle and roll production line. However, the shingle and roll production line was installed in 1972, which is prior to the rule applicability date of January 1, 1980. Therefore, the requirements of this rule are not applicable to this emission unit.

There are no other Article 8 (326 IAC 8) rules applicable to this source.

Testing Requirements

During the period between 30 to 36 months after issuance of this permit, the Permittee shall perform testing for the asphalt blowing operation, modified bitumen production line, and the modified bitumen granules and filler handling, talc handling, and sand handling operations utilizing methods as approved by the Commissioner and as described below:

(a) In order to demonstrate compliance with the particulate emission limitations in permit Condition D.1.11 for the modified bitumen production line, the Permittee shall perform PM testing utilizing methods per 40 CFR Part 60 Appendix A, Method 5A.

(b) In order to demonstrate compliance with the particulate emission limitations (PM/PM-10) in permit Conditions D.1.1, D.1.2, and D.1.3 for the asphalt blowing operation, the Permittee shall perform PM and PM-10 testing utilizing methods per 40 CFR Part 60 Appendix A, Method 5A.

(c) In order to demonstrate compliance with the opacity limitation in permit Condition D.1.11, the Permittee shall perform opacity testing for the modified bitumen production line, the modified bitumen granules and filler handling, talc handling, and sand handling operations utilizing 40 CFR Part 60 Appendix A, Method 9.

These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

Compliance Determination and Monitoring Requirements

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

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

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

(a) The two (2) boilers (No. 1 and No. 2) and the asphalt blowing operation have applicable compliance determination conditions as specified below:

(1) Visible emission notations of the boilers (No.: 1 and No.: 2) and the asphalt blowing operation stack exhaust (S32) shall be performed daily during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(2) 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.

(3) 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.

(4) 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.

(5) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

(6) The afterburners (boilers No.: 1 and No.: 2) for controlling emissions from asphalt blowing operation, shall maintain a minimum operating temperature of 1,500ºF or a temperature determined in the most recent compliance stack tests to ensure that the minimum destruction efficiency of 90% is achieved. The temperature of the combustion chamber shall be continuously monitored and recorded by the temperature monitoring instrument whenever the asphalt blowing operation is in use.

These monitoring conditions are necessary because the afterburners (boilers No.: 1 and No.: 2) must operate properly to ensure compliance with 326 IAC 6-2-3 (Particulate Emission Limitations for Sources of Indirect Heating). At least one of the two afterburners (boilers No.: 1 or No.: 2) must also operate at all times that the asphalt blowing operation is in use, in order to ensure compliance with 326 IAC 2-8 (FESOP), and 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) and to render 326 IAC 2-2 (PSD) not applicable.

(b) The modified bitumen production line, the modified bitumen granules and filler handling, talc handling, and sand handling operations have applicable compliance determination conditions as specified below:

(1) Visible emission notations of the modified bitumen production line operation stack exhaust (S3), the modified bitumen granules handling stack exhausts (S13, S14, S27, S28, S29, and S30), the modified bitumen filler handling stack exhausts (S8, S9, S10, S11, S19, S20, S21, S22, S23, S24, and S4), the talc handling stack exhausts (S18 and S25), and the sand handling stack exhausts (S12, S15, S17, and S26) shall be performed daily during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(2) 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.

(3) 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.

(4) 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.

(5) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

These monitoring conditions are necessary because the modified bitumen production line, talc handling, and sand handling operations must operate properly to ensure compliance with 40 CFR Part 60, Subpart UU (Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture). Additionally, these monitoring conditions are necessary because the modified bitumen granules and filler handling operations must operate properly to ensure compliance with 40 CFR Part 60, Subpart UU (Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture) and 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes).

Recommendation

The staff recommends to the Commissioner that the FESOP 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 July 26, 2006.

Conclusion

The operation of this stationary asphalt roofing manufacturing shall be subject to the conditions of the attached FESOP Renewal No.: F129-23419-00011.

Appendix A: Emission Calculations

Company Name: Building Materials Manufacturing Corporation
Address: 901 Givens Road, Mount Vernon, IN 47620
Permit No.: F129-23419-00011
Reviewer: Tanya White/EVP
Date: 08/09/07

Uncontrolled Potential Emissions (tons/year)

Emissions Generating Activity

Pollutant	Boilers No.1 and No. 2	Mill Oil Heater #2 and Coating Heater	Flux Heater, Mod-Bit and Filler Hot Oil Heaters	Liquid Asphalt Heater	Mill Oil Heater #1	Mat Heater and Flame Bar	Shingles and Roll Production Line	Modified Bitumen Production Line	Asphalt Blowing	Granule Handling	Filler Handling	Talc Handling	Sand Handling	Total
PM	20.55	2.47	6.42	0.06	0.09	0.04	5.57	1.64	578.16	26.81	28.04	0.10	4.06	673.99
PM10	13.11	1.57	4.09	0.10	0.09	0.04	19.16	2.18	537.69	4.02	4.21	0.08	0.61	586.95
SO_2	213.82	25.67	66.75	0.01	3.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	309.38
NOx	93.63	11.24	29.23	1.31	0.94	1.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	137.66
VOC	1.92	0.23	0.60	0.07	0.02	0.05	9.59	1.70	14.89	0.00	0.00	0.00	0.00	29.07
CO	14.98	1.02	6.70	1.10	0.23	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.21
total HAPs	0.24	0.00	0.15	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42
worst case single HAP	0.23	0.00	0.14	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
	Hexane		Hexane	Hexane										Hexane

Total emissions based on rated capacity at 8,760 hours/year.

Limited/Controlled Potential Emissions (tons/year)

Emissions Generating Activity

Pollutant	Boilers No.1 and No. 2	Mill Oil Heater #2 and Coating Heater	Flux Heater, Mod-Bit and Filler Hot Oil Heaters	Liquid Asphalt Heater	Mill Oil Heater #1	Mat Heater and Flame Bar	Shingles and Roll Production Line	Modified Bitumen Production Line	Asphalt Blowing	Granule Handling	Filler Handling	Talc Handling	Sand Handling	Total
PM	9.08			0.06	0.09	0.04	5.57	1.64	57.82	26.81	0.28	0.001	4.06	105.44
PM10	5.79			0.10	0.09	0.04	19.16	2.18	53.77	4.02	0.04	0.001	0.61	85.81
SO_2	94.50			0.01	3.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	97.64
NOx	41.38			1.31	0.94	1.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44.94
VOC	0.85			0.07	0.02	0.05	9.59	1.70	1.49	0.00	0.00	0.00	0.00	13.76
CO	14.98	1.02	6.70	1.10	0.23	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.21
total HAPs	0.24	0.00	0.15	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42
worst case single HAP	0.23	0.00	0.14	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
	Hexane		Hexane	Hexane										Hexane

Total emissions based on rated capacity at 8,760 hours/year after controls, except for combustion units that burn No. 6 fuel oil which are limited to 1,504,800 gallons of No. 6 fuel oil usage per year.

Appendix A: Emissions Calculations
Combustion Units (< 100 MMBtu/hr)
#6 Fuel Oil

Company Name: **Building Materials Manufacturing Corporation**
Address: **901 Givens Road, Mount Vernon, IN 47620**
Permit No.: **F129-23419-00011**
Reviewer: **Tanya White/EVP**
Date: **08/09/07**

One (1) No. 6 fuel oil boiler, identified as boiler No. 1, with a maximum heat input capacity of 29.15 MMBtu/hr.

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur
29.15	1702.36	0.8

		Pollutant				
	PM**	PM-10	SO_2	NOx	VOC	CO
Emission Factor in lb/kgal	12.07 *see below	7.70	125.60 *(157S)*	55.00	1.13	5.00
Potential Emissions in tons/yr	10.28	6.55	106.91	46.81	0.96	4.26

*Particulate Matter emission factor for #6 fuel oil is 9.19(s) + 3.22 lb/kgal + 1.5 lb/kgal

**PM emission factor is filterable and condensable PM. The condensable PM emission factor is 1.5 lb/kgal.

Methodology

1 gallon of #6 Fuel oil has a heating value of 150,000 Btu
Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.150 MMBtu
Emission Factors are from AP 42 Tables 1.3-1, 1.3-2 and 1.3-3 (SCC 1-03-004-02/03,1-02-004-02/03, and 1-03-004-04)
(AP-42 Supplement E 9/98)
Potential Emissions (tons/yr) = Throughput (kgals/year) x Emission Factor (lb/kgal)/2,000 lb/ton
No data was available for HAP emissions for No. 6 fuel oil combustion.

Appendix A: Emissions Calculations
Combustion Units (< 100 MMBtu/hr)
#6 Fuel Oil (Back-Up Fuel)

Company Name: **Building Materials Manufacturing Corporation**
Address: **901 Givens Road, Mount Vernon, IN 47620**
Permit No.: **F129-23419-00011**
Reviewer: **Tanya White/EVP**
Date: **08/09/07**

One (1) natural gas-fired boiler, identified as boiler No. 2, with a maximum heat input capacity of 29.15 MMBtu/hr, using No. 6 fuel oil as a backup fuel.

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur
29.15	1702.36	0.8

	Pollutant					
	PM**	PM-10	SO_2	NOx	VOC	CO
Emission Factor in lb/kgal	12.07 *see below	7.70	125.60 *(157S)*	55.00	1.13	5.00
Potential Emissions in tons/yr	10.28	6.55	106.91	46.81	0.96	4.26

*Particulate Matter emission factor for #6 fuel oil is 9.19(s) + 3.22 lb/kgal + 1.5 lb/kgal

**PM emission factor is filterable and condensable PM. The condensable PM emission factor is 1.5 lb/kgal.

Methodology

All pollutants except CO are worst-case while burning No. 6 fuel oil. CO emissions are worst-case when burning natural gas.
1 gallon of #6 Fuel oil has a heating value of 150,000 Btu
Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.150 MMBtu
Emission Factors are from AP 42 Tables 1.3-1, 1.3-2 and 1.3-3 (SCC 1-03-004-02/03,1-02-004-02/03, and 1-03-004-04)
(AP-42 Supplement E 9/98)
Potential Emissions (tons/yr) = Throughput (kgals/year) x Emission Factor (lb/kgal)/2,000 lb/ton
No data was available for HAP emissions for No. 6 fuel oil combustion.

Appendix A: Emissions Calculations
Natural Gas
Combustion Units (< 100 MMBtu/hr)
Small Boilers (Primary Fuel)

Company Name: Building Materials Manufacturing Corporation
Address: 901 Givens Road, Mount Vernon, IN 47620
Permit No.: F129-23419-00011
Reviewer: Tanya White/EVP
Date: 08/09/07

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
29.150	255.354

	Pollutant					
	PM*	PM10*	SO_2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.90	7.60	0.60	100.00 **see below	5.50	84.00
Potential Emissions in tons/yr	0.24	0.97	0.08	12.77	0.70	10.72

*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

All pollutants except CO are worst-case while burning No. 6 fuel oil. CO emissions are worst-case when burning natural gas.
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
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)
Potential Emissions (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/to
See next page for HAP emissions calculations.

Appendix A: Emissions Calculations
Natural Gas
Combustion Units (< 100 MMBtu/hr)
Small Boilers
HAP Emissions

Company Name: Building Materials Manufacturing Corporation
Address: 901 Givens Road, Mount Vernon, IN 47620
Permit No.: F129-23419-00011
Reviewer: Tanya White/EVP
Date: 08/09/07

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.10E-03	1.20E-03	7.50E-02	1.80E+00	3.40E-03
Potential Emissions in tons/yr	2.68E-04	1.53E-04	9.58E-03	2.30E-01	4.34E-04

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.00E-04	1.10E-03	1.40E-03	3.80E-04	2.10E-03
Potential Emissions in tons/yr	6.38E-05	1.40E-04	1.79E-04	4.85E-05	2.68E-04

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAP emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
Combustion Units (< 100 MMBtu/hr)
#6 Fuel Oil

Company Name: **Building Materials Manufacturing Corporation**
Address: **901 Givens Road, Mount Vernon, IN 47620**
Permit No.: **F129-23419-00011**
Reviewer: **Tanya White/EVP**
Date: **08/09/07**

One (1) mill oil heater (# 2) with a heat input rating of 2.5 MMBtu/hr; One (1) coating heater with a heat input rating of 4.5 MMBtu/hr.

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur
7.00	408.80	0.8

	Pollutant					
	PM**	PM-10	SO_2	NOx	VOC	CO
Emission Factor in lb/kgal	12.07 *see below	7.70	125.60 *(157S)*	55.00	1.13	5.00
Potential Emissions in tons/yr	2.47	1.57	25.67	11.24	0.23	1.02

*Particulate Matter emission factor for #6 fuel oil is 9.19(s) + 3.22 lb/kgal + 1.5 lb/kgal
**PM emission factor is filterable and condensable PM. The condensable PM emission factor is 1.5 lb/kgal.

Methodology

1 gallon of #6 Fuel oil has a heating value of 150,000 Btu
Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.150 MMBtu
Emission Factors are from AP 42 Tables 1.3-1, 1.3-2 and 1.3-3 (SCC 1-03-004-02/03,1-02-004-02/03, and 1-03-004-04)
(AP-42 Supplement E 9/98)
Potential Emissions (tons/yr) = Throughput (kgals/year) x Emission Factor (lb/kgal)/2,000 lb/ton
No data was available for HAP emissions for No. 6 fuel oil combustion.

Appendix A: Emissions Calculations
Combustion Units (< 100 MMBtu/hr) - Limited Source-Wide No. 6 Fuel Usage
#6 Fuel Oil

Company Name: Building Materials Manufacturing Corporation
Address: 901 Givens Road, Mount Vernon, IN 47620
Permit No.: F129-23419-00011
Reviewer: Tanya White/EVP
Date: 08/09/07

One (1) natural gas-fired boiler, identified as boiler No. 2, with a maximum heat input capacity of 29.15 MMBtu/hr, using No. 6 fuel oil as a backup fuel.
One (1) No. 6 fuel oil boiler, identified as boiler No. 1, with a maximum heat input capacity of 29.15 MMBtu/hr.
One (1) mill oil heater (# 2) with a heat input rating of 2.5 MMBtu/hr; One (1) coating heater with a heat input rating of 4.5 MMBtu/hr;
One (1) natural gas fired unit, identified as flux heater, rated at 7.0 MMBtu/hr, with a spare unit fired by a No. 6 Fuel oil.
One natural gas fired combustion unit with a heat input rating of 5.2 MMBtu/hr, identified as mod-bit hot oil heater, with No. 6 fuel oil as a back up.
One (1) No. 6 fuel oil fired combustion unit rated at 6.5 MMBtu/hr with natural gas as a backup, and identified as filler heater hot oil heater.

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	Limited Throughput kgals/year	S = Weight % Sulfur
84.00	4905.60	1504.80	0.8

		Pollutant			
	PM**	PM-10	SO_2	NOx	VOC
Emission Factor in lb/kgal	12.07 *see below	7.70	125.60 *(157S)*	55.00	1.13
Potential Emissions in tons/yr	29.61	18.89	308.07	134.90	2.77
Limited Emissions in tons/yr	9.08	5.79	94.50	41.38	0.85

*Particulate Matter emission factor for #6 fuel oil is 9.19(s) + 3.22 lb/kgal +1.5 lb/kgal
**PM emission factor is filterable and condensable PM. The condensable PM emission factor is 1.5 lb/kgal.

Methodology
1 gallon of #6 Fuel oil has a heating value of 150,000 Btu
Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.150 MMBtu
Emission Factors are from AP 42 Tables 1.3-1, 1.3-2 and 1.3-3 (SCC 1-03-004-02/03,1-02-004-02/03, and 1-03-004-04)
(AP-42 Supplement E 9/98)
Emissions (tons/yr) = Throughput (kgals/year) x Emission Factor (lb/kgal)/2,000 lb/ton
No data was available for HAP emissions for No. 6 fuel oil combustion.

Appendix A: Emissions Calculations
Combustion Units (< 100 MMBtu/hr)
#6 Fuel Oil

Company Name: **Building Materials Manufacturing Corporation**
Address: **901 Givens Road, Mount Vernon, IN 47620**
Permit No.: **F129-23419-00011**
Reviewer: **Tanya White/EVP**
Date: **08/09/07**

One (1) natural gas fired unit, identified as flux heater rated at 7.0 MMBtu/hr, with a spare unit fired by a No. 6 Fuel oil.
One natural gas fired combustion unit with a heat input rating of 5.2 MMBtu/hr, identified as mod-bit hot oil heater, with No. 6 fuel oil as a back up.
One (1) No. 6 fuel oil fired combustion unit rated at 6.5 MMBtu/hr with natural gas as a backup, and identified as filler heater hot oil heater.

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur
18.20	1062.88	0.8

		Pollutant				
	PM**	PM-10	SO_2	NOx	VOC	CO
Emission Factor in lb/kgal	12.07 *see below	7.70	125.60 *(157S)*	55.00	1.13	5.00
Potential Emission in tons/yr	6.42	4.09	66.75	29.23	0.60	2.66

*Particulate Matter emission factor for #6 fuel oil is 9.19(s) + 3.22 lb/kgal +1.5 lb/kgal
**PM emission factor is filterable and condensable PM. The condensable PM emission factor is 1.5 lb/kgal.

Methodology
All pollutants except CO are worst-case while burning No. 6 fuel oil. CO emissions are worst-case when burning natural gas.
1 gallon of #6 Fuel oil has a heating value of 150,000 Btu
Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.150 MMBtu
Emission Factors are from AP 42 Tables 1.3-1, 1.3-2 and 1.3-3 (SCC 1-03-004-02/03,1-02-004-02/03, and 1-03-004-04)
(AP-42 Supplement E 9/98)
Emission (tons/yr) = Throughput (kgals/year) x Emission Factor (lb/kgal)/2,000 lb/ton
No data was available for HAP emissions for No. 6 fuel oil combustion.

Appendix A: Emissions Calculations
Combustion Units (< 100 MMBtu/hr)
Natural Gas

Company Name: **Building Materials Manufacturing Corporation**
Address: **901 Givens Road, Mount Vernon, IN 47620**
Permit No.: **F129-23419-00011**
Reviewer: **Tanya White/EVP**
Date: **08/09/07**

One (1) natural gas fired unit, identified as flux heater, rated at 7.5 MMBtu/hr, with a spare unit fired by a No. 6 Fuel oil.
One natural gas fired combustion unit a heat input rating of 5.2 MMBtu/hr, identified as mod-bit hot oil heater, with No. 6 fuel oil as a back up.
One (1) No. 6 fuel oil fired combustion unit rated at 6.5 MMBtu/hr with natural gas as a backup, and identified as filler heater hot oil heater.

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
18.200	159.432

	Pollutant					
	PM*	PM10*	SO_2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.90	7.60	0.60	100.00 **see below	5.50	84.00
Potential Emission in tons/yr	0.15	0.61	0.05	7.97	0.44	6.70

*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

All pollutants except CO are worst-case while burning No. 6 fuel oil. CO emissions are worst-case when burning natural gas.
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
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)
Potential Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
See next page for HAP emissions calculations.

Appendix A: Emissions Calculations
Combustion Units (< 100 MMBtu/hr)
Natural Gas
HAP Emissions

Company Name: Building Materials Manufacturing Corporation
Address: 901 Givens Road, Mount Vernon, IN 47620
Permit No.: F129-23419-00011
Reviewer: Tanya White/EVP
Date: 08/09/07

	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 Emissions in tons/yr	1.67E-04	9.57E-05	5.98E-03	1.43E-01	2.71E-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 Emissions in tons/yr	3.99E-05	8.77E-05	1.12E-04	3.03E-05	1.67E-04

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAP emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
Combustion Units (< 100 MMBtu/hr)
Propane (Back-up Fuel)

Company Name: **Building Materials Manufacturing Corporation**
Address: **901 Givens Road, Mount Vernon, IN 47620**
Permit No.: **F129-23419-00011**
Reviewer: **Tanya White/EVP**
Date: **08/09/07**

One (1) natural gas fired combustion unit rated at 3.0 MMBtu/hr, identified as liquid asphalt storage heater with propane as a back up.

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	SO_2 Emission factor = 0.10 x S S = Weight % Sulfur =
3.00	279.57	0.47

	Pollutant					
	PM	PM10	SO_2	NOx	VOC	CO
Emission Factor in lb/kgal	0.40	0.40	0.05 *(0.10S)*	14.00	0.50	1.90
Potential Emissions in tons/yr	0.06	0.06	0.01	1.96	0.07	0.27

Methodology

CO, VOC, SO_2, and PM-10 emissions are worst-case while burning NG. NOx and PM emission are worst-case while burning propane.
1 gallon of LPG has a heating value of 94,000 Btu
Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.094 MMBtu
Emission Factors are from AP42, Fifth Edition (January 1995), Table 1.5-2 (SCC #1-02-010-02)
Potential Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal) / 2,000 lb/ton

Appendix A: Emissions Calculations
Combustion Units (< 100 MMBtu/hr)
Natural Gas (Primary Fuel)

Company Name: **Building Materials Manufacturing Corporation**
Address: **901 Givens Road, Mount Vernon, IN 47620**
Permit No.: **F129-23419-00011**
Reviewer: **Tanya White/EVP**
Date: **08/09/07**

One (1) natural gas fired combustion unit rated at 3.0 MMBtu/hr, identified as liquid asphalt storage heater with propane as a back up.

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
3.00	26.28

	Pollutant					
	PM*	PM10*	SO_2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.90	7.60	0.60	100.00 **see below	5.50	84.00
Potential Emissions in tons/y	0.02	0.10	0.01	1.31	0.07	1.10

*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

CO, VOC, SO2, and PM-10 emissions are worst-case while burning NG. NOx and PM emission are worst-case while burning propane.
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
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 next page for HAPs emissions calculations.

Appendix A: Emissions Calculations
Combustion Units (< 100 MMBtu/hr)
Natural Gas (Primary Fuel)
HAP Emissions

Company Name: **Building Materials Manufacturing Corporation**
Address: **901 Givens Road, Mount Vernon, IN 47620**
Permit No.: **F129-23419-00011**
Reviewer: **Tanya White/EVP**
Date: **08/09/07**

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.10E-03	1.20E-03	7.50E-02	1.80E+00	3.40E-03
Potential Emissions in tons/y	2.76E-05	1.58E-05	9.86E-04	2.37E-02	4.47E-05

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.00E-04	1.10E-03	1.40E-03	3.80E-04	2.10E-03
Potential Emissions in tons/y	6.57E-06	1.45E-05	1.84E-05	4.99E-06	2.76E-05

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAP emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
Combustion Units (< 100 MMBtu/hr)
#2 Fuel Oil

Company Name: **Building Materials Manufacturing Corporation**
Address: **901 Givens Road, Mount Vernon, IN 47620**
Permit No.: **F129-23419-00011**
Reviewer: **Tanya White/EVP**
Date: **08/09/07**

One No. 2 fuel oil fired combustion unit with a rated capacity of 1.5 MMBtu/hr identified as mill oil heater # 1.

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur
1.5	93.86	0.47

	Pollutant				
	PM*	SO_2	NOx	VOC	CO
Emission Factor in lb/kgal	2.00	66.74 *(142.0S)*	20.00	0.34	5.00
Potential Emissions in tons/yr	0.09	3.13	0.94	0.02	0.23

*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see errata file)

Potential Emissions (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal)/2,000 lb/ton

See next page for HAP emission calculations.

Appendix A: Emissions Calculations
Combustion Units (< 100 MMBtu/hr)
#2 Fuel Oil
HAP Emissions

Company Name: **Building Materials Manufacturing Corporation**
Address: **901 Givens Road, Mount Vernon, IN 47620**
Permit No.: **F129-23419-00011**
Reviewer: **Tanya White/EVP**
Date: **08/09/07**

	HAPs - Metals				
	Arsenic	Beryllium	Cadmium	Chromium	Lead
Emission Factor in lb/mmBtu	4.0E-06	3.0E-06	3.0E-06	3.0E-06	9.0E-06
Potential Emissions in tons/yr	2.63E-05	1.97E-05	1.97E-05	1.97E-05	5.91E-05

	HAPs - Metals (continued)			
	Mercury	Manganese	Nickel	Selenium
Emission Factor in lb/mmBtu	3.0E-06	6.0E-06	3.0E-06	1.5E-05
Potential Emissions in tons/yr	1.97E-05	3.94E-05	1.97E-05	9.86E-05

Methodology

No data was available in AP-42 for organic HAPs.
Potential Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton

Appendix A: Emission Calculations
Liquid Propane Gas
(Heat input capacity: > 0.3 MMBtu/hr and < 10 MMBtu/hr)

Company Name: Building Materials Manufacturing Corporation
Address: 901 Givens Road, Mount Vernon, IN 47620
Permit No.: F129-23419-00011
Reviewer: Tanya White/EVP
Date: 08/09/07

One (1) mat heater rated at 1.0 MMBtu/hr; One (1) flame bar rated at 1.0 MMBtu/hr.

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	SO_2 Emission factor = 0.10 x S S = Weight % Sulfur =
2.00	186.38	0.00

	Pollutant					
	PM	PM10	SO_2	NOx	VOC	CO
Emission Factor in lb/kgal	0.40	0.40	0.00 *(0.10S)*	14.00	0.50	1.90
Potential Emissions in tons/yr	0.04	0.04	0.00	1.30	0.05	0.18

Methodology

1 gallon of LPG has a heating value of 94,000 Btu
Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.094 MMBtu
Emission Factors are from AP42, Fifth Edition (January 1995), Table 1.5-2 (SCC #1-02-010-02)
Potential Emissions (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal) / 2,000 lb/ton

Appendix A: Emission Calculations
Asphalt Blowing

Company Name: Building Materials Manufacturing Corporation
Address: 901 Givens Road, Mount Vernon, IN 47620
Permit No.: F129-23419-00011
Reviewer: Tanya White/EVP
Date: 08/09/07

Potential Throughput	
tons/hr	tons/yr
20	175200

	Pollutant		
	PM	PM10	VOC
Emission Factor in lb/ton (after Controls)	0.66	0.61	0.017
Emission Factor in lb/ton (before Controls)*	6.60	6.14	
Potential Emissions in ton/yr	578.16	537.69	14.89
Controlled Emissions in ton/yr	57.82	53.77	1.49

Methodology

Emissions are controlled by an afterburner with a control efficiency of 90% (or greater) for PM, PM-10 and VOC (provided by the source).

PM and PM-10 emissions from asphalt blowing operation are condensable and primarily consist of high molecular organic material.

*PM emission factor is from U.S. EPA AP-42, Chapter 11.2 (Table 11.2-2). The PM-10 emission factor (before controls) is based on AIRS/Facility SCC and Emission Factors listing, PM10 emissions are 93% of PM emissions.

The VOC emission factors is based on AP-42, 5th Edition, Chapter 11.2 (SCC # 03-05-001-02).

Throughput (lb/hr) * 8760 hr/yr * ton/2000 lb = throughput (ton/yr)

Potential Emissions (tons/yr) = Throughput (ton/yr) x Emission Factor (lb/ton) / 2,000 lb/ton

Appendix A: Emission Calculations
Shingles and Roll Production Line

Company Name: Building Materials Manufacturing Corporation
Address: 901 Givens Road, Mount Vernon, IN 47620
Permit No.: F129-23419-00011
Reviewer: Tanya White/EVP
Date: 08/09/07

	Throughput	
	tons/hr	tons/yr
Potential	73	639480

A. Roofing Line Coater:

	Pollutant	
	PM*	PM10*
Emission Factor in lb/hr	1.10	1.28
Emission Factor in lb/ton	0.015	0.018
Potential Emissions in ton/yr	4.95	5.76

B. Surfacing Section:

	Pollutant	
	PM**	PM10**
Emission Factor in lb/hr	0.14	0.39
Emission Factor in lb/ton	0.0019	0.042
Potential Emissions in ton/yr	0.61	13.39

C. VOC Emissions:

	Pollutant
	VOC***
Emission Factor in lb/ton	0.030
Potential Emissions in ton/yr	9.59

Methodology

*PM and PM-10 emission factors are from an IDEM approved stack test performed on March 22, 2005. The average operating rate for the roof line coater during the test was 71 tons per hour.

**PM and PM-10 emission factors are from an IDEM approved stack test performed on March 22, 2005. The average operating rate for the surfacing section during the test was 73 tons per hour.

***The VOC emission factor is based on U.S. EPA WebFire, SCC# 3-05-001-04.

Throughput (tons/yr) = Throughput (lb/hr) * 8760 hr/yr * ton/2000 lb

Potential Emissions (tons/yr) = Throughput (ton/yr) x Emission Factor (lb/ton) / 2,000 lb/ton

Appendix A: Emission Calculations
Modified Bitumen Production Line

Company Name: **Building Materials Manufacturing Corporation**
Address: **901 Givens Road, Mount Vernon, IN 47620**
Permit No.: **F129-23419-00011**
Reviewer: **Tanya White/EVP**
Date: **08/09/07**

	Throughput	
	tons/hr	tons/yr
Potential	12.9	113004

	Pollutant		
	PM*	PM10*	VOC**
Emission Factor in lb/hr	0.27	0.36	-
Emission Factor in lb/ton	0.03	0.04	0.030
Potential Emissions in ton/yr	1.64	2.18	1.70

Methodology

*PM and PM-10 emission factors are from an IDEM approved stack test performed on March 22, 2005. The average operating rate during the test was 9.31 tons per hour.
**The VOC emission factor is based on U.S. EPA WebFire, SCC# 3-05-001-04.
Throughput (tons/yr) = Throughput (lb/hr) * 8760 hr/yr * ton/2000 lb
Potential Emissions (tons/yr) = Throughput (ton/yr) x Emission Factor (lb/ton) / 2,000 lb/ton

Appendix A: Secondary Metal Production
Storage and Handling of Bulk Material

Company Name: Building Materials Manufacturing Corporation
Address: 901 Givens Road, Mount Vernon, IN 47620
Permit No.: F129-23419-00011
Reviewer: Tanya White/EVP
Date: 08/09/07

Shingle and Modified Bitumen Granules Handling

	TONS/YR	
Maximum Throughput	268,072	
	PM	**PM10**
	lbs/ton material handled	**lbs/ton material handled**
	0.20	0.03
Potential Emissions lbs/hr	6.12	0.92
Potential Emissions lbs/day	146.89	22.03
Potential Emissions tons/year	26.81	4.02
Potential Emissions after control tons/yr	26.81	4.02

Notes:

Emission factor for shingle and mod-bit granule handling was taken from AIRS facility emission factors (SCC# 3-05-002-02) for sand handling based on an engineering judgment.

Shingle and Modified Bitumen Filler Handling

	TONS/YR	
Maximum Throughput	280,404	
	PM	**PM10**
	lbs/ton material handled	**lbs/ton material handled**
	0.20	0.03
Potential Emissions lbs/hr	6.40	0.96
Potential Emissions lbs/day	153.65	23.05
Potential Emissions tons/year	28.04	4.21
Potential Emissions after control tons/yr (1)	0.280	0.042

Notes:

Emission factor for shingle and mod-bit filler handling was taken from AIRS facility emission factors (SCC# 3-05-002-02) for sand handling based on an engineering judgment.
(1) Controlled by a baghouse with 99% control efficiency.

Appendix A: Secondary Metal Production
Storage and Handling of Bulk Material

Company Name: Building Materials Manufacturing Corporation
Address: 901 Givens Road, Mount Vernon, IN 47620
Permit No.: F129-23419-00011
Reviewer: Tanya White/EVP
Date: 08/09/07

Talc Handling

	TONS/YR	
Maximum Throughput	801	
	PM	**PM10**
	lbs/ton material handled	**lbs/ton material handled**
	0.24	0.20
Potential Emissions lbs/hr	0.02	0.02
Potential Emissions lbs/day	0.53	0.44
Potential Emissions tons/year	0.10	0.08
Potential Emissions after control tons/yr (1)	0.001	0.001

Notes:

Emission factor for talc handling was taken from AIRS Facility emission factors (SCC#3-05-007-19) for cement handling based on engineering judgment.
(1) Controlled by a baghouse with 99% control efficiency.

Shingle and Modified Bitumen Sand Handling

	TONS/YR	
Maximum Throughput	40,593	
	PM	**PM10**
	lbs/ton material handled	**lbs/ton material handled**
	0.20	0.03
Potential Emissions lbs/hr	0.93	0.14
Potential Emissions lbs/day	22.24	3.34
Potential Emissions tons/year	4.06	0.61
Potential Emissions after control tons/yr	4.06	0.61

Notes:

Emission factor for shingle and mod-bit sand handling was taken from AIRS Facility emission factors (SCC# 3-05-002-02) for sand.