



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

To: Interested Parties

Date: December 30, 2014

From: Matthew Stuckey, Chief
Permits Branch
Office of Air Quality

Source Name: Henry Company

Permit Level: Federally Enforceable State Operating Permit Renewal

Permit Number: 097-33649-00208

Source Location: 4351 W Morris Street, Indianapolis, Indiana

Type of Action Taken: Permit Renewal

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 matter referenced above.

The final decision is available on the IDEM website at: <http://www.in.gov/apps/idem/caats/>
To view the document, select Search option 3, then enter permit 33649.

If you would like to request a paper copy of the permit document, please contact IDEM's central file room:

Indiana Government Center North, Room 1201
100 North Senate Avenue, MC 50-07
Indianapolis, IN 46204
Phone: 1-800-451-6027 (ext. 4-0965)
Fax (317) 232-8659

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.

(continues on next page)

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

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

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

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

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



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Federally Enforceable State Operating Permit Renewal OFFICE OF AIR QUALITY

**Henry Company
4351 W. Morris St.
Indianapolis, Indiana 46241**

(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.: F097-33649-00208	
Issued by:  Jenny Acker, Section Chief Permits Branch Office of Air Quality	Issuance Date: December 30, 2014 Expiration Date: December 30, 2024



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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 batch mix protective coating manufacturer.

Source Address:	4351 W. Morris St., Indianapolis, Indiana 46241
General Source Phone Number:	317-248-1344
SIC Code:	2952
County Location:	Marion Wayne Township
Source Location Status:	Nonattainment for SO ₂ standard Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

- (a) Asphalt Cutback Plant: Five (5) Asphalt Cutback (ACB) Blenders, identified as Blender 1 through Blender 5, constructed in 1983 through 1984, each with a maximum capacity of 1,800 gallons, and having a combined maximum throughput of 10,800 lbs/hr per batch; using a WWSly dust collector as particulate control for Blenders 1 through 5, and exhausting to ACB Stack.
- (b) One (1) mixer identified as Mixer 12, constructed in 2003, maximum capacity of 3,800 gallons or 31,600 pounds/hr; using a WWSly dust collector as particulate control and exhausting to ACB Stack.
- (c) Three (3) enclosed Chemical Emulsion Plant (CEP) Tanks, identified as Emulsion Tank 24 Tank 25, and ribbon Tank 33A and holding tank 33B, equipped with feed hopper and mixers, each constructed in 1983, each with a maximum capacity of 6,000 gallons, and having a combined maximum throughput of 48,000 lbs/hr; using an Air Chafeco bin vent for particulate control, and exhausting inside.
- (d) Asphalt Emulsion Plant (AEP): Three (3) enclosed AEP Slurry Tanks, identified as Slurry Tanks 46, 47 and 48 each tank fed by Flexicon feeder, constructed in 1983, and Slurry Tank 48 constructed in 2002, each Slurry Tank has a maximum capacity of 6,000 gallons; with a combined maximum throughput of 36,000 lbs/hr; using a Torit dust collector for particulate control from Flexicon feeder, exhausting through AEP-1, and wet scrubber for tank mixers, exhausting to stack AEP-2.
- (e) Whippany Tanks and Sealer Plant: Three (3) enclosed Mixers and one (1) ribbon blender, equipped with feed hoppers in the Whippany area, three (3) Whippany Mixers identified as 7 through 9, and one ribbon blender, identified as hopper 10 and mixer 10, constructed in 1995 through 1997, maximum capacity of 4,000 gallon for each Mixer, and 1,400 gallon for ribbon blender, combined maximum throughput of 40,000 lbs/hr; using a torit dust collector as particulate control for hoppers 7 through 9, and Mixers 7 and 8,

exhausting outside through stack Whippany, and Mixer 9, and ribbon blender hopper 10, and mixer 10, vent to bin vent filter exhausting inside the building.

- (f) One (1) silica sand process, performing silica sand transfer operations and silica sand batch operations, consisting of:
 - 1) One (1) silica sand silo, identified as Silo 1, constructed in 2006, with a maximum annual throughput of 5.5 million tons per year, with particulate emissions controlled by a Whirl-Air Bin vent dust collector.
- (g) One (1) enclosed limestone storage silo identified as silo 2, constructed in 1983, with a maximum throughput of 5.5 tons per year, equipped with an air bin vent to control particulates, and exhausting inside.

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) Space heaters, process heaters, or boilers using the following fuels:
 - (1) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, consisting of:
 - (i) One (1) 100 Horsepower Steam Boiler, identified as Boiler 1, constructed in 2008, equipped with a low NOx burner.
 - (ii) One (1) Hot Oil Heater, identified as Heater 1, constructed in 2008, nominally rated at 2.8 million British thermal units per hour (MMBtu/hr), equipped with a low NOx burner.
 - (iii) One (1) 37.8 Horsepower Hot Water Heater, identified as Heater 2, constructed in 2008.
- (b) Fourteen (14) enclosed storage Tanks, identified as tanks 60 through 73, located outside, used to store Water, Wax, Asphalt, Cutback and Mineral spirits:
 - (1) Twelve (12) Tanks, identified as Tank 60, 61, 63, and 65 through 73, each constructed in 1983, each with a maximum capacity of 20,000 gallons, utilizing no control devices.
 - (2) One (1) Storage Tank, identified as Tank 64, constructed in 1991, with a maximum capacity of 16,000 gallons, utilizing no control devices.
 - (3) One (1) Storage Tank, identified as Tank 62, constructed in 1989, with a maximum capacity of 13,000 gallons, utilizing no control device.
- (c) Five (5) enclosed caulking cement storage Tanks, identified as Tank 13B and, Tank 14 through Tank 17, constructed in 2002 through 2007, with a capacity of 2165, 2000, 2000, and 1000 gallons respectively, and exhausting inside the building.
- (d) Two (2) enclosed finished good storage Tanks, identified as Tank 31 through Tank 32, constructed in 2002, each tank has a maximum capacity of 20,000 gallons, and exhausting inside the building.
- (e) Four (4) enclosed Intermediate Asphalt emulsion or wax storage Tanks, identified as Tanks 26, 27, 28 and 29, constructed in 1983, with a maximum capacity of 6000, 6000, 11879, 1641 gallons respectively, and exhausting inside the building.

- (f) Four (4) enclosed Intermediate Asphalt emulsion storage Tanks, identified as Tanks 41, 42, 43 and 44, constructed in 1983, each tank has a maximum capacity of 6000 gallons, exhausting inside the building.
- (g) Three (3) tanks 11, 22, and 23. Tank 11 is a final storage tank and 22 and 23 are prime storage tanks. All vent inside the building.
- (h) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]
- (i) One (1) asphalt cutback intermediate holding tank, identified as Tank 6, venting into the building.
- (j) One (1) premix tank, identified as Tank 30.
- (k) Three (3) water tanks; two (2) cold water and one (1) hot water.

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, F097-33649-00208, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

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

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

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

B.4 Enforceability [326 IAC 2-8-6] [IC 13-17-12]

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. 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) A certification required by this permit meets the requirements of 326 IAC 2-8-5(a)(1) if:

- (1) it contains a certification by an "authorized individual", as defined by 326 IAC 2-1.1-1(1), and
 - (2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent 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 and Enforcement 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 a certification that meets the requirements of 326 IAC 2-8-5(a)(1) 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)]

- (a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:
- (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.

The Permittee shall implement the PMPs.

- (b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

The Permittee shall implement the PMPs.

- (c) 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. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

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

Indiana Department of Environmental Management
Compliance and Enforcement 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 a certification that meets the requirements of 326 IAC 2-8-5(a)(1) 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.

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

- (a) All terms and conditions of permits established prior to F097-33649-00208 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 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 a certification that meets the requirements of 326 IAC 2-8-5(a)(1) 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.16 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(42). The renewal application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) 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
Permit Administration and Support Section, 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, pursuant to 326 IAC 2-8-3(g), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) 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.18 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) and (c) 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
Permit Administration and Support Section, 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)(1) and (c). 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)(1) and (c).

- (b) **Emission Trades [326 IAC 2-8-15(b)]**
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(b).
- (c) **Alternative Operating Scenarios [326 IAC 2-8-15(c)]**
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.19 Source Modification Requirement [326 IAC 2-8-11.1]

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

B.20 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.21 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) 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.22 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 no later than 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.23 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) Pursuant to 326 IAC 2-2 (PSD), 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.

(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 5-1-1 (Applicability) and 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 except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

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 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the attached plan as in Attachment A.

C.8 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.9 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
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCM 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 that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

C.10 Performance Testing [326 IAC 3-6]

- (a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCM 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 a certification that meets the requirements of 326 IAC 2-8-5(a)(1) 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 a certification that meets the requirements of 326 IAC 2-8-5(a)(1) 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.11 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.12 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

- (a) For new units:
Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units shall be implemented on and after the date of initial start-up.
- (b) For existing units:
Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance to begin such monitoring. If, due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance, 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 and Enforcement 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 a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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. The analog instrument shall be capable of measuring values outside of the normal range.
- (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 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.15 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.16 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

- (a) The Permittee shall take reasonable response steps to 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 excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned or are returning 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 normal or usual manner of operation.
- (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 record the reasonable response steps taken.

C.17 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 submit a description of its response actions to IDEM, OAQ no later than seventy-five (75) days after the date of the test.

- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) 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 a certification that meets the requirements of 326 IAC 2-8-5(a)(1) 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.18 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. Support information includes the following, where applicable:

- (AA) All calibration and maintenance records.
- (BB) All original strip chart recordings for continuous monitoring instrumentation.
- (CC) Copies of all reports required by the FESOP.

Records of required monitoring information include the following, where applicable:

- (AA) The date, place, as defined in this permit, and time of sampling or measurements.
- (BB) The dates analyses were performed.
- (CC) The company or entity that performed the analyses.
- (DD) The analytical techniques or methods used.
- (EE) The results of such analyses.
- (FF) The operating conditions as existing at the time of sampling or measurement.

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, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.19 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. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that 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. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring

Report shall include a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

- (b) The address for report submittal is:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, 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) 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.20 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 applicable standards for recycling and emissions reduction.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) Asphalt Cutback Plant: Five (5) Asphalt Cutback (ACB) Blenders, identified as Blender 1 through Blender 5, constructed in 1983 through 1984, each with a maximum capacity of 1,800 gallons, and having a combined maximum throughput of 10,800 lbs/hr per batch; using a WWSly dust collector as particulate control for Blenders 1 through 5, and exhausting to ACB Stack.
- (b) One (1) mixer identified as Mixer 12, constructed in 2003, maximum capacity of 3,800 gallons or 31,600 pounds/hr; using a WWSly dust collector as particulate control and exhausting to ACB Stack.
- (c) Three (3) enclosed Chemical Emulsion Plant (CEP) Tanks, identified as Emulsion Tank 24 Tank 25, and ribbon Tank 33A and holding tank 33B, equipped with feed hopper and mixers, each constructed in 1983, each with a maximum capacity of 6,000 gallons, and having a combined maximum throughput of 48,000 lbs/hr; using an Air Chafeco bin vent for particulate control, and exhausting inside.
- (d) Asphalt Emulsion Plant (AEP): Three (3) enclosed AEP Slurry Tanks, identified as Slurry Tanks 46, 47 and 48 each tank fed by Flexicon feeder, constructed in 1983, and Slurry Tank 48 constructed in 2002, each Slurry Tank has a maximum capacity of 6,000 gallons; with a combined maximum throughput of 36,000 lbs/hr; using a Torit dust collector for particulate control from Flexicon feeder, exhausting through AEP-1, and wet scrubber for tank mixers, exhausting to stack AEP-2.
- (e) Whippany Tanks and Sealer Plant: Three (3) enclosed Mixers and one (1) ribbon blender, equipped with feed hoppers in the Whippany area, three (3) Whippany Mixers identified as 7 through 9, and one ribbon blender, identified as hopper 10 and mixer 10, constructed in 1995 through 1997, maximum capacity of 4,000 gallon for each Mixer, and 1,400 gallon for ribbon blender, combined maximum throughput of 40,000 lbs/hr; using a torit dust collector as particulate control for hoppers 7 through 9, and Mixers 7 and 8, exhausting outside through stack Whippany, and Mixer 9, and ribbon blender hopper 10, and mixer 10, vent to bin vent filter exhausting inside the building.
- (f) One (1) silica sand process, performing silica sand transfer operations and silica sand batch operations, consisting of:
 - 1) One (1) silica sand silo, identified as Silo 1, constructed in 2006, with a maximum annual throughput of 5.5 million tons per year, with particulate emissions controlled by a Whirl-Air Bin vent dust collector.
- (g) One (1) enclosed limestone storage silo identified as silo 2, constructed in 1983, with a maximum throughput of 5.5 tons per year, equipped with an air bin vent to control particulates, and exhausting inside.

(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 FESOP Limitations [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4 (FESOP), PM10 and PM2.5 emissions from the following stack/control shall not exceed the emission limits listed in the table below:

Stack / Control Device ID	Unit Description	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
ACB/ WWSly dust collector	Asphalt Cutback Blenders and Mixer 12 (ACB)	0.23	0.23
Air Chafeco bin vent dust collector	Chemical Emulsion Plant (CEP) Tanks	0.11	0.11
AEP-1 / Torit dust collector	Asphalt Emulsion Plant Slurry (AEP) -Flexicon feeders	0.46	0.46
AEP-2 / Wet Scrubber	Asphalt Emulsion Plant Slurry (AEP) Mixers	0.46	0.46
Whippany / Torit dust collector	Whippany hoppers 7,8 &9, Mixers 7 and 8	0.23	0.23
Bin Vent Filter	Whippany Mixer 9, ribbon blender hopper 10 and mixer 10	0.23	0.23
Whirl-Air Bin dust collector	Silica Sand Process	0.11	0.11
Air bin vent	Limestone Storage Silo	0.11	0.11

Compliance with these PM10 and PM2.5 limits, in combination with the PTE of PM10 and PM2.5 from the other emissions units at this source, shall limit the source-wide PM10 and PM2.5 emissions to less than one-hundred (100) tons per twelve (12) consecutive month period and shall render 326 IAC 2-7 (Part 70 Permits) not applicable.

D.1.2 Particulate Matter Limitations except Lake County [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6-5.1-2, particulate matter (PM) emission from each unit listed in the table below shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three hundredths (0.03) grain per dry standard cubic foot (dscf)).

Stack / Control Device ID	Unit Description
ACB/ WWSly dust collector	Asphalt Cutback Blenders and Mixer 12 (ACB)
Air Chafeco bin vent dust collector	Chemical Emulsion Plant (CEP) Tanks
AEP-1 / Torit dust collector	Asphalt Emulsion Plant Slurry (AEP) -Flexicon feeders
AEP-2 / Wet Scrubber	Asphalt Emulsion Plant Slurry (AEP) Mixers
Whippany / Torit dust collector	Whippany hoppers 7,8 &9, Mixers 7 and 8
Bin Vent Filter	Whippany Mixer 9, ribbon blender hopper 10 and mixer 10
Whirl-Air Bin dust collector	Silica Sand Process

D.1.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for this facility and the control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.4 Particulate Control

- (a) In order to comply with Conditions D.1.1 and D.1.2, the baghouses, dust collectors and bin vents for particulate control shall be in operation and control emissions from the emission units at all times that the emission units are in operation as listed in the table below, when these units are in operation:

Stack / Control Device ID	Unit Description
ACB/ WWSly dust collector	Asphalt Cutback Blenders and Mixer 12 (ACB)
Air Chafeco bin vent dust collector	Chemical Emulsion Plant (CEP) Tanks
AEP-1 / Torit dust collector	Asphalt Emulsion Plant Slurry (AEP) -Flexicon feeders
AEP-2 / Wet Scrubber	Asphalt Emulsion Plant Slurry (AEP) Mixers
Whippany / Torit dust collector	Whippany hoppers 7,8 &9, Mixers 7 and 8
Bin Vent Filter	Whippany Mixer 9, ribbon blender hopper 10 and mixer 10

- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.
- (c) In order to comply with Conditions D.1.1 and D.1.2, the wet scrubber, AEP-2, for particulate control shall be in operation and control emissions from the asphalt emulsion plant (AEP) slurry tanks, when these units are in operation.

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

D.1.5 Visible Emissions Notations

- (a) Visible emission notations of the stack exhausts (stacks ACB, AEP-1, AEP-2, stack Whippany, Torit dust collector, and bin vent (Whirl-Air Bin vent dust collector)) shall be performed once per day during normal daylight operations when exhausting to the atmosphere. 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 a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.1.6 Broken or Failed Bag Detection [326 IAC 2-8-5(1)] [326 IAC 2-8-4(1)]

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

processing of the material in emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

D.1.7 Parametric Monitoring - Scrubber

- (a) The Permittee shall monitor and record the flow rate across the scrubber AEP-2 at least once per day when the associated processes are in operation. When for any one reading, the flow rate of the scrubber is below the normal range, the Permittee shall take a reasonable response. The normal range for this unit is not less than 0.40 gallons per minute, unless a different lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. A flow rate reading that is below the above mentioned value is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (b) The Permittee shall monitor and record the pressure drop across the scrubber AEP-2 at least once per day when the associated processes are in operation. When for any one reading, the pressure drop across a scrubber is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is between 0.5 and 6.0 inches of water, unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. A pressure drop reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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

D.1.8 Scrubber Detection

In the event that a scrubber malfunction has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response shall be considered a deviation from this permit.

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

D.1.9 Record Keeping Requirement

- (a) To document the compliance status with Condition D.1.5, the Permittee shall maintain records of once per day visible emission notations of the baghouse 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 the compliance status with Condition D.1.7, the Permittee shall maintain once per day records of the flow rate and pressure drop for scrubber AEP-2 during normal operation. The Permittee shall include in its daily record when a flow rate reading

or pressure drop reading is not taken and the reason for the lack of flow rate reading or pressure drop reading (e.g. the process did not operate that day).

- (c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

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

Source Name: Henry Company
Source Address: 4351 W. Morris St., Indianapolis, Indiana 46241
FESOP Permit No.: F097-33649-00208

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 AND ENFORCEMENT 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: Henry Company
Source Address: 4351 W. Morris St., Indianapolis, Indiana 46241
FESOP Permit No.: F097-33649-00208

This form consists of 2 pages

Page 1 of 2

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

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

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

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

Page 2 of 2

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

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

Source Name: Henry Company
 Source Address: 4351 W. Morris St., Indianapolis, Indiana 46241
 FESOP Permit No.: F097-33649-00208

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

Page 1 of 2

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

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

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:	Henry Company
Source Location:	4351 W. Morris St., Indianapolis, Indiana 46241
County:	Marion
SIC Code:	2952 (Asphalt Felts and Coatings)
Permit Renewal No.:	F097-33649-00208
Permit Reviewer:	Joshua Levering

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Henry Company relating to the operation of a stationary batch mix protective coating manufacturer. On September 16, 2013, Henry Company submitted an application to the OAQ requesting to renew its operating permit. Henry Company was issued its first FESOP (F097-22588-00208) on June 25, 2009.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

- (a) Five (5) Asphalt Cutback (ACB) Blenders, identified as Blender 1 through Blender 5, constructed in 1983 through 1984, each with a maximum capacity of 1,800 gallons, and having a combined maximum throughput of 10,800 lbs/hr per batch; using a WWSly dust collector as particulate control for Blenders 1 through 5, and exhausting to ACB Stack.
- (b) One (1) mixer identified as Mixer 12, constructed in 2003, maximum capacity of 3,800 gallons or 31,600 pounds/hr; using a WWSly dust collector as particulate control and exhausting to ACB stack.
- (c) Three (3) enclosed Asphalt Emulsion Plant (AEP) Tanks, identified as Emulsion Tank 24 Tank 25, and ribbon Tank 33 equipped with feed hopper and mixers, each constructed in 1983, each with a maximum capacity of 6,000 gallons, and having a combined maximum throughput of 48,000 lbs/hr; using an Air Chafeco bin vent for particulate control, and exhausting inside.
- (d) Three (3) enclosed AEP Slurry Tanks, identified as Slurry Tanks 46, 47 and 48 each tank fed by Flexicon feeder, constructed in 1983, and Slurry Tank 48 constructed in 2002, each Slurry Tank has a maximum capacity of 6,000 gallons; with a combined maximum throughput of 36,000 lbs/hr; using a Torit dust collector for particulate control from Flexicon feeder, exhausting through AEP-1, and wet scrubber for tank mixers, exhausting to stack AEP-2.
- (e) Three (3) enclosed Mixers and one (1) ribbon blender, equipped with feed hoppers in the Whippany area, three (3) Whippany Mixers identified as 7 through 9, and one ribbon blender, identified as hopper 10 and mixer 10, constructed in 1995 through 1997, maximum capacity of 4,000 gallon for each Mixer, and 1,400 gallon for ribbon blender, combined maximum throughput of 40,000 lbs/hr; using a torit dust collector as particulate control for hoppers 7 through 9, and Mixers 7 and 8, exhausting outside through stack Whippany, and Mixer 9, and ribbon blender hopper 10, and mixer 10, vent to bin vent filter exhausting inside the building.

- (f) One (1) silica sand process, performing silica sand transfer operations and silica sand batch operations, consisting of:
 - 1) One (1) silica sand silo, identified as Silo 1, constructed in 2006, with a maximum annual throughput of 5.5 million tons per year, with particulate emissions controlled by a Whirl-Air Bin vent dust collector.
- (g) One (1) enclosed limestone storage silo identified as silo 2, constructed in 1983, with a maximum throughput of 5.5 tons per year, equipped with an air bin vent to control particulates, and exhausting inside.

Emission Units and Pollution Control Equipment Removed From the Source

The source has removed the following emission unit:

Insignificant activities:

- (b) Fifteen (15) enclosed storage Tanks, identified as tanks 60 through 73 and tank 12, located outside, used to store Water, Wax, Asphalt, Cutback and Mineral spirits:

 - (3) One (1) Storage tank, identified as Tank 12, constructed in 1983, with a maximum capacity of 8,000 gallons, utilizing no control device.

Note: Only Tank 12 was removed.

Insignificant Activities

The source also consists of the following insignificant activities:

- (a) Space heaters, process heaters, or boilers using the following fuels:
 - (1) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, consisting of:
 - (i) One (1) 100 Horsepower Steam Boiler, identified as Boiler 1, constructed in 2008, equipped with a low NOx burner.
 - (ii) One (1) Hot Oil Heater, identified as Heater 1, constructed in 2008, nominally rated at 2.8 million British thermal units per hour (MMBtu/hr), equipped with a low NOx burner.
 - (iii) One (1) 37.8 Horsepower Hot Water Heater, identified as Heater 2, constructed in 2008.
- (b) Fourteen (14) enclosed storage Tanks, identified as tanks 60 through 73, located outside, used to store Water, Wax, Asphalt, Cutback and Mineral spirits:
 - (1) Twelve (12) Tanks, identified as Tank 60, 61, 63, and 65 through 73, each constructed in 1983, each with a maximum capacity of 20,000 gallons, utilizing no control devices.
 - (2) One (1) Storage Tank, identified as Tank 64, constructed in 1991, with a maximum capacity of 16,000 gallons, utilizing no control devices.

- (3) One (1) Storage Tank, identified as Tank 62, constructed in 1989, with a maximum capacity of 13,000 gallons, utilizing no control device.
 - (c) Four (4) enclosed caulking cement storage Tanks, identified as Tank 14, through Tank 17, constructed in 2002 through 2007, with a capacity of 2165, 2000, 2000, and 1000 gallons respectively, and exhausting inside the building.
 - (d) Two (2) enclosed finished good storage Tanks, identified as Tank 31 through Tank 32, constructed in 2002, each tank has a maximum capacity of 20,000 gallons, and exhausting inside the building.
 - (e) Four (4) enclosed Intermediate Asphalt emulsion or wax storage Tanks, identified as Tanks 26, 27, 28 and 29, constructed in 1983, with a maximum capacity of 6000, 6000, 11879, 1641 gallons respectively, and exhausting inside the building.
 - (f) Four (4) enclosed Intermediate Asphalt emulsion storage Tanks, identified as Tanks 41, 42, 43 and 44, constructed in 1983, each tank has a maximum capacity of 6000 gallons, exhausting inside the building.
 - (g) Two (2) enclosed tanks 11 and 23 are not in operation.
- Note: The following existing units have been identified at the source, do not require construction authorization, and are being added to the permit as part of this Renewal action.
- (h) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]
 - (i) One (1) asphalt cutback intermediate holding tank, identified as Tank 6, venting into the building.
 - (j) One (1) premix tank, identified as Tank 30.
 - (k) Three (3) water tanks; two (2) cold water and one (1) hot water.

Emission Units Descriptive Changes

The changes listed below have been made to Federally Enforceable State Operating Permit Renewal No. F097-33649-00208. Deleted language appears as ~~strike throughs~~ and new language appears in **bold**:

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) **Asphalt Cutback Plant:** Five (5) Asphalt Cutback (ACB) Blenders, identified as Blender 1 through Blender 5, constructed in 1983 through 1984, each with a maximum capacity of 1,800 gallons, and having a combined maximum throughput of 10,800 lbs/hr per batch; using a WWSly dust collector as particulate control for Blenders 1 through 5, and exhausting to ACB Stack.
- (b) One (1) mixer identified as Mixer 12, constructed in 2003, maximum capacity of 3,800 gallons or 31,600 pounds/hr; using a WWSly dust collector as particulate control and exhausting to ACB stack.
- (c) Three (3) enclosed ~~Asphalt~~**Chemical** Emulsion Plant (**ACEP**) Tanks, identified as Emulsion Tank 24 Tank 25, and ribbon Tank 33**A and holding tank 33B**, equipped with feed hopper and mixers, each constructed in 1983, each with a maximum capacity of

6,000 gallons, and having a combined maximum throughput of 48,000 lbs/hr; using an Air Chafeco bin vent for particulate control, and exhausting inside.

- (d) **Asphalt Emulsion Plant (AEP):** Three (3) enclosed AEP Slurry Tanks, identified as Slurry Tanks 46, 47, ~~and 48~~, **and 13A**, each tank fed by Flexicon feeder, constructed in 1983, and Slurry Tank 48 constructed in 2002, each Slurry Tank has a maximum capacity of 6,000 gallons; with a combined maximum throughput of 36,000 lbs/hr; using a Torit dust collector for particulate control from Flexicon feeder, exhausting through AEP-1, and wet scrubber for tank mixers, exhausting to stack AEP-2.
- (e) **Whippany Tanks and Sealer Plant:** Three (3) enclosed Mixers and one (1) ribbon blender, equipped with feed hoppers in the Whippany area, three (3) Whippany Mixers identified as 7 through 9, and one ribbon blender, identified as hopper 10 and mixer 10, constructed in 1995 through 1997, maximum capacity of 4,000 gallon for each Mixer, and 1,400 gallon for ribbon blender, combined maximum throughput of 40,000 lbs/hr; using a torit dust collector as particulate control for hoppers 7 through 9, and Mixers 7 and 8, exhausting outside through stack Whippany, and Mixer 9, and ribbon blender hopper 10, and mixer 10, vent to bin vent filter exhausting inside the building.
- (f) One (1) silica sand process, performing silica sand transfer operations and silica sand batch operations, consisting of:
 - 1) One (1) silica sand silo, identified as Silo 1, constructed in 2006, with a maximum annual throughput of 5.5 million tons per year, with particulate emissions controlled by a Whirl-Air Bin vent dust collector.
- (g) One (1) enclosed limestone storage silo identified as silo 2, constructed in 1983, with a maximum throughput of 5.5 tons per year, equipped with an air bin vent to control particulates, and exhausting inside.

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) Space heaters, process heaters, or boilers using the following fuels:
 - (1) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, consisting of:
 - (i) One (1) 100 Horsepower Steam Boiler, identified as Boiler 1, constructed in 2008, equipped with a low NOx burner.
 - (ii) One (1) Hot Oil Heater, identified as Heater 1, constructed in 2008, nominally rated at 2.8 million British thermal units per hour (MMBtu/hr), equipped with a low NOx burner.
 - (iii) One (1) 37.8 Horsepower Hot Water Heater, identified as Heater 2, constructed in 2008.
- (b) ~~Fifteen~~**Fourteen** (15~~4~~) enclosed storage Tanks, identified as tanks 60 through 73 ~~and tank 12~~, located outside, used to store Water, Wax, Asphalt, Cutback and Mineral spirits:
 - (1) Twelve (12) Tanks, identified as Tank 60, 61, 63, and 65 through 73, each constructed in 1983, each with a maximum capacity of 20,000 gallons, utilizing no control devices.

- (2) One (1) Storage Tank, identified as Tank 64, constructed in 1991, with a maximum capacity of 16,000 gallons, utilizing no control devices.
 - ~~(3) One (1) Storage tank, identified as Tank 12, constructed in 1983, with a maximum capacity of 8,000 gallons, utilizing no control device.~~
 - (43) One (1) Storage Tank, identified as Tank 62, constructed in 1989, with a maximum capacity of 13,000 gallons, utilizing no control device.
 - (c) ~~Four~~**Five (45)** enclosed caulking cement storage Tanks, identified as **Tank 13B and**, Tank 14, through Tank 17, constructed in 2002 through 2007, with a capacity of 2165, 2000, 2000, and 1000 gallons respectively, and exhausting inside the building.
- ***
- (g) ~~Two~~**Three (23)** enclosed tanks 11, **22**, and 23. **Tank 11 is a final storage tank and 22 and 23 are prime storage tanks. All vent inside the building are not in operation.**
 - (h) **Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]**
 - (i) **One (1) asphalt cutback intermediate holding tank, identified as Tank 6, venting into the building.**
 - (j) **One (1) premix tank, identified as Tank 30.**
 - (k) **Three (3) water tanks; two (2) cold water and one (1) hot water.**

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

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

Emission Units as Listed in the Permit

Due to descriptive clarification of existing emission units as shown above, the following is the listing of the emission units as they will appear in the permit.

The source consists of the following permitted emission units:

- (a) Asphalt Cutback Plant: Five (5) Asphalt Cutback (ACB) Blenders, identified as Blender 1 through Blender 5, constructed in 1983 through 1984, each with a maximum capacity of 1,800 gallons, and having a combined maximum throughput of 10,800 lbs/hr per batch; using a WWSly dust collector as particulate control for Blenders 1 through 5, and exhausting to ACB Stack.
- (b) One (1) mixer identified as Mixer 12, constructed in 2003, maximum capacity of 3,800 gallons or 31,600 pounds/hr; using a WWSly dust collector as particulate control and exhausting to ACB stack.
- (c) Three (3) enclosed Chemical Emulsion Plant (CEP) Tanks, identified as Emulsion Tank 24 Tank 25, and ribbon Tank 33A and holding tank 33B, equipped with feed hopper and mixers, each constructed in 1983, each with a maximum capacity of 6,000 gallons, and having a combined maximum throughput of 48,000 lbs/hr; using an Air Chafeco bin vent for particulate control, and exhausting inside.
- (d) Asphalt Emulsion Plant (AEP): Three (3) enclosed AEP Slurry Tanks, identified as Slurry Tanks 46, 47 and 48 each tank fed by Flexicon feeder, constructed in 1983, and Slurry

Tank 48 constructed in 2002, each Slurry Tank has a maximum capacity of 6,000 gallons; with a combined maximum throughput of 36,000 lbs/hr; using a Torit dust collector for particulate control from Flexicon feeder, exhausting through AEP-1, and wet scrubber for tank mixers, exhausting to stack AEP-2.

- (e) Whippany Tanks and Sealer Plant: Three (3) enclosed Mixers and one (1) ribbon blender, equipped with feed hoppers in the Whippany area, three (3) Whippany Mixers identified as 7 through 9, and one ribbon blender, identified as hopper 10 and mixer 10, constructed in 1995 through 1997, maximum capacity of 4,000 gallon for each Mixer, and 1,400 gallon for ribbon blender, combined maximum throughput of 40,000 lbs/hr; using a torit dust collector as particulate control for hoppers 7 through 9, and Mixers 7 and 8, exhausting outside through stack Whippany, and Mixer 9, and ribbon blender hopper 10, and mixer 10, vent to bin vent filter exhausting inside the building.
- (f) One (1) silica sand process, performing silica sand transfer operations and silica sand batch operations, consisting of:
 - 1) One (1) silica sand silo, identified as Silo 1, constructed in 2006, with a maximum annual throughput of 5.5 million tons per year, with particulate emissions controlled by a Whirl-Air Bin vent dust collector.
- (g) One (1) enclosed limestone storage silo identified as silo 2, constructed in 1983, with a maximum throughput of 5.5 tons per year, equipped with an air bin vent to control particulates, and exhausting inside.

The source also consists of the following insignificant activities:

- (a) Space heaters, process heaters, or boilers using the following fuels:
 - (1) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, consisting of:
 - (i) One (1) 100 Horsepower Steam Boiler, identified as Boiler 1, constructed in 2008, equipped with a low NOx burner.
 - (ii) One (1) Hot Oil Heater, identified as Heater 1, constructed in 2008, nominally rated at 2.8 million British thermal units per hour (MMBtu/hr), equipped with a low NOx burner.
 - (iii) One (1) 37.8 Horsepower Hot Water Heater, identified as Heater 2, constructed in 2008.
- (b) Fourteen (14) enclosed storage Tanks, identified as tanks 60 through 73, located outside, used to store Water, Wax, Asphalt, Cutback and Mineral spirits:
 - (1) Twelve (12) Tanks, identified as Tank 60, 61, 63, and 65 through 73, each constructed in 1983, each with a maximum capacity of 20,000 gallons, utilizing no control devices.
 - (2) One (1) Storage Tank, identified as Tank 64, constructed in 1991, with a maximum capacity of 16,000 gallons, utilizing no control devices.
 - (3) One (1) Storage Tank, identified as Tank 62, constructed in 1989, with a maximum capacity of 13,000 gallons, utilizing no control device.

- (c) Five (5) enclosed caulking cement storage Tanks, identified as Tank 13B and, Tank 14 through Tank 17, constructed in 2002 through 2007, with a capacity of 2165, 2000, 2000, and 1000 gallons respectively, and exhausting inside the building.
- (d) Two (2) enclosed finished good storage Tanks, identified as Tank 31 through Tank 32, constructed in 2002, each tank has a maximum capacity of 20,000 gallons, and exhausting inside the building.
- (e) Four (4) enclosed Intermediate Asphalt emulsion or wax storage Tanks, identified as Tanks 26, 27, 28 and 29, constructed in 1983, with a maximum capacity of 6000, 6000, 11879, 1641 gallons respectively, and exhausting inside the building.
- (f) Four (4) enclosed Intermediate Asphalt emulsion storage Tanks, identified as Tanks 41, 42, 43 and 44, constructed in 1983, each tank has a maximum capacity of 6000 gallons, exhausting inside the building.
- (g) Three (3) tanks 11, 22, and 23. Tank 11 is a final storage tank and 22 and 23 are prime storage tanks. All vent inside the building.
- (h) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]
- (i) One (1) asphalt cutback intermediate holding tank, identified as Tank 6, venting into the building.
- (j) One (1) premix tank, identified as Tank 30.
- (k) Three (3) water tanks; two (2) cold water and one (1) hot water.

Existing Approvals

Since the issuance of the FESOP 097-22588-00208 on June 25, 2009, the source has constructed or has been operating under the following additional approvals:

- (a) Administrative Amendment No. 097-30065-00208 issued on May 26, 2011.

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.

County Attainment Status

The source is located in Marion County Wayne Township.

Pollutant	Designation
SO ₂	Non-attainment effective October 4, 2013, for the Center Township, Perry Township, and Wayne Township. Better than national standards for the remainder of the county.
CO	Attainment effective February 18, 2000, for the part of the city of Indianapolis bounded by 11 th Street on the north; Capitol Avenue on the west; Georgia Street on the south; and Delaware Street on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of Indianapolis and Marion County.
O ₃	Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard. ¹
PM _{2.5}	Attainment effective July 11, 2013, for the annual PM _{2.5} standard.
PM _{2.5}	Unclassifiable or attainment effective December 13, 2009, for the 24-hour PM _{2.5} standard.
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.

¹Attainment effective October 18, 2000, for the 1-hour ozone standard for the Indianapolis area, including Marion County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X*. The 1-hour designation was revoked effective June 15, 2005.

- (a) **Ozone Standards**
 Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) **PM_{2.5}**
 Marion County has been classified as attainment for PM_{2.5}. Therefore, direct PM_{2.5}, SO₂, and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (c) **SO₂**
 U.S. EPA, in the Federal Register Notice 78 FR 47191 dated August 5, 2013, has designated Marion County Wayne Township as nonattainment for SO₂. Therefore, SO₂ emissions were reviewed pursuant to the requirements of Emission Offset, 326 IAC 2-3.
- (d) **Other Criteria Pollutants**
 Marion 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.

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Unrestricted Potential Emissions	
Pollutant	Tons/year
PM	202.65
PM ₁₀	201.33
PM _{2.5}	180.00
SO ₂	0.02
NO _x	1.86
VOC	82.23
CO	2.67
Single HAP	2.15 (Xylene)
Total HAP	3.93

Appendix A of this TSD reflects the unrestricted potential emissions of the source.

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHGs emissions to determine operating permit applicability or PSD applicability to a source or modification.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM, PM₁₀, and PM_{2.5} is equal to or greater than 100 tons per year. However, the Permittee has agreed to limit the source's PM₁₀ and PM_{2.5} emissions to less than Title V levels, therefore the Permittee will be issued a FESOP Renewal.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants are less than 100 tons per year.
- (c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year.

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 is made practically enforceable in the permit.

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)								
	PM	PM ₁₀ *	PM _{2.5} **	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
ACB Blenders	47.57	1.01	1.01	--	--	81.96	--	3.87	2.15 (Xylene)
CEP Emulsion	16.89	0.48	0.48	--	--	--	--	--	--
AEP Slurry	37.92	4.03	4.03	--	--	--	--	--	--
Whipp Mixers 7, 8, 9, and 10	72.74	2.01	2.01	--	--	--	--	--	--
Sand Operations	25.60	0.96	0.96	--	--	--	--	--	--
Hot Oil Heater and Boiler	0.05	0.20	0.20	0.02	1.32	0.15	2.21	0.05	0.05 (Hexane)
Hot Water Heater	0.01	0.04	0.04	0.003	0.54	0.03	0.45	0.01	0.01 (Hexane)
Tanks	--	--	--	--	--	0.10	--	--	--
Paved Roads	1.71	0.33	0.05	--	--	--	--	--	--
Total PTE of Entire Source	202.49	9.07	8.79	0.02	1.86	82.23	2.67	3.93	2.15 (Xylene)
Title V Major Source Thresholds	NA	100	100	100	100	100	100	25	10
PSD Major Source Thresholds	--	--	--	250	--	--	--	NA	NA
negl. = negligible * Under the Part 70 Permit program (40 CFR 70), PM10 and PM2.5, not particulate matter (PM), are each considered as a "regulated air pollutant". **PM _{2.5} listed is direct PM _{2.5} .									

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

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- (a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no PSD regulated pollutant is emitted at a rate of two hundred fifty (250) tons per year or

more and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

- (b) This existing source is not a major source of HAPs, as defined in 40 CFR 63.2, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

Federal Rule Applicability

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the potential to emit of the source is limited to less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

New Source Performance Standards (NSPS)

- (a) The requirements of the New Source Performance Standard for Standards of Performance for Hot Mix Asphalt Plants, 40 CFR 60, Subpart I (326 IAC 12), are not included in the permit, because the source does not manufacture hot mix asphalt by heating and drying aggregate and mixing with asphalt cements.
- (b) The requirements of the New Source Performance Standard for Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978, 40 CFR 60, Subpart K (326 IAC 12), are not included in the permit, because no volatile organic liquid storage vessels was constructed, reconstructed, or modified after June 11, 1973 or prior to May 19, 1978, and none have a storage capacity greater than 40,000 gallons.
- (c) The requirements of the New Source Performance Standard for Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984, 40 CFR 60, Subpart Ka (326 IAC 12), are not included in the permit, because no tanks for which construction has commenced after May 18, 1978 have a storage capacity greater than 151,416 liters (40,000 gallons) or store petroleum liquids.
- (d) The requirements of the New Source Performance Standard for Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, 40 CFR 60, Subpart Kb (326 IAC 12), are not included in the permit, because although tanks FO Tank 1 was constructed after July 23, 1984 and has a storage capacity greater than or equal to 75 m³ but less than 151 m³, it stores a liquid with a maximum true vapor pressure less than 15.0 kPa.
- (e) The requirements of the New Source Performance Standard for Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture, 40 CFR 60, Subpart UU (326 IAC 12-71), are not included in this permit, because although the source uses asphalt in the production of its protective coatings, the source does not perform blowing of asphalt or the saturation of roofing substrates by means of a saturator.
- (f) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit renewal for this source.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (a) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63.7480, Subpart DDDDD (326 IAC 20-95), are not included in the permit, since this source is not a major source of hazardous air pollutants (HAP) emissions, located at, or part of a major source of HAP emissions.
- (b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Asphalt Processing and Asphalt Roofing Manufacturing, 40 CFR 63.8680, Subpart LLLLL (326 IAC 20-71), are not included in the permit, since this source is not a major source of hazardous air pollutants (HAP) emissions, located at, or part of a major source of HAP emissions.
- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63.11193, Subpart JJJJJJ, are not included in the permit. This source is an area source, as defined in 40 CFR 63.2, and operates an industrial boiler, as defined in 40 CFR 63.11237; however, pursuant to 40 CFR 63.11195(e), the natural gas-fired boiler at this source is not subject to this subpart.
- (d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Area Sources for Asphalt Processing and Asphalt Roofing Manufacturing, 40 CFR 63.11559, Subpart AAAAAAA, are not included in the permit, since this source does not perform blowing of asphalt or use asphalt coating equipment, as defined in 40 CFR 63.11566.
- (e) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting) because it is not required to have an operating permit pursuant to 326 IAC 2-7 (Part 70); it is not located in Lake, Porter, or LaPorte County, and its potential to emit lead is less than 5 tons per year. Therefore, this rule does not apply.

326 IAC 5-1 (Opacity Limitations)

This source is subject to the opacity limitations specified in 326 IAC 5-1-2(?)

326 IAC 6.5 PM Limitations Except Lake County

This source is subject to 326 IAC 6.5 because it is located in Marion County, its PM PTE (or limited PM PTE) is equal to or greater than 100 tons/year or actual emissions are greater than 10 tons/year. However, this source is not one of the sources specifically listed in 326 IAC 6.5-2 through 326 IAC 6.5-10. Therefore, 326 IAC 6.5-1-2(?) applies.

326 IAC 6.8 PM Limitations for Lake County

This source is not subject to 326 IAC 6.8 because it is not located in Lake County.

326 IAC 8-5-2 (Asphalt Paving Rules)

The source is not subject to 326 IAC 8-5-2, because the source does not perform asphalt paving.

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

Tanks at the source are not subject to 326 IAC 8-9, because the source is not located in Clark, Floyd, Lake, or Porter Counties.

State Rule Applicability – Individual Facilities

Asphalt Cutback (ACB) Blenders

- (a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the ACB Blenders operation shall not exceed 20.19 pounds per hour when operating at a process weight rate of 10.80 tons per hour. The pound per hour limitation was calculated with the following equation:

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

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

The WWSly dust collector shall be in operation at all times the ACB Blenders operation is in operation, in order to comply with this limit.

- (b) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
Each blender is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each blender is less than twenty-five (25) tons per year. Each blender is considered a single unit because each blender can operate independently of the others.
- (c) There are no 326 IAC 8 Rules that are applicable to these units.

Mixer 12

- (d) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the AEP operation shall not exceed 26.05 pounds per hour when operating at a process weight rate of 15.80 tons per hour. The pound per hour limitation was calculated with the following equation:

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

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

The WWSly dust collector shall be in operation at all times the Mixer 12 is in operation, in order to comply with this limit.

Chemical Emulsion Plant (CEP) Tanks

- (e) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the CEP operation shall not exceed 34.48 pounds per hour when operating at a process weight rate of 24.00 tons per hour. The pound per hour limitation was calculated with the following equation:

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

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

The Torit dust collector shall be in operation at all times the CEP Tanks are in operation, in order to comply with this limit.

AEP (AEP) Slurry Tanks

- (f) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the AEP Slurry operation shall not exceed 28.43 pounds per hour when operating at a process weight rate of 18.00 tons per hour. The pound per hour limitation was calculated with the following equation:

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

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

The Torit wet scrubber shall be in operation at all times the AEP Slurry operation is in operation, in order to comply with this limit.

Whippany Tanks

- (g) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the Whippany operation shall not exceed 30.51 pounds per hour when operating at a process weight rate of 20.00 tons per hour. The pound per hour limitation was calculated with the following equation:

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

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

The Torit dust collector shall be in operation at all times the Whippany operation is in operation, in order to comply with this limit.

Silica Sand Transfer Operations and Limestone Storage Silo

- (h) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(14), the silica sand transfer operations and limestone storage silo are each exempt from the requirements of 326 IAC 6-3, because potential particulate emissions for each process are less than five hundred fifty-one thousandths (0.551) pound per hour.

Silica Sand Batch Operations

- (i) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the silica sand batch operations shall not exceed 30.51 pounds per hour when operating at a process weight rate of 20.00 tons per hour. The pound per hour limitation was calculated with the following equation:

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

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

The Whirl-Air Bin vent dust collector shall be in operation at all times the silica sand batch operations are in operation, in order to comply with this limit.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a 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 Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements 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 testing requirements applicable to this source are as follows:

Emission Unit	Control Device	Timeframe for Testing	Pollutant	Frequency of Testing
ACB, Mixer 12	WWSly dust collector	180 days after publication of revised test method	PM10 and PM2.5	Once every five (5) years
CEP, AEP, and Whippany	Torit dust collector	180 days after publication of revised test method	PM10 and PM2.5	Once every five (5) years

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

Control	Parameter	Frequency	Range	Excursions and Exceedances
WWSly dust collector	Visible Emissions	Daily	Normal-Abnormal	Response Steps
Torit dust collector	Flow Rate	Daily	0.4 gallons per minute (gal/min)	Response Steps
	Visible Emissions		Normal-Abnormal	
Whirl-Air Bin dust collector	Visible Emissions	Daily	Normal-Abnormal	Response Steps

These monitoring conditions are necessary because the control devices for the facility must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-8 (FESOP).

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 September 16, 2013.

Conclusion

The operation of this stationary batch mix protective coating manufacturer shall be subject to the conditions of the attached FESOP Renewal No. 097-33649-00208.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Joshua Levering at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-6543 or toll free at 1-800-451-6027 extension 4-6543.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: <http://www.in.gov/idem/5881.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

SUMMARY OF EMISSIONS

Company Name: Henry Company
Address City IN Zip: 4351 West Morris Street, Indianapolis, IN 46241
Permit Number: 097-33649-00208
Reviewer: Joshua Levering
Date: July 2014

Uncontrolled Potential to Emit (tons/yr)										
Emission Unit	PM	PM10	PM2.5*	SO2	Nox	VOC	CO	HAPs	Worst Single HAP	
ACB Blenders & Mixer 12	47.57	47.57	47.57	0.00	0.00	81.96	0.00	3.87	2.15	Xylene
CEP Emulsion	16.89	16.89	16.89	0.00	0.00	0.00	0.00	0.00	0.00	NA
AEP Slurry	37.92	37.92	16.89	0.00	0.00	0.00	0.00	0.00	0.00	NA
Whipp Mixers 7,8,9, and 10	72.74	72.74	72.74	0.00	0.00	0.00	0.00	0.00	0.00	NA
Sand Operations & Limestone Storage Bin	25.60	25.60	25.597633	0.00	0.00	0.00	0.00	0.00	0.00	NA
Hot Oil Heater & Boiler	0.05	0.20	0.20	0.02	1.32	0.15	2.21	0.05	0.05	Hexane
Hot Water Heater	0.01	0.04	0.04	0.00	0.54	0.03	0.45	0.01	0.01	Hexane
Tanks	-	-	-	-	-	0.10	-	-	-	-
Paved Roads	1.87	0.36	0.05	0.00	0.00	0.00	0.00	0.00	0.00	NA
Total	202.65	201.33	180.00	0.02	1.86	82.23	2.67	3.93	2.15	Xylene

* PM2.5 listed is direct PM2.5

Potential to Emit After Control (tons/yr)										
Emission Unit	PM	PM10	PM2.5*	SO2	Nox	VOC	CO	HAPs	Worst Single HAP	
ACB Blenders & Mixer 12	0.48	0.48	0.48	0.00	0.00	81.96	0.00	3.87	2.15	Xylene
CEP Emulsion	0.17	0.17	0.17	0.00	0.00	0.00	0.00	0.00	0.00	NA
AEP Slurry	1.90	1.90	1.90	0.00	0.00	0.00	0.00	0.00	0.00	NA
Whipp Mixers 7,8,9, and 10	1.33	1.33	1.33	0.00	0.00	0.00	0.00	0.00	0.00	NA
Sand Operations & Limestone Storage Bin	0.26	0.26	0.26	0.00	0.00	0.00	0.00	0.00	0.00	NA
Hot Oil Heater & Boiler	0.05	0.20	0.20	0.02	1.32	0.15	2.21	0.05	0.05	Hexane
Hot Water Heater	0.01	0.04	0.04	0.00	0.54	0.03	0.45	0.01	0.01	Hexane
Tanks	-	-	-	-	-	0.10	-	-	-	-
Paved Roads	1.71	0.33	0.05	0.00	0.00	0.00	0.00	0.00	0.00	NA
Total	5.89	4.70	4.42	0.02	1.86	82.23	2.67	3.93	2.15	Xylene

* PM2.5 listed is direct PM2.5

Potential to Emit after Issuance (tons/yr)										
Emission Unit	PM	PM10	PM2.5*	SO2	Nox	VOC	CO	HAPs	Worst Single HAP	
ACB Blenders & Mixer 12	47.57	1.01	1.01	0.00	0.00	81.96	0.00	3.87	2.15	Xylene
CEP Emulsion	16.89	0.48	0.48	0.00	0.00	0.00	0.00	0.00	0.00	NA
AEP Slurry	37.92	4.03	4.03	0.00	0.00	0.00	0.00	0.00	0.00	NA
Whipp Mixers 7,8,9, and 10	72.74	2.01	2.01	0.00	0.00	0.00	0.00	0.00	0.00	NA
Sand Operations & Limestone Storage Bin	25.60	0.96	0.96	0.00	0.00	0.00	0.00	0.00	0.00	NA
Hot Oil Heater & Boiler	0.05	0.20	0.20	0.02	1.32	0.15	2.21	0.05	0.05	Hexane
Hot Water Heater	0.01	0.04	0.04	3.25E-03	0.54	0.03	0.45	0.01	0.01	Hexane
Tanks	-	-	-	-	-	0.10	-	-	-	-
Paved Roads	1.71	0.33	0.05	0.00	0.00	0.00	0.00	0.00	0.00	NA
Total	202.49	9.07	8.79	0.02	1.86	82.23	2.67	3.93	2.15	Xylene

* PM2.5 listed is direct PM2.5

Note: The shaded cells indicate where limits are included.

**Appendix A: Emission Calculations
PM/ PM 10/ PM2.5 Emissions
From ACB Blenders and Mixer 12 (ACB)**

**Company Name: Henry Company
Address City IN Zip: 4351 West Morris Street, Indianapolis, IN 46241
Permit Number: 097-33649-00208
Reviewer: Joshua Levering**

Emission Unit Description	Outlet Grain Loading (gr/acf)	Control Device Fan Flow Rate (acfm)	Control Efficiency (%)	Potential PM/PM10/PM2.5 Emission Rate			
				Uncontrolled		Controlled	
				(lb/hr)	(tons/yr)	(lb/hr)	(tons/yr)
ACB Blenders and Mixer 12	0.006	2,112	99.00%	10.86	47.57	0.11	0.48
Total Potential to Emit PM/PM10/PM2.5:				10.86	47.57	0.11	0.48

Notes:

The ACB Blender Operation includes Blender1 thru Blender 5 and Mixer 12.

Methodology:

Potential Uncontrolled Emission: Outlet Loading (grains/acf) * Fan Flow Rate (acfm) * 1 lb/7,000 grains * 60 min/hr * 8760 hr/yr * 1 ton/2,000 lbs / (1 - Control Efficiency)
 Potential Controlled Emission: Outlet Loading (grains/acf) * Fan Flow Rate (acfm) * 1 lb/7,000 grains * 60 min/hr * 8760 hr/yr * 1 ton/2,000 lbs

NOTE: The Particulate Matter Limitations except Lake County [326 IAC 6.5-1-2] is more stringent than the Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2], therefore the 326 IAC 6-3-2 does not apply.

VOC Emissions from ACB Blenders

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non Volatiles (solids)	Maximum Annual Usage Per Tank (gal/yr)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year
Mineral Spirits	6.49	0.43%	0.0%	0.4%	0.0%	0.00%	946,080	0.03	0.03	3.01	72.33	13.20
Aromatic 100	7.28	1.70%	0.0%	1.7%	0.0%	0.00%	7,422	0.12	0.12	0.10	2.52	0.46
Potential Emissions Per Tank:										3.12	74.85	13.66
Combined Potential Emissions:										18.71	449.11	81.96

Methodology:

Potential VOC pounds per hour = Density (lb/gal) * Weight % Volatile (H2O & Organics) * Maximum Annual Usage (gal/yr) * 1 yr / 8760 hrs
 Potential VOC pounds per day = Potential VOC pounds per hour * 24 hrs / 1 day
 Potential VOC tons per year = Potential VOC pounds per hour * 8760 hrs / 1 yr * 2000 lbs / 1 ton
 Combined Potential Emissions = Potential Emissions per Tank * 6 Tanks

HAP Emissions from ACB Blenders

Material	Density (Lb/Gal)	Maximum Annual Usage (gal/yr)	Weight % Xylene	Weight % Cumene	Xylene Emissions (ton/yr)	Cumene Emissions (ton/yr)
Mineral Spirits	6.49	5,676,480	0.00%	0.00%	0.00	0.00
Aromatic 100	6.43	44,532	1.20%	1.50%	1.72	2.15
Potential Emissions:					1.72	2.15

Worst Single HAP: 2.15 Xylene
Combined HAPs: 3.87

Methodology:

HAPS emission rate (tons/yr) = Density (lb/gal) * Maximum Annual Usage (gal/yr) * Weight % HAP * 1 ton/2000 lbs

**Appendix A: Emission Calculations
PM/ PM 10/ PM2.5 Emissions
From Emulsion Tanks (AEP) Tanks 24, 25 and Tank 33**

**Company Name: Henry Company
Address City IN Zip: 4351 West Morris Street, Indianapolis, IN 46241
Permit Number: 097-33649-00208
Reviewer: Joshua Levering**

Emission Unit Description	Outlet Grain Loading (gr/acf)	Control Device Fan Flow Rate (acfm)	Control Efficiency (%)	Potential PM/PM10/PM2.5 Emission Rate			
				Uncontrolled		Controlled	
				(lb/hr)	(tons/yr)	(lb/hr)	(tons/yr)
Emulsion AEP Tanks	0.003	1,500	99.00%	3.86	16.89	0.04	0.17
Total Potential to Emit PM/PM10/PM2.5:				3.86	16.89	0.04	0.17

Methodology:

Potential Uncontrolled Emission: Outlet Loading (grains/acf) * Fan Flow Rate (acfm) * 1 lb/7,000 grains * 60 min/hr * 8760 hr/yr * 1 ton/2,000 lbs / (1 - Control Efficiency)

Potential Controlled Emission: Outlet Loading (grains/acf) * Fan Flow Rate (acfm) * 1 lb/7,000 grains * 60 min/hr * 8760 hr/yr * 1 ton/2,000 lbs

NOTE: The Particulate Matter Limitations except Lake County [326 IAC 6.5-1-2] is more stringent than the Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2], therefore the 326 IAC 6-3-2 does not apply.

**Appendix A: Emission Calculations
PM/ PM 10/ PM2.5 Emissions
From Slurry Tanks 46, 47 and 48**

**Company Name: Henry Company
Address City IN Zip: 4351 West Morris Street, Indianapolis, IN 46241
Permit Number: 097-33649-00208
Reviewer: Joshua Levering**

Emission Unit Stack Description	Outlet Grain Loading (gr/acf)	Control Device Fan Flow Rate (acfm)	Control Efficiency (%)	Potential PM/PM10/PM2.5 Emission Rate			
				Uncontrolled		Controlled	
				(lb/hr)	(tons/yr)	(lb/hr)	(tons/yr)
AEP-2 (wet scrubber)	0.029	900	95.00%	4.47	19.60	0.22	0.98
AEP-1 (Torit dust collector)	0.016	1,525	95.00%	4.18	18.32	0.21	0.92
Total Potential to Emit PM/PM10/PM2.5:				8.66	37.92	0.43	1.90

Methodology:

Potential Uncontrolled Emissions (tons/yr Outlet Loading (grains/acf) * Fan Flow Rate (acfm) * 1 lb/7,000 grains * 60 min/hr * 8760 hr/yr * 1 ton/2,000 lbs / (1 - Control Efficiency)

Potential Controlled Emissions (tons/yr) = Outlet Loading (grains/acf) * Fan Flow Rate (acfm) * 1 lb/7,000 grains * 60 min/hr * 8760 hr/yr * 1 ton/2,000 lbs

NOTE: The Particulate Matter Limitations except Lake County [326 IAC 6.5-1-2] is more stringent than the Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2], therefore the 326 IAC 6-3-2 does not apply.

**Appendix A: Emission Calculations
PM/ PM 10/ PM2.5 Emissions
From Whippany area mixers 7, 8, 9 and blender 10**

**Company Name: Henry Company
Address City IN Zip: 4351 West Morris Street, Indianapolis, IN 46241
Permit Number: 097-33649-00208
Reviewer: Joshua Levering**

Emission Unit Description	Outlet Grain Loading (gr/acf)	Control Device Fan Flow Rate (acfm)	Control Efficiency (%)	Potential PM/PM10/PM2.5 Emission Rate			
				Uncontrolled		Controlled	
				(lb/hr)	(tons/yr)	(lb/hr)	(tons/yr)
Whippany Stack	0.015	1,025	99.00%	13.18	57.72	0.13	0.58
Bin vent filter	0.02	1,000	95.00%	3.43	15.02	0.17	0.75
Total Potential to Emit PM/PM10/PM2.5:				16.61	72.74	0.30	1.33

Methodology:

Potential Uncontrolled Emissions (tons/yr) = Outlet Loading (grains/acf) * Fan Flow Rate (acfm) * 1 lb/7,000 grains * 60 min/hr * 8760 hr/yr * 1 ton/2,000 lbs / (1 - Control Efficiency)
 Potential Controlled Emissions (tons/yr) = Outlet Loading (grains/acf) * Fan Flow Rate (acfm) * 1 lb/7,000 grains * 60 min/hr * 8760 hr/yr * 1 ton/2,000 lbs

NOTE: The Particulate Matter Limitations except Lake County [326 IAC 6.5-1-2] is more stringent than the Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2], therefore the 326 IAC 6-3-2 does not apply.

Appendix A: Emission Calculations
PM/ PM 10/ PM2.5 Emissions
From Silica Sand Operations and Limestone Storage Silo

Company Name: Henry Company
Address City IN Zip: 4351 West Morris Street, Indianapolis, IN 46241
Permit Number: 097-33649-00208
Reviewer: Joshua Levering

Emission Unit Description	Emission Factor (lb/ton)	Maximum Throughput (ton/yr)	Control Efficiency (%)	Potential PM/PM10/PM2.5 Emission Rate			
				Uncontrolled		Controlled	
				(lb/hr)	(tons/yr)	(lb/hr)	(tons/yr)
Limestone Storage Silo	0.73	5.5	99	0.00046	0.002	0	0
Sand Silo Transfer	0.015	2,750	99.00%	0.00	0.02	0.00	0.00
Batch Operations	18.60	2,750	99.00%	5.84	25.58	0.06	0.26
Total Potential to Emit PM/PM10/PM2.5:				5.84	25.598	0.06	0.26

Notes:

Sand Silo Transfer emission factor based on AP-42 11.19.1 (Sand and Gravel Processing).

Batch Operations emission factor (0.0093lb/lb processed) based on mass balance information provided by source.

Limestone storage silo emission factor based on AP-42, Table 11.12-2 (Sand and Gravel Operations)

Methodology:

Potential Uncontrolled Emissions (lb/hr) = Emission Factor (lb/ton) * Maximum Throughput (ton/yr) / 8760 hrs

Potential Uncontrolled Emissions (ton/yr) = Potential Uncontrolled Emissions (lb/hr) * 8760 hrs / 2000 lbs

Potential Controlled Emissions (lb/hr) = Potential Uncontrolled Emissions (lb/hr) * (1-Control Efficiency (%))

Potential Controlled Emissions (ton/yr) = Potential Uncontrolled Emissions (ton/yr) * (1-Control Efficiency (%))

Appendix A: Emissions Calculations
Natural Gas Combustion Only - Hot Oil Heater & Boiler
MM BTU/HR <100
Company Name: Henry Company
Address City IN Zip: 4351 West Morris Street, Indianapolis, IN 46241
Permit Number: 097-33649-00208
Reviewer: Joshua Levering

Emission Unit	MMBtu/hr
Hot Oil Heater	2.8
Boiler	3.34
Total	6.14

Heat Input Capacity MMBtu/hr	HHV mmBtu mmscf	Potential Throughput MMCF/yr
6.1	1020	52.7

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	50 **see below	5.5	84
Potential Emission in tons/yr	0.1	0.2	0.2	0.0	1.3	0.1	2.2

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
 PM2.5 emission factor is filterable and condensable PM2.5 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
 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
 Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
 Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

HAPS Calculations

Emission Factor in lb/MMcf	HAPs - Organics					Total - Organics
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	5.537E-05	3.164E-05	1.977E-03	4.746E-02	8.964E-05	4.961E-02

Emission Factor in lb/MMcf	HAPs - Metals					Total - Metals
	Lead	Cadmium	Chromium	Manganese	Nickel	
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	1.318E-05	2.900E-05	3.691E-05	1.002E-05	5.537E-05	1.445E-04
						Total HAPs
						4.976E-02
						Worst HAP
						4.746E-02

Methodology is the same as above.

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

**Appendix A: Emissions Calculations
Natural Gas Combustion Only - Hot Water Heater
MM BTU/HR <100**

**Company Name: Henry Company
Address City IN Zip: 4351 West Morris Street, Indianapolis, IN 46241
Permit Number: 097-33649-00208
Reviewer: Joshua Levering**

Heat Input Capacity MMBtu/hr	HHV mmBtu mmscf	Potential Throughput MMCF/yr
1.3	1020	10.8

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx 100 **see below	VOC	CO
Potential Emission in tons/yr	0.0	0.0	0.0	0.0	0.5	0.0	0.5

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

PM2.5 emission factor is filterable and condensable PM2.5 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

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

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu

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

HAPS Calculations

Emission Factor in lb/MMcf	HAPs - Organics					Total - Organics
	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03	
Potential Emission in tons/yr	1.136E-05	6.493E-06	4.058E-04	9.739E-03	1.840E-05	1.018E-02

Emission Factor in lb/MMcf	HAPs - Metals					Total - Metals
	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	
Potential Emission in tons/yr	2.705E-06	5.952E-06	7.575E-06	2.056E-06	1.136E-05	2.965E-05
					Total HAPs	1.021E-02
					Worst HAP	9.739E-03

Methodology is the same as above.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations
TANKS Printout**

Company Name: Henry Company
Address City IN Zip: 4351 West Morris Street, Indianapolis, IN 46241
Permit Number: 097-33649-00208
Reviewer: Joshua Levering

Emission Unit Tank ID	VOC Emissions (tons/year)
Tank #6	0.092
Tank #30	0.000
13B	0.003
TOTAL	0.095

Note: The VOC emissions were calculated using TANKS 4.0.9d software.

**Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads**

Company Name: Henry Company
Address City IN Zip: 4351 West Morris Street, Indianapolis, IN 46241
Permit Number: 097-33649-00208
Reviewer: Joshua Levering

Paved Roads at Industrial Site

The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (12/2003).

Vehicle Information (provided by source)

Type	Maximum number of vehicles	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Vehicle (entering plant) (one-way trip)	20.0	1.0	20.0	25.0	500.0	1500	0.284	5.7	2073.9
Vehicle (leaving plant) (one-way trip)	20.0	1.0	20.0	25.0	500.0	1500	0.284	5.7	2073.9
Total			40.0		1000.0			11.4	4147.7

Average Vehicle Weight Per Trip = tons/trip
 Average Miles Per Trip = miles/trip

Unmitigated Emission Factor, $E_f = [k * (sL/2)^{0.65} * (W/3)^{1.5} - C]$ (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.082	0.016	0.0024	lb/mi = particle size multiplier (AP-42 Table 13.2.1-1)
W =	25.0	25.0	25.0	tons = average vehicle weight (provided by source)
C =	0.00047	0.00047	0.00036	lb/mi = emission factor for vehicle exhaust, brake wear, and tire wear (AP-42 Table 13.2.1-2)
sL =	0.6	0.6	0.6	g/m ² = Ubiquitous Baseline Silt Loading Values of paved roads (Table 13.2.1-3 for summer months)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, $E_{ext} = E * [1 - (p/4N)]$

Mitigated Emission Factor, $E_{ext} = E_f * [1 - (p/4N)]$
 where p = days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
 N = days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, E_f =	0.90	0.18	0.03	lb/mile
Mitigated Emission Factor, E_{ext} =	0.82	0.16	0.02	lb/mile
Dust Control Efficiency =	50%	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Vehicle (entering plant) (one-way trip)	0.93	0.18	0.03	0.85	0.17	0.02	0.43	0.08	0.01
Vehicle (leaving plant) (one-way trip)	0.93	0.18	0.03	0.85	0.17	0.02	0.43	0.08	0.01
Total	1.87	0.36	0.05	1.71	0.33	0.05	0.85	0.17	0.02

Methodology

Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
 Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip)] / [5280 ft/mile]
 Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
 Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
 Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
 Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
 Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
 Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations

PM = Particulate Matter
 PM10 = Particulate Matter (<10 um)
 PM2.5 = Particle Matter (<2.5 um)
 PTE = Potential to Emit



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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December 30, 2014

TO: West Indianapolis Library Branch

From: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: Henry Company
Permit Number: 097-33649-00208

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 6/13/2013

Mail Code 61-53

IDEM Staff	GHOTOPP 12/30/2014 Henry Company 097-33649-00208 Final		Type of Mail: CERTIFICATE OF MAILING ONLY	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
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1		Mike Shew Henry Company 4351 W Morris St Indianapolis IN 46241 (Source CAATS) via confirmed delivery										
2		Matt Stofko Director of SEA Henry Company 336 Cold Stream Rd Kimberton PA 19442 (RO CAATS)										
3		Johan & Susan Van Den Heuvel 4409 Blue Creek Drive Carmel IN 46033 (Affected Party)										
4		Fairfield Builders Supply Corp PO Box 4427 Lafayette IN 47903 (Affected Party)										
5		Indiana Members Credit Union 5103 Madison Avenue Indianapolis IN 46227 (Affected Party)										
6		Marion County Health Department 3838 N, Rural St Indianapolis IN 46205-2930 (Health Department)										
7		West Indianapolis Library Branch 1216 South Kappes St. Indianapolis IN 46221 (Library)										
8		Indianapolis City Council 200 East Washington Street, Room E Indianapolis IN 46204 (Local Official)										
9		Marion County Commissioners 200 E. Washington St. City County Bldg., Suite 801 Indianapolis IN 46204 (Local Official)										
10		Matt Mosier Office of Sustainability City-County Bldg/200 E Washington St. Rm# 2460 Indianapolis IN 46204 (Local Official)										
11		Kristian Witt Compliance Management International 1350 Welsh Rd, Suite 200 North Wales PA 19454 (Consultant)										
12												
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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Mike Shew
Henry Company
4351 W Morris Street
Indianapolis, IN 46241

DATE: December 30, 2014

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
Federally Enforceable State Operating Permit
097-33649-00208

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Matt Stofko – Director of SEA
Kristian Witt – Compliance Management International
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 6/13/2013