



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

Eric J. Holcomb
Governor

Bruno L. Pigott
Commissioner

NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding the Renewal of a
Federally Enforceable State Operating Permit (FESOP)

for Advanced Bearing Materials, LLC in Decatur County

FESOP Renewal No.: F031-38983-00002

The Indiana Department of Environmental Management (IDEM) has received an application from Advanced Bearing Materials, LLC located at 1515 West Main Street, Greensburg, IN 47240 for a renewal of its FESOP issued on July 3, 2008. If approved by IDEM's Office of Air Quality (OAQ), this proposed renewal would allow Advanced Bearing Materials, LLC to continue to operate its existing source.

This draft FESOP Renewal does not contain any new equipment that would emit air pollutants; however, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g., changes that add or modify synthetic minor emission limits). This notice fulfills the public notice procedures to which those conditions are subject. IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow for these changes.

A copy of the permit application and IDEM's preliminary findings are available at:

Greensburg-Decatur County Public Library
1110 East Main Street
Greensburg, IN 47240

and

IDEM Southeast Regional Office
820 West Sweet Street
Brownstown, IN 47220-9557

A copy of the preliminary findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>.

A copy of the preliminary findings is also available via IDEM's Virtual File Cabinet (VFC.) Please go to: <http://www.IN.idem.gov> and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.

How can you participate in this process?

The date that this notice is published in a newspaper marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing,

you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number F031-38983-00002 in all correspondence.

Comments should be sent to:

Ethan Horvath
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for extension 3-8397
Or dial directly: (317) 233-8397
Fax: (317) 232-6749 attn: Ethan Horvath
E-mail: EHorvath@idem.IN.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local officials.

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: <http://www.in.gov/idem/airquality/2356.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, at the IDEM Regional Office indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions, please contact Ethan Horvath of my staff at the above address.



Heath Hartley, Section Chief
Permits Branch
Office of Air Quality



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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DRAFT

**Federally Enforceable State Operating Permit
Renewal
OFFICE OF AIR QUALITY**

**Advanced Bearing Materials LLC
1515 West Main Street
Greensburg, Indiana 47240**

(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.: F031-38983-00002 Master Agency Interest ID.: 15726	
Issued by: Heath Hartley, Section Chief Permits Branch Office of Air Quality	Issuance Date: Expiration Date:

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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 bearings manufacturing plant.

Source Address:	1515 West Main Street, Greensburg, Indiana 47240
General Source Phone Number:	812-663-1620
SIC Code:	3714 (Motor Vehicle Parts and Accessories)
County Location:	Decatur
Source Location Status:	Attainment for all 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:

One (1) Cast Bronze Strip (CBS) Line, constructed after 1990, approved in 2011 for modification, with a maximum capacity of 3,000 pounds per hour of steel, to which a maximum of 750 pounds per hour of bronze is applied, consisting of the following:

- (a) One (1) electric coreless furnace, identified as PT #6, with a maximum capacity of 0.13 tons of copper per hour, using the CBS baghouse (modified in 2011) as control, and exhausting to stack #8;
- (b) Two (2) on-line electric induction melting furnaces, identified as PT #2 and PT #4, each with a maximum capacity of 1.87 tons of metal per hour, using the CBS baghouse (modified in 2011) as control, and exhausting to stack #8;
- (c) One (1) hot oil quench unit, identified as PT #15; and
- (d) Two (2) rough milling units, identified as PT #13, with a combined maximum capacity of 0.5 tons of metal per hour, using the CBS cyclone/bag filter as control and exhausting to stack #10.

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) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, including:
 - (1) Two (2) oxygen scavenging flames (units 81 and 82), each with a total capacity of 0.3 million British thermal unit per hour (MMBtu/hr);
 - (2) Two (2) pre-ladle heaters (units 9 and 10) with a total capacity of 0.7 million British thermal unit per hour (MMBtu/hr); and

- (3) One (1) natural gas-fired boiler, identified as boiler #1 (unit 50), constructed prior to 1996, with heat input capacity of 2.93 million British thermal units per hour (MMBtu/hr), exhausting indoors.
- (b) Refractory storage not requiring air pollution control equipment;
- (c) Application of oils, greases lubricants or other nonvolatile materials applied as temporary protective coatings;
- (d) Machining where an aqueous cutting coolant continuously floods the machining interface;
- (e) Three (3) cold cleaner degreasing operations used to clean small parts, constructed in 1997, with two (2) having a maximum capacity of thirty (30) gallons and one having a maximum capacity of twenty (20) gallons;
- (f) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment:
 - (1) Welding operations using much less than six hundred and twenty-five (625) pounds of wire or rod per day;
- (g) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1 percent by volume;
- (h) Quenching operations used with heat treating processes;
- (i) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment;
- (j) Paved roads and parking lots with public access;
- (k) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (l) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations;
- (m) A laboratory as defined in 326 IAC 2-7-1(21)(D);
- (n) Other activities or categories not previously identified:
 - (1) Miscellaneous dry machining and deburring operations producing large shavings;
 - (2) Miscellaneous metal washing operations;
 - (3) One (1) finish mill, with a maximum capacity of 0.6 tons per hour.
- (o) Three (3) electric holding furnaces, identified as PT #7, #12, and #11, each with a maximum capacity of 1.65 tons of metal per hour, and exhausting inside the building.

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, F031-38983-00002, 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 or Southeast Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865
Southeast Regional Office phone: (812) 358-2027; fax: (812) 358-2058.

- (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 F031-38983-00002 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 one hundred (100) 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 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.

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

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

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification 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.9 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 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require 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.10 Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale. 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.13 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.14 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

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

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

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

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall 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.17 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. 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.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. 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.19 Compliance with 40 CFR 82 and 326 IAC 22-1

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

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Cast Bronze Strip (CBS) Line

One (1) Cast Bronze Strip (CBS) Line, constructed after 1990, approved in 2011 for modification, with a maximum capacity of 3,000 pounds per hour of steel, to which a maximum of 750 pounds per hour of bronze is applied, consisting of the following:

- (a) One (1) electric coreless furnace, identified as PT #6, with a maximum capacity of 0.13 tons of copper per hour, using the CBS baghouse (modified in 2011) as control, and exhausting to stack #8;
- (b) Two (2) on-line electric induction melting furnaces, identified as PT #2 and PT #4, each with a maximum capacity of 1.87 tons of metal per hour, using the CBS baghouse (modified in 2011) as control, and exhausting to stack #8;
- (c) One (1) hot oil quench unit, identified as PT #15; and
- (d) Two (2) rough milling units, identified as PT #13, with a combined maximum capacity of 0.5 tons of metal per hour, using the CBS cyclone/bag filter as control and exhausting to stack #10.

(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 Limits [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4 (FESOP) and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

- (a) PM10 emissions from the three (3) furnaces (PT #6, PT #2, and PT #4) at the Cast Bronze Strip (CBS) Line, all exhausting to the CBS baghouse and stack #8, shall not exceed a total of 9.6 pounds per hour.
- (b) PM2.5 emissions from the three (3) furnaces (PT #6, PT #2, and PT #4) at the Cast Bronze Strip (CBS) Line, all exhausting to the CBS baghouse and stack #8, shall not exceed a total of 9.6 pounds per hour.
- (c) PM10 emissions from the two (2) rough milling units (PT# 13) at the Cast Bronze Strip (CBS) Line, both exhausting to the CBS Line cyclone/bag filter and stack #10, shall not exceed a total of 9.6 pounds per hour.
- (d) PM2.5 emissions from the two (2) rough milling units (PT# 13) at the Cast Bronze Strip (CBS) Line, both exhausting to the CBS Line cyclone/bag filter and stack #10, shall not exceed a total of 9.6 pounds per hour.

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit PM10 and PM2.5 to less than 100 tons per twelve (12) consecutive month period each, and shall render 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.2 PSD Minor Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the source shall comply with the following:

- (a) PM emissions from the three (3) furnaces (PT #6, PT #2, and PT #4) at the Cast Bronze Strip (CBS) Line, all exhausting to the CBS baghouse and stack #8, shall not exceed a total of 9.6 pounds per hour.

Compliance with this limit, combined with the PM emissions from all other emission units at this source, shall limit the source-wide total PM emissions to less than 250 tons per 12 consecutive month period and shall render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.3 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) coreless furnace, identified as PT #6, shall not exceed 1.05 pounds per hour when operating at a process weight rate of 0.13 tons per hour.
- (b) Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the two (2) on-line electric induction melting furnaces, identified as PT #2 and PT #4, shall not exceed 6.24 pounds per hour when operating at a process weight rate of 1.87 tons per hour, each.
- (c) Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the two (2) rough milling units, identified as PT #13, shall each not exceed 1.62 pounds per hour when operating at a process weight rate of 0.25 tons per hour, each.

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

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

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

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

D.1.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)][326 IAC 1-6-3]

A Preventative Maintenance Plan is required for these facilities and any 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 [326 IAC 2-8-4(1)]

D.1.5 Particulate Control

- (a) In order to assure compliance with Conditions D.1.1, D.1.2, and D.1.3(a) and (b), the CBS baghouse for particulate control shall be in operation and control emissions from the three (3) furnaces (PT #6, PT #2, and PT #4) at the Cast Bronze Strip (CBS) Line at all times that any of the furnaces are in operation.
- (b) In order to assure compliance with Conditions D.1.1 and D.1.3(c), the CBS cyclone/bag filter for particulate control shall be in operation and control emissions from the two (2)

rough milling units at the Cast Bronze Strip (CBS) Line at all times that either or both of the rough milling units are in operation.

D.1.6 Testing Requirements [326 IAC 2-8-5(a)(4)][326 IAC 2-1.1-11]

- (a) In order to demonstrate compliance with Conditions D.1.1(a), D.1.1(b), and D.1.2, the Permittee shall perform PM, PM10 and PM2.5 testing of stack #8 utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition. PM10 and PM2.5 includes filterable and condensable PM.
- (b) In order to demonstrate compliance with Conditions D.1.1(c) and D.1.1(d), the Permittee shall perform PM, PM10 and PM2.5 testing of stack #10 utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition. PM10 and PM2.5 includes filterable and condensable PM.

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

D.1.7 Parametric Monitoring

- (a) The Permittee shall record the pressure drop across the baghouse used in conjunction with the CBS Line furnaces, at least once per day when the furnaces are in operation. When, for any one reading, the pressure drop across the baghouse is outside of the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 7.0 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 reasonable response steps required by this condition. A pressure 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.
- (b) The Permittee shall record the pressure drop across the cyclone/bag filter combination used in conjunction with the CBS Line rough milling units, at least once per day when the CBS Line is in operation. When, for any one reading, the pressure drop across the baghouse is outside of the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 8.8 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 reasonable response steps required by this condition. A pressure 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.
- (c) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.1.8 Broken or Failed Bag Detection

- (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 unit 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 the current batch. 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.1.9 Cyclone Failure Detection

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).

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

D.1.10 Record Keeping Requirement

- (a) To document the compliance status with Conditions D.1.7(a) and D.1.7(b), the Permittee shall maintain daily records of the pressure drop across the baghouse and cyclone controlling the Cast Bronze Strip (CBS) Line. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the process did not operate that day).
- (b) Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Insignificant Activities:

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, including:
 - (1) Two (2) oxygen scavenging flames (units 81 and 82), each with a total capacity of 0.3 million British thermal unit per hour (MMBtu/hr);
 - (2) Two (2) pre-ladle heaters (units 9 and 10) with a total capacity of 0.7 million British thermal unit per hour (MMBtu/hr); and
 - (3) One (1) natural gas-fired boiler, identified as boiler #1 (unit 50), constructed prior to 1996, with heat input capacity of 2.93 million British thermal units per hour (MMBtu/hr), exhausting indoors.
- (e) Three (3) cold cleaner degreasing operations, each with a capacity of 15 gallons, to clean small parts, installed in 1997
- (l) Furnaces used for melting metals other than beryllium with a brim full capacity of less than or equal to 450 cubic inches by volume;
- (m) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations;

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

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

D.2.1 Particulate [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), particulate emissions from the natural gas-fired boiler (Boiler #1 (Unit 50)), oxygen scavenging flames (Units 81 and Unit 82), and pre-ladle heaters (Unit 9 and Unit 10), shall be limited to 0.6 pounds per MMBtu heat input, each.

D.2.2 Particulate Emission Limitations [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from the grinding operation shall not exceed 6.23 pounds per hour, when operating at a process weight rate of 1.87 tons per hour.

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

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

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

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

D.2.3 Cold Cleaner Degreaser Control Equipment and Operating Requirements [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Degreaser Control Equipment and Operating Requirements), the Permittee shall:

- (a) Ensure the following control equipment and operating requirements are met:
 - (1) Equip the degreaser with a cover.
 - (2) Equip the degreaser with a device for draining cleaned parts.
 - (3) Close the degreaser cover whenever parts are not being handled in the degreaser.
 - (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
 - (5) Provide a permanent, conspicuous label that lists the operating requirements in subdivisions (3), (4), (6), and (7).
 - (6) Store waste solvent only in closed containers.
 - (7) Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.

- (b) Ensure the following additional control equipment and operating requirements are met:
 - (1) Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent used is insoluble in, and heavier than, water.
 - (C) A refrigerated chiller.
 - (D) Carbon adsorption.
 - (E) An alternative system of demonstrated equivalent or better control as those outlined in clauses (A) through (D) that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.
 - (2) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.
 - (3) If used, solvent spray:
 - (A) must be a solid, fluid stream; and
 - (B) shall be applied at a pressure that does not cause excessive splashing.

D.2.4 Material Requirements for Cold Cleaner Degreasers [326 IAC 8-3-8]

Pursuant to 326 IAC 8-3-8 (Material Requirements for Cold Cleaner Degreasers), the Permittee shall not operate a cold cleaning degreaser with a solvent that has a VOC composite partial vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

D.2.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)][326 IAC 1-6-3]

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

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

D.2.6 Record Keeping Requirements

- (a) To document the compliance status with Condition D.2.4, the Permittee shall maintain the following records for each purchase of solvent used in the cold cleaner degreasing operations. These records shall be retained on-site or accessible electronically for the most recent three (3) year period and shall be reasonably accessible for an additional two (2) year period.
- (1) The name and address of the solvent supplier.
 - (2) The date of purchase (or invoice/bill dates of contract servicer indicating service date).
 - (3) The type of solvent purchased.
 - (4) The total volume of the solvent purchased.
 - (5) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).
- (b) 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: Advanced Bearing Materials LLC
Source Address: 1515 West Main Street, Greensburg, Indiana 47240
FESOP Permit No.: F031-38983-00002

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: Advanced Bearing Materials LLC
Source Address: 1515 West Main Street, Greensburg, Indiana 47240
FESOP Permit No.: F031-38983-00002

This form consists of 2 pages

Page 1 of 2

- | |
|---|
| <input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12) <ul style="list-style-type: none">• The Permittee must notify the Office of Air Quality (OAQ), within four (4) daytime 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 2-8-12 |
|---|

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: Advanced Bearing Materials LLC
 Source Address: 1515 West Main Street, Greensburg, Indiana 47240
 FESOP Permit No.: F031-38983-00002

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

<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 (FESOP) Renewal

Source Description and Location
--

Source Name:	Advanced Bearing Materials, LLC
Source Location:	1515 West Main Street, Greensburg, Indiana 47240
County:	Decatur
SIC Code:	3714 (Motor Vehicle Parts and Accessories)
Permit Renewal No.:	F031-38983-00002
Permit Reviewer:	Ethan Horvath

On August 25, 2017, Advanced Bearing Materials, LLC submitted an application to the Office of Air Quality (OAQ) requesting to renew its operating permit. OAQ has reviewed the operating permit renewal application from Advanced Bearing Materials, LLC relating to the operation of a stationary bearings manufacturing plant. Advanced Bearing Materials, LLC was issued its second FESOP Renewal (F031-38983-00002) on July 3, 2008.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

One (1) Cast Bronze Strip (CBS) Line, constructed after 1990, modified in 2011, with a maximum capacity of 3,000 pounds per hour of steel, to which a maximum of 750 pounds per hour of bronze is applied, consisting of the following:

- (a) One (1) electric coreless furnace, identified as PT #6, with a maximum capacity of 0.13 tons of copper per hour, using the CBS baghouse (modified in 2011) as control, and exhausting to stack #8;
- (b) Two (2) on-line electric induction melting furnaces, identified as PT #2 and PT #4, each with a maximum capacity of 1.87 tons of metal per hour, using the CBS baghouse (modified in 2011) as control, and exhausting to stack #8;
- (c) One (1) hot oil quench unit, identified as PT #15; and
- (d) Two (2) rough milling units, identified as PT #13, with a combined maximum capacity of 0.5 tons of metal per hour, using the CBS cyclone/bag filter as control and exhausting to stack #10.

Insignificant Activities

The source also consists of the following insignificant activities:

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, including:
 - (1) Two (2) oxygen scavenging flames (units 81 and 82), each with a heat input capacity of 0.3 million British thermal unit per hour (MMBtu/hr);

- (2) Two (2) pre-ladle heaters (units 9 and 10) with a total capacity of 0.7 million British thermal unit per hour (MMBtu/hr); and
 - (3) One (1) natural gas-fired boiler, identified as boiler #1 (unit 50), constructed prior to 1996, with heat input capacity of 2.93 million British thermal units per hour (MMBtu/hr), exhausting indoors.
- (b) Refractory storage not requiring air pollution control equipment;
 - (c) Application of oils, greases lubricants or other nonvolatile materials applied as temporary protective coatings;
 - (d) Machining where an aqueous cutting coolant continuously floods the machining interface;
 - (e) Three (3) cold cleaner degreasing operations used to clean small parts, constructed in 1997, with two (2) having a maximum capacity of thirty (30) gallons and one having a maximum capacity of twenty (20) gallons;
 - (f) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment:
 - (1) Welding operations using much less than six hundred and twenty-five (625) pounds of wire or rod per day;
 - (g) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1 percent by volume;
 - (h) Quenching operations used with heat treating processes;
 - (i) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment;
 - (j) Paved roads and parking lots with public access;
 - (k) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
 - (l) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations;
 - (m) A laboratory as defined in 326 IAC 2-7-1(21)(D);
 - (n) Other activities or categories not previously identified:
 - (1) Miscellaneous dry machining and deburring operations producing large shavings;
 - (2) Miscellaneous metal washing operations;
 - (3) One (1) finish mill, with a maximum capacity of 0.6 tons per hour.
 - (o) Three (3) electric holding furnaces, identified as PT #7, #12, and #11, each with a maximum capacity of 1.65 tons of metal per hour, and exhausting inside the building.

Existing Approvals

The source was issued FESOP Renewal No. F031-24769-00002 on July 3, 2008. The source has since received the following approval:

- (a) Significant Permit Revision No.: F031-30545-00002, issued on September 1, 2011; and
- (b) Administrative Amendment No.: F031-31870-00002, issued on May 24, 2012; and
- (c) Administrative Amendment No.: F031-32760-00002, issued on February 19, 2013.

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 Decatur County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard. ¹
PM _{2.5}	Unclassifiable or attainment effective April 5, 2005, 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.

¹Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which 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. Decatur 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}**
Decatur 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) **Other Criteria Pollutants**
Decatur County has been classified as attainment or unclassifiable in Indiana for all 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 (1) of the twenty-eight (28) listed source categories under 326 IAC 2-2-1(ff)(1), 326 IAC 2-3-2(g), or 326 IAC 2-7-1(22)(B), and there is no applicable New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants 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.

Greenhouse Gas (GHG) Emissions

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 GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Unrestricted Potential Emissions	
Pollutant	Tons/year
PM	Greater than 250
PM ₁₀	Greater than 250
PM _{2.5}	Greater than 250
SO ₂	Less than 100
NO _x	Less than 100
VOC	Less than 100
CO	Less than 100
Pb	Less than 10
Single HAP	Less than 10
Total HAP	Less than 25

- (a) The potential to emit (as defined in 326 IAC 2-7-1(30)) of 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(30)) 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(30)) 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(30)) of a combination of HAPs is less than twenty-five (25) tons per year.

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of this 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	Pb	Total HAPs	Worst Single HAP
Cast Bronze Strip- Stack 8	42.05	42.05	42.05	0.00	0.00	0.00	0.00	6.49E-04	0.00	0.00
CBS Line-Electric Induction Furnaces	0.33	0.33	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Casting Emissions from CBS Line	0.12	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cast Bronze Strip-Stack 10	42.05	42.05	42.05	0.00	0.00	0.00	0.00	2.46E-03	0.00	0.00
Grinding Operation	4.51	4.51	4.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Operation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Degreasing Operation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas Units	0.03	0.14	0.14	0.01	1.82	0.10	1.53	0.00	0.03	0.03 (Hexane)
One (1) Hot oil quench unit	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
One (1) finish mill	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Three (3) electric holding furnaces	negl.	negl.	negl.	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paved Roads	0.21	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PTE of Entire Source	89.09	89.19	89.19	0.01	1.82	1.10	1.53	3.13E-03	0.04	0.03 (Hexane)
Title V Major Source Thresholds	NA	100	100	100	100	100	100	10	25	10
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} .										

- (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

Compliance Assurance Monitoring (CAM):

- (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 Secondary Brass and Bronze Production Plants, 40 CFR 60.130, Subpart M, are not included in the permit, since the source purchases the alloys from a vendor and melts the alloys for use in producing coils or slabs. The furnaces at this source use molten brass or bronze and are cast into the shape of finished products. Therefore, the source is not considered a brass and bronze production plant, since none of the furnaces are considered reverberatory, electric, or blast furnaces, per §60.131.
- (b) The requirements of the New Source Performance Standard for Standards of Performance for Electric Utility Steam Generating Units, 40 CFR 60.40Da, Subpart Da, are not included in the permit, since the natural gas-fired boiler (boiler #1 (Unit 50)) is not considered an electric utility steam-generating unit, as per §60.41Da.
- (c) The requirements of the New Source Performance Standard for Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60.40Db, Subpart Db, are not included in the permit, since the natural gas-fired boiler (boiler #1 (Unit 50)) does not have a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)).
- (d) The requirements of the New Source Performance Standard for Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60.40Dc, Subpart Dc, are not included in the permit, since the natural gas-fired boiler (boiler #1 (Unit 50)) has a maximum design heat input capacity of less than 2.9 MW (10 MMBtu/h).
- (e) There are no other New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.

National Emission Standards for Hazardous Air Pollutants (NESHAPs)

- (a) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for National Emission Standards for Halogenated Solvent Cleaning, Subpart T are not included in the permit for the three (3) parts washers, since the source does not use any solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride or chloroform.
- (b) The requirements of the National Emission Standards for Hazardous Air Pollutants for Primary Copper Smelting, Subpart QQQ are not included in the permit, since the source does not own or operate a primary copper smelter and is not considered a major source of HAP emissions.

- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, Subpart DDDDD are not included in the permit for the natural gas-fired boiler (boiler #1 (Unit 50)), since the source is not considered a major source of HAP emissions.
- (d) The requirements of the National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities, Subpart YYYYY are not included in the permit, since the source is not considered a steelmaking facility and does not operate an electric arc furnace.
- (e) The requirements of the National Emission Standards for Hazardous Air Pollutants for Primary Copper Smelting Area Sources, Subpart EEEEE are not included in the permit, since the source does not own or operate a primary copper smelter, as defined by §63.11151, because it processes ready-to-melt copper ingots.
- (f) The requirements of National Emission Standards for Hazardous Air Pollutants for Secondary Copper Smelting Area Sources, Subpart FFFFF are not included in the permit, since the source does not own or operate a secondary copper smelter, as defined by §63.11158, because it processes ready-to-melt copper ingots.
- (g) The requirements of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources, Subpart JJJJJ are not included in the permit for the natural gas-fired boiler (boiler #1 (Unit 50)), since the natural gas-fired boiler (boiler #1 (Unit 50)) is an exempt boiler under §63.11195, because it is considered a gas-fired boiler under §63.11237.
- (h) The requirements of the National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries, Subpart ZZZZZ are not included in the permit washers, since the source is not considered a copper foundry under §63.11556.
- (i) 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 2-2 (Prevention of Significant Deterioration (PSD) Requirements)

The source is not one (1) of the twenty-eight (28) source categories, does not have the potential to emit equal to or greater than 250 tons per year of any criteria pollutant, PM or VOC's, and does not have the potential to emit equal to or greater than 25 tons per year of lead. Therefore, the source is minor for PSD and 326 IAC 2-2 is not applicable.

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the source shall comply with the following:

- (a) PM emissions from the three (3) furnaces (PT #6, PT #2, and PT #4) at the Cast Bronze Strip (CBS) Line, all exhausting to the CBS baghouse and stack #8, shall not exceed a total of 9.6 pounds per hour.

Compliance with this limit, combined with the PM emissions from all other emission units at this source, shall limit the source-wide total PM emissions to less than 250 tons per 12 consecutive month period and shall render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

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 2-8-4 (FESOP)

Pursuant to 326 IAC 2-8-4 (FESOP) and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

- (a) The potential to emit PM₁₀ from the Cast Bronze Strip (CBS) Line furnaces, all exhausting to the CBS baghouse and stack #8, shall not exceed a total of 9.6 pounds per hour.
- (b) The total potential to emit PM₁₀ from the two (2) rough milling units at the Cast Bronze Strip (CBS) Line, both exhausting to the CBS Line cyclone/bag filter and stack #10, shall not exceed a total of 9.6 pounds per hour.

Compliance with these limits, combined with the potential to emit PM₁₀ and PM_{2.5} from all other emission units at this source, shall limit the source-wide total potential to emit PM₁₀ and PM_{2.5} to less than 100 tons per twelve (12) consecutive month period each, and shall render 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

326 IAC 5-1 (Opacity Limitations)

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

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

326 IAC 6-4 (Fugitive Dust Emissions Limitations)

Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.

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

The requirements of 326 IAC 6-5 are not included in the permit, since the source does not have a potential to emit of greater than 25 tons/yr of fugitive emissions.

State Rule Applicability – Individual Facilities

Natural Gas Boiler (Boiler #1 (Unit 50)), Oxygen Scavenging Flames (Unit 81 and Unit 82) and Pre-Ladle Heaters (Unit 9 and Unit 10)

326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating)

Pursuant to 326 IAC 6-2-1(d), indirect heating facilities which received permit to construct after September 21, 1983 are subject to the requirements of 326 IAC 6-2-4.

The particulate matter emissions (Pt) shall be limited by the following equation:

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

Where:

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

Q = Total source maximum operating capacity rating in MMBtu/hr heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation.

Indirect Heating Units Which Began Began Operation After September 21, 1983						
Facility	Construction Date (Removal Date)	Operating Capacity (MMBtu/hr)	Q (MMBtu/hr)	Calculated Pt (lb/MMBtu)	Particulate Limitation, (Pt) (lb/MMBtu)	PM PTE based on AP-42 (lb/MMBtu)
Boiler #1 (Unit 50)	1995	2.93	4.23	0.03	0.6	0.002
Unit 81	1995	0.3	4.23	0.03	0.6	0.002
Unit 82	1995	0.3	4.23	0.03	0.6	0.002
Unit 9	1995	0.35	4.23	0.03	0.6	0.002
Unit 10	1995	0.35	4.23	0.03	0.6	0.002
Where: Q = Sum of the maximum operating capacity rating (MMBtu/hr) of the new unit(s) and all units located at the source on the date the new unit(s) was constructed.						
Note: Emission units shown in strikethrough were subsequently removed from the source. The effect of removing these units on "Q" is shown in the year the boiler was removed.						

Pursuant to 326 IAC 6-2-4(a), for Q less than 10 MMBtu/hr, Pt shall not exceed 0.6 lb/MMBtu.

326 IAC 7 (Sulfur Dioxide Emission Limitations)

Pursuant to 7-1.1-1, the requirements of 326 IAC 7 are not applicable to the natural gas boiler (Boiler #1 (Unit 50) and pre-ladle heaters (Unit 9 and Unit 10), since the natural gas boiler (Boiler #1 (Unit 50) and pre-ladle heaters (Unit 9 and Unit 10) do not have the potential to emit twenty-five (25) tons per year or ten (10) pounds per hour of SO₂ per year, each.

Electric Coreless Furnace (PT #6)

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

Pursuant to 326 IAC 6-3-2(c) the particulate from the electric coreless furnace (PT #6) shall not exceed 1.05 pounds per hour when operating at a process weight of 0.13 tons per hour.

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 CBS baghouse is not required be in operation at all times the electric coreless furnace (PT #6) is in operation in order to comply with this limit.

On-line Electric Induction Melting Furnaces (PT #2 and PT #4)

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

Pursuant to 326 IAC 6-3-2(c) the particulate from the on-line electric induction melting furnaces (PT #2 and PT #4) shall not exceed 6.23 pounds per hour, each, when operating at a process weight of 1.87 tons per hour, each.

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 CBS baghouse shall be in operation at all times the on-line electric induction melting furnaces (PT #2 and PT #4) are in operation, in order to comply with this limit.

326 IAC 15 (Lead Rules)

Pursuant to 326 IAC 15-1-1, the requirements of 326 IAC 15 are not applicable to the rough milling units (PT #13), since the source is not a specifically regulated source under 326 IAC 15-1-2.

Rough Milling Units (PT #13)

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

Pursuant to 326 IAC 6-3-2(c) the particulate from the rough milling units (PT #13) shall not exceed 2.58 pounds per hour when operating at a process weight of 0.5 tons per hour.

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 CBS cyclone/bag filter shall be in operation at all times the rough milling units (PT #13) are in operation, in order to comply with this limit.

326 IAC 15 (Lead Rules)

Pursuant to 326 IAC 15-1-1, the requirements of 326 IAC 15 are not applicable to the rough milling units (PT #13), since the source is not a specifically regulated source under 326 IAC 15-1-2.

Grinding Operation

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

Pursuant to 326 IAC 6-3-2(c) the particulate from the grinding shall not exceed 6.23 pounds per hour when operating at a process weight of 1.87 tons per hour.

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:

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

A control device is not required for the grinding operation in order to comply with this limit.

Welding Operation

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

Pursuant to 326 IAC 6-3-1(b)(9), the requirements of 326 IAC 6-3-2 are not applicable to the welding operation, since the welding operation consumes less than six hundred twenty-five (625) pounds of rod or wire per day.

Parts Washers

326 IAC 8-3 Volatile Organic Compound Rules

Pursuant to 326 IAC 8-3-1(c), the requirements of 326 IAC 8-3 are applicable to the three (3) parts washers, since they are cold cleaner degreasers without remote solvent reservoirs that were constructed after July 1, 1990, and located anywhere in the state. The applicable requirements for the three (3) parts washers are found in 326 IAC 8-3-2.

326 IAC 8-3-8 (Material requirements for cold cleaner degreasers)

Pursuant to 326 IAC 8-3-8(a), the requirements of 326 IAC 8-3-8 are not applicable to the three (3) parts washers, since they were constructed prior to January 1, 2015 and the source is located in Decatur County.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-8 are required to assure 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.

(a) The Compliance Determination Requirements applicable to this source are as follows:

Summary of Testing Requirements					
Emission Unit	Control Device	Timeframe for Testing or Date of Last Valid Demonstration)	Pollutant	Frequency of Testing	Authority
Coreless furnace (PT #6)	CBS Baghouse	August 18, 2016	PM, PM10 and PM2.5	Every 5 Years	326 IAC 2-8-5(a) 326 IAC 2-2
On-line induction melting furnaces (PT #2 and PT #4)	CBS Baghouse	August 18, 2016	PM, PM10 and PM2.5	Every 5 Years	326 IAC 2-8-5(a) 326 IAC 2-2
Rough milling units (PT #13)	CBS Cyclone/Bag Filter	August 18, 2016	PM, PM10 and PM2.5	Every 5 Years	326 IAC 2-8-5(a) 326 IAC 2-2

(b) The Compliance Monitoring Requirements applicable to this source are as follows:

Control	Parameter	Frequency	Range	Excursions and Exceedances
CBS Baghouse	Water Pressure Drop	Daily	1.0 to 7.0 inches	Response Steps
CBS Cyclone/Bag Filter	Water Pressure Drop	Daily	1.0 to 8.8 inches	Response Steps

These monitoring conditions are necessary because the CBS Baghouse and CBS Cyclone/Bag Filter for the on-line electric induction melting furnaces (PT #2 and PT #4) and rough milling units (PT #13), respectively, must operate properly to assure compliance with 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes).

Conclusion and Recommendation

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 August 25, 2017.

The operation of this stationary bearing manufacturing source shall be subject to the conditions of the attached FESOP Renewal No. F031-38983-00002.

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

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Ethan Horvath 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) 233-8397 or toll free at 1-800-451-6027 extension 3-8397.
- (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 Air Permits page on the Internet at: <http://www.in.gov/idem/airquality/2356.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

**Appendix A: Emissions Calculations
Source-wide Summary**

**Company Name: Advanced Bearing Materials, LLC
Address City IN Zip: 1515 West Main Street, Greensburg, Indiana 47240
Renewal No: F031-38983-00002
Reviewer: Ethan Horvath**

Uncontrolled Potential to Emit (tons/yr)										
Emission Unit	PM	PM10	PM2.5 *	SO2	NOx	VOC	CO	Pb	Total HAPs	Worst-Case HAP
Cast Bronze Strip (CBS) Line Baghouse exhausting to stack 8	784.99	784.99	784.99	0.00	0.00	0.00	0.00	0.06	0.00	0.00
Emissions from CBS Line based on Electric Induction Furnaces	0.33	0.33	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Casting Emissions from CBS Line	0.12	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cast Bronze Strip (CBS) Line Cyclone/Baghouse exhausting to stack 10	73.64	73.64	73.64	0.00	0.00	0.00	0.00	0.09	0.00	0.00
Grinding Operation	4.51	4.51	4.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Operation	7.88E-04	7.88E-04	7.88E-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Degreasing Operation	0.00	0.00	0.00	0.00	0.00	4.90E-03	0.00	0.00	0.00	0.00
Natural Gas Combustion	0.03	0.14	0.14	0.01	1.82	0.10	1.53	0.00	0.03	0.03 (Hexane)
*One (1) hot oil quench unit	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
One (1) finish mill	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Three (3) electric holding furnaces, identified as PT #7, #12, and #11	negl.	negl.	negl.	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paved Roads	0.21	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	863.62	863.72	863.72	0.01	1.82	1.10	1.53	0.15	0.19	0.03 (Hexane)

* PM2.5 listed is direct PM2.5

- = negligible

Note:

*There are VOC emissions from the hot oil quench which are assumed to be less than or equal to 1.0 ton per year.

Potential to Emit after Issuance (tons/yr)										
Emission Unit	PM	PM10	PM2.5 *	SO2	NOx	VOC	CO	Pb	Total HAPs	Worst-Case HAP
Cast Bronze Strip (CBS) Line Baghouse exhausting to stack 8	42.05	42.05	42.05	0.00	0.00	0.00	0.00	6.49E-04	0.00	0.00
Emissions from CBS Line based on Electric Induction Furnaces	0.33	0.33	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Casting Emissions from CBS Line	0.12	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cast Bronze Strip (CBS) Line Cyclone/Baghouse exhausting to stack 10	42.05	42.05	42.05	0.00	0.00	0.00	0.00	2.46E-03	0.00	0.00
Grinding Operation	4.51	4.51	4.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Operation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Degreasing Operation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas Combustion	0.03	0.14	0.14	0.01	1.82	0.10	1.53	0.00	0.03	0.03 (Hexane)
*One (1) hot oil quench unit	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
One (1) finish mill	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Three (3) electric holding furnaces, identified as PT #7, #12, and #11	Negl.	Negl.	Negl.	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paved Roads	0.21	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	89.09	89.19	89.19	0.01	1.82	1.10	1.53	3.13E-03	0.04	0.03 (Hexane)

* PM2.5 listed is direct PM2.5

- = negligible

Note:

*There are VOC emissions from the hot oil quench which are assumed to be less than or equal to 1.0 ton per year.

**Appendix A: Emissions Calculations
Welding Operations**

**Company Name: Advanced Bearing Materials, LLC
Address City IN Zip: 1515 West Main Street, Greensburg, Indiana 47240
Renewal No: F031-38983-00002
Reviewer: Ethan Horvath**

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)	EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
			PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
WELDING											
Submerged Arc	1	0.005	0.036	0.011			1.80E-04	5.50E-05	0.000	0.00	5.50E-05
EMISSION TOTALS											
Potential Emissions lbs/hr							1.80E-04	5.50E-05	0.00	0.00	5.50E-05
Potential Emissions lbs/day							4.32E-03	1.32E-03	0.00	0.00	1.32E-03
Potential Emissions tons/year							7.88E-04	2.41E-04	0.00	0.00	2.41E-04

Methodology:

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column.

Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/year x 1 ton/2,000 lbs.

**Appendix A: Emission Calculations
Grinding Operation**

Company Name: Advanced Bearing Materials, LLC
Address City IN Zip: 1515 West Main Street, Greensburg, Indiana 47240
Renewal No: F031-38983-00002
Reviewer: Ethan Horvath

Unit ID	Grain Loading (grains/ft ³)	Gas Flow Rate (acfm)	Control Efficiency (%)	PM Emission Rate (lb/hr)	PM Emission Rate (ton/yr)
PG Grinding Wheel	0.030	4000	-	1.029	4.51

Methodology:

PM Emission Rate (lb/hr) = Grain Loading (grains/ft³) * Gas Flow Rate (acfm)

PM Emission Rate (tn/yr) = PM Emission Rate (lb/hr) * 8760 (hr/yr) / 2000 (lb/tn)

Note:

The PG Grinding Wheel does not use a gas/air flow, but is only a grinding wheel. Since the source does not keep record of excess material grinded off, grain loading and gas flow have been estimated at the maximum allowable rates to be considered insignificant under 326 IAC 2-7-1(21)(J)(xxii) in order for conservative PM estimates.

There is no control device associated with the grinding operation.

**Appendix A: Emission Calculations
Degreasing Operation**

Company Name: Advanced Bearing Materials, LLC
Address City IN Zip: 1515 West Main Street, Greensburg, Indiana 47240
Renewal No: F031-38983-00002
Reviewer: Ethan Horvath

Cleaners	Density (lbs/gal)	Consumption (gal/yr)*	Weight Volatiles (%)	VOC PTE (tn/yr)	HAP	HAP % Weight (%)	HAP Emission (tn/yr)
Crystal Clean 142 Mineral Spirit (915876)	6.76	145.00	100%	4.90E-03	N/A	0.00%	0.00
Crystal Clean 142 Mineral Spirit (915876)	6.76	145.00	100%	4.90E-03	N/A	0.00%	0.00
Crystal Clean 142 Mineral Spirit (915876)	6.76	145.00	100%	4.90E-03	N/A	0.00%	0.00
Total				4.90E-03		Total HAP	0.00
						Worst HAP	0.00

Methodology:

VOC PTE (tn/yr) = Density (lbs/gal) * Consumption (gal/yr) * (Weight Volatiles (%) / 100) / 2000 (lb/tn)

Note:

Consumption (gal/yr) was calculated by taking the maximum amount allowable by 326 IAC 2-7-1(21)(j)(CC)

**Appendix A: Emission Calculations
Process Operations**

Company Name: Advanced Bearing Materials, LLC
Address City IN Zip: 1515 West Main Street, Greensburg, Indiana 47240
Renewal No: F031-38983-00002
Reviewer: Ethan Horvath

Unit ID	Grain Loading (grain/ft3)	Gas/Air Flow Rate (acfm)	Control Efficiency (%)	*PM Emission Rate before Controls (lb/hr)	*PM Emission Rate before Controls (tons/yr)	*PM Emission Rate after Controls (lb/hr)	*PM Emission Rate after Controls (tons/yr)
Cast Bronze Strip (CBS) Line Baghouse exhausting to stack #8	0.005	46000	98.9%	179.2	785.0	1.971	8.63

*Assume PM = PM10 = PM2.5

Methodology

PM Emission Rate after Controls (lb/hr) = Grain Loading (grain/ft³) * Gas/Air Flow Rate (acfm) * 60 (min/hr) / 7000 (grain/lb)
 PM Emission Rate after Controls (tn/yr) = PM Emission Rate after Controls (lb/hr) * 8760 (hr/yr) / 2000 (lb/tn)
 PM Emissions Rate before Controls (lb/hr) = PM Emission Rate After Controls (lb/hr) / (1 - Control Efficiency (%))
 PM Emissions Rate before Controls (tn/yr) = PM Emissions Rate before Controls (lb/hr) * 8760 (hr/yr) / 2000 (lb/tn)

Unit ID	Lead (Pb) Emissions* (lbs/tn)	Maximum Process Weight Rate (lbs/hr)	Control Efficiency (%)	Pb Emission Rate after Controls (lb/hr)	Pb Emission Rate after Controls (tons/yr)	Pb Emission Rate before Controls (lb/hr)	Pb Emission Rate before Controls (tons/yr)
Cast Bronze Strip (CBS) Line Baghouse exhausting to stack #8	0.000079	3750	98.9%	0.00015	0.0006	0.013	0.059
Total				0.00	0.00	0.01	0.06

*The emission factor has been carried over from previously approved permits.

Methodology

Pb Emission Factor (lb/tn) = 0.77 (kg/Mg) * 2.205 (lb/kg) / 1.102 (Mg/tn) * (1 - Control Efficiency (%))
 Pb Emission Rate after Controls (lb/hr) = Lead Emissions (lb/hr) * Maximum Process Weight Rate (lbs/hr) / Process Weight Rate During Test (lbs/hr)
 Pb Emission Rate after Controls (tn/yr) = Pb Emission Rate after Controls (lb/hr) * 8760 (hr/yr) / 2000 (lb/tn)
 Pb Emission Rate before Controls (lb/hr) = Pb Emission Rate after Controls (lb/hr) / (1 - Control Efficiency (%))
 Pb Emissions Rate before Controls (lb/tn) = Pb Emission Rate before Controls (lb/hr) * 8760 (hr/yr) / 2000 (lb/tn)

Uncaptured Emissions

Unit ID	PM-10 Emission Factor (lbs/ton)	Maximum Process Weight Rate (lbs/hr)	PM and PM-10 Emission Rate (lb/hr)	PM and PM-10 Emission Rate (tons/yr)
Emissions from CBS Line based on Electric Induction Furnaces (SCC 3-04-002-38)	0.040	3750	0.075	0.329
Casting Emissions from CBS Line (SCC 3-04-002-39)	0.015	3750	0.028	0.123
Total			0.103	0.452

*Assume PM = PM10 = PM2.5

Methodology

Emission Rate in lbs/hrs = Maximum Process Weight Rate in lbs/hr (weight of charge for furnace emissions and weight of product for casting emissions) x PM-10 Emission Factor (based on FIRES 6.23)
 Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

Note:

The source has a furnace holding stand where furnaces are kept that are not being used in-line to their process. This holding stand has three slots where these furnaces are kept with the molten copper/bronze alloy being maintained in this phase. Therefore, the emissions are uncaptured by the control devices.

**Appendix A: Emission Calculations
Process Operations**

**Company Name: Advanced Bearing Materials, LLC
Address City IN Zip: 1515 West Main Street, Greensburg, Indiana 47240
Renewal No: F031-38983-00002
Reviewer: Ethan Horvath**

Stack Emissions

Unit ID	Grain Loading (grain/ft ³)	Gas Flow Rate (acfm)	Control Efficiency (%)	*PM Emission Rate Rate before Controls (lb/hr)	*PM Emission Rate Rate before Controls (tons/yr)	*PM Emission Rate Rate after Controls (lb/hr)	*PM Emission Rate Rate after Controls (tons/yr)
Cast Bronze Strip (CBS) Line Cyclone/Baghouse exhausting to stack #10	0.020	2550	97.4%	16.81	73.64	0.44	1.91
Total:				16.81	73.64	0.44	1.91

Methodology

*Assume PM = PM10 = PM2.5

Emission Rate in lbs/hr (after controls) = (grains/cub. ft.) (sq. ft.) ((cub. ft./min.)/sq. ft.) (60 min/hr) (lb/7000 grains)

Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

Emission Rate in lbs/hr (before controls) = Emission Rate (after controls): (lbs/hr)/(1-control efficiency)

Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

Unit ID	Lead (Pb) Emissions* (lbs/tn)	Maximum Process Weight Rate (lbs/hr)	Control Efficiency (%)	Pb Emission Rate after Controls (lb/hr)	Pb Emission Rate after Controls (tons/yr)	Pb Emission Rate before Controls (lb/hr)	Pb Emission Rate before Controls (tons/yr)
Cast Bronze Strip (CBS) Line Cyclone/Baghouse exhausting to stack #10	0.000300	3750	97.4%	0.00	0.00	0.022	0.095
Total:				0.00	0.00	0.02	0.09

*The emission factor has been carried over from previously approved permits.

Methodology

Pb Emission Factor (lb/tn) = 0.77 (kg/Mg) * 2.205 (lb/kg) / 1.102 (Mg/tn) * (1 - Control Efficiency (%))

Pb Emission Rate after Controls (lb/hr) = Lead Emissions (lb/hr) * Maximum Process Weight Rate (lbs/hr) / Process Weight Rate During Test (lbs/hr)

Pb Emission Rate after Controls (tn/yr) = Pb Emission Rate after Controls (lb/hr) * 8760 (hr/yr) / 2000 (lb/tn)

Pb Emission Rate before Controls (lb/hr) = Pb Emission Rate after Controls (lb/hr) / (1 - Control Efficiency (%))

Pb Emissions Rate before Controls (lb/hr) = Pb Emission Rate before Controls (lb/hr) * 8760 (hr/yr) / 2000 (lb/tn)

**Appendix A: Emission Calculations
Process Operations**

Company Name: Advanced Bearing Materials, LLC
Address City IN Zip: 1515 West Main Street, Greensburg, Indiana 47240
Renewal No: F031-38983-00002
Reviewer: Ethan Horvath

Unit ID	PM ¹ Emission Factor (lb/ton)	Maximum Process Weight Rate (lbs/hr)	*PM Emission Rate Rate before Controls (lb/hr)	*PM Emission Rate Rate before Controls (tons/yr)	Pb ¹ Emission Factor (lb/ton)	Maximum Process Weight Rate (lbs/hr)	Pb Emission Rate Rate before Controls (lb/hr)	Pb Emission Rate Rate before Controls (tons/yr)
One (1) finish mill	0.000001	1200	6.96E-07	3.05E-06	0.000007	1200	4.14E-06	1.81E-05
Total:			6.96E-07	3.05E-06	Total:			4.14E-06 1.81E-05

*Assume PM = PM10 = PM2.5

Note 1: Emission Factors are based on the Stack Test done on June 19, 1997 for the source on a similar unit, this operation is insignificant. The emission factor based from the test is 11.6 x10⁻⁷ lb PM/lb, and 6.9 x10⁻⁶ lb lead/lb metal.

Methodology

Emission Rate in lbs/hr before controls = Emission Factor (lb/ton) x Maximum Process weight rate (lbs/hr) x 1 ton / 2,000 lbs

Emission Rate in tons/yr = Emission Rate in lbs/hr x 8760 hr/yr x 1 ton / 2000 lbs

Unit ID	PM ¹ Emission Factor (lb/ton)	Maximum Process Weight Rate (lbs/hr)	*PM Emission Rate Rate before Controls (lb/hr)	*PM Emission Rate Rate before Controls (tons/yr)
² Two (2) rough milling units, identified as PT #13	1.60	1000	0.80	3.50
Total:			0.80	3.50

*Assume PM = PM10 = PM2.5

Note 1: Use grinding emission factor of 1.6 lb PM/ton metal, from "An Inventory of Iron Foundry Emissions", Modern Castings, 1971.

Note 2: The two (2) rough milling units, identified as PT #13 are controlled by the Cast Bronze Strip (CBS) Line Cyclone/Baghouse exhausting to stack 10; therefore, their PTE is included on the summary page under Cast Bronze Strip (CBS) Line Cyclone/Baghouse exhausting to stack 10.

Methodology

Emission Rate in lbs/hr before controls = Emission Factor (lb/ton) x Maximum Process weight rate (lbs/hr) x 1 ton / 2,000 lbs

Emission Rate in tons/yr = Emission Rate in lbs/hr x 8760 hr/yr x 1 ton / 2000 lbs

Note: Three (3) electric holding furnaces, identified as PT #7, #12, and #11 have negligible particulate emissions. The source has a furnace holding stand where furnaces are kept that are not being used in-line to their process. This holding stand has three slots where these furnaces are kept with the molten copper/bronze alloy being maintained in this phase.

**Appendix A: Emissions Calculations
Natural Gas Combustion Only After Revision
MM BTU/HR >100**

Company Name: Advanced Bearing Materials, LLC
Address City IN Zip: 1515 West Main Street, Greensburg, Indiana 47240
Renewal No: F031-38983-00002
Reviewer: Ethan Horvath

Emission Units	Heat Input Capacity (MMBtu/hr)
Oxygen Savenging Flames (Unit 81 and Unit 82)	0.6
Pre-Ladle Heaters (Unit 9 and Unit 10)	0.7
Boiler #1 (Unit 50)	2.93
Total	4.23

Heat Input Capacity MMBtu/hr	HHV mmBtu mmscf	Potential Throughput MMCF/yr
4.23	1020	36.3

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100	5.5	84
Potential Emission in tons/yr	0.03	0.14	0.14	0.01	**see below	0.10	1.53

*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

Hazardous Air Pollutants (HAPs)

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	3.8E-05	2.2E-05	1.4E-03	3.3E-02	6.2E-05	0.03

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	9.1E-06	2.0E-05	2.5E-05	6.9E-06	3.8E-05	1.0E-04
					Total HAPs	0.03
					Worst HAP	0.03

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: Emission Calculations
Fugitive Dust Emissions - Paved Roads

Company Name: Advanced Bearing Materials, LLC
Address City IN Zip: 1515 West Main Street, Greensburg, Indiana 47240
Renewal No: F031-38983-00002
Reviewer: Ethan Horvath

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 (1/2011).

Vehicle Information (provided by source)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	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)
Semi-trailers (entering plant) (one-way trip)	3.0	1.0	3.0	20.0	60.0	400	0.076	0.2	83.0
Semi-trailers (leaving plant) (one-way trip)	3.0	1.0	3.0	40.0	120.0	400	0.076	0.2	83.0
Totals			6.0		180.0			0.5	165.9

Average Vehicle Weight Per Trip =

30.0

 tons/trip
Average Miles Per Trip =

0.08

 miles/trip

Unmitigated Emission Factor, $E_f = [k * (sL)^{0.91} * (W)^{1.02}]$ (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	30.0	30.0	30.0	tons = average vehicle weight (provided by source)
sL =	9.7	9.7	9.7	g/m ² = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, $E_{ext} = E * [1 - (p/4N)]$ (Equation 2 from AP-42 13.2.1)

Mitigated Emission Factor, $E_{ext} = E_f * [1 - (p/4N)]$
where p =

125

 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
N =

365

 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, $E_f =$	2.793	0.559	0.1371	lb/mile
Mitigated Emission Factor, $E_{ext} =$	2.554	0.511	0.1254	lb/mile

Process	Mitigated PTE of PM (Before Control) (tons/yr)	Mitigated PTE of PM10 (Before Control) (tons/yr)	Mitigated PTE of PM2.5 (Before Control) (tons/yr)
Semi-trailers (entering plant) (one-way trip)	0.11	0.02	0.01
Semi-trailers (leaving plant) (one-way trip)	0.11	0.02	0.01
Totals	0.21	0.04	0.01

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)]
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 (Before Control) (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (After Control) (tons/yr) = [Mitigated PTE (Before Control) (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations

PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particle Matter (<2.5 um)

Appendix A: 326 IAC 6-3-2 Compliance

Company Name: Advanced Bearing Materials, LLC
Address City IN Zip: 1515 West Main Street, Greensburg, Indiana 47240
Renewal No: F031-38983-00002
Reviewer: Ethan Horvath

Emissions Units	Maximum Process Weight (tons/hour)	326 IAC 6-3 Limit (lbs/hr)	Emission factor (lb/ton)	Max PTE Particulate (lb/hour)	Emission Factor Source
One (1) coreless furnace, identified as PT #6	0.13	1.05	7.00	0.91	(SCC 3-04-002-23)
One (1) on-line electric induction melting furnace, identified as PT #2	1.87	6.24	20.00	37.40	(SCC 3-04-002-24)
One (1) on-line electric induction melting furnace, identified as PT #4	1.87	6.24	20.00	37.40	(SCC 3-04-002-24)
One (1) rough milling unit	0.25	1.62	1.60	0.40	See Note 1
One (1) rough milling unit	0.25	1.62	1.60	0.40	See Note 1
⁴ One (1) finish mill	0.60	2.91	1.16E-06	6.96E-07	See Note 2
⁴ One (1) electric holding furnace, identified as PT #7	1.65	5.73	N/A	Negligible	See Note 3
⁴ One (1) electric holding furnace, identified as PT #12	1.65	5.73	N/A	Negligible	See Note 3
⁴ One (1) electric holding furnace, identified as PT #11	1.65	5.73	N/A	Negligible	See Note 3

Pursuant to 326 IAC 6-3-2, the particulate emissions limitations from the above table shall be calculated using 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:

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

Where:

E = Rate of emission in pounds per hour.

P = Process weight rate in tons per hour.

Notes:

Note 1: Use grinding emission factor of 1.6 lb PM/ton metal, from "An Inventory of Iron Foundry Emissions", Modern Castings, 1971.

Note 2: Emission Factors are based on the Stack Test done on June 19, 1997 for the source on a similar unit, this operation is insignificant. The emission factor based from the test is 11.6 x10⁻⁷ lb PM/lb, and 6.9 x10⁻⁶ lb lead/lb metal.

Note 3: Three (3) electric holding furnaces, identified as PT #7, #12, and #11 have negligible particulate emissions. The source has a furnace holding stand where furnaces are kept that are not being used in-line to their process. This holding stand has three slots where these furnaces are kept with the molten copper/bronze alloy being maintained in this phase.

Note 4: Pursuant to 326 IAC 6-3-1(b)(14), the requirements of 326 IAC 6-3-2 do not apply to the finish mill or the electric holding furnaces, because manufacturing processes with potential emissions less than five hundred fifty-one thousandths (0.551) pound per hour are exempt from the requirements of 326 IAC 6-3.



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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Eric J. Holcomb
Governor

Bruno L. Pigott
Commissioner

May 30, 2018

David Plott
Advanced Bearing Materials, LLC.
1515 West Main Street
Greensburg, Indiana 47240

Re: Public Notice
Advanced Bearing Materials, LLC.
Permit Level: FESOP Renewal
Permit Number: 031-38983-00002

Dear Mr. Plott:

Enclosed is a copy of your draft FESOP Renewal, Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has prepared two versions of the Public Notice Document. The abbreviated version will be published in the newspaper, and the more detailed version will be made available on the IDEM's website and provided to interested parties. Both versions are included for your reference. The OAQ has requested that the Greensburg Daily News in Greensburg, Indiana publish the abbreviated version of the public notice no later than June 2, 2018. You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper.

OAQ has submitted the draft permit package to the Greensburg-Decatur County Public Library, 1110 East main Street in Greensburg, Indiana. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Ethan Horvath, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 3-8397 or dial (317) 233-8397.

Sincerely,

John F. Jackson

John F. Jackson
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover Letter 1/9/2017



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Eric J. Holcomb
Governor

Bruno L. Pigott
Commissioner

ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

May 30, 2018

Greensburg Daily News
135 South Franklin
P.O. Box 106
Greensburg, Indiana 47240

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Advance Bearing materials, LLC., Decatur County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than June 2, 2018.

Please send a notarized form, clippings showing the date of publication, and the billing to the Indiana Department of Environmental Management, Accounting, Room N1345, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

To ensure proper payment, please reference account # 100174737.

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call John Jackson at 800-451-6027 and ask for extension 3-1449 or dial 317-233-1449.

Sincerely,

John F. Jackson

John F. Jackson
Permit Branch
Office of Air Quality

Permit Level: FESOP Renewal
Permit Number: 031-38983-00002

Enclosure

PN Newspaper Letter 1/9/2017



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May 30, 2018

To: Greensburg-Decatur County Public Library

From: Jenny Acker, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information to Display Regarding a Public Notice for an Air Permit**

Applicant Name: Advance Bearing Materials, LLC.
Permit Number: 031-38983-00002

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Request to publish the Notice of 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. **Please make this information readily available until you receive a copy of the final package.**

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. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures
PN Library 1/9/2017



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Notice of Public Comment

May 30, 2018
Advance Bearing Materials, LLC.
031-38983-00002

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.


Enclosed is a Notice of Public Comment, which has been placed in the Legal Advertising section of your local newspaper. The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana's Air Permitting Program.

Please Note: *If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.*

Enclosure
PN AAA Cover Letter 1/9/2017

Mail Code 61-53

IDEM Staff	JJACKSON 5/30/2018 ADVANCED BEARING MATERIALS LLC 031-38983-00002 (draf)		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	 Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: CERTIFICATE OF MAILING ONLY	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handling Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
											Remarks
1		David Plott ADVANCED BEARING MATERIALS LLC 1515 W Main St Greensburg IN 47240 (Source CAATS)									
2		Greensburg Decatur Co Public Library 1110 East Main Greensburg IN 47240 (Library)									
3		Decatur County Commissioners 150 Courthouse Square Greensburg IN 47240 (Local Official)									
4		Greensburg City Council & Mayors office 314 W Washington Street Greensburg IN 47240 (Local Official)									
5		Decatur County Health Department 801 N. Lincoln St Greensburg IN 47240-1397 (Health Department)									
6		Mr. Leonard Rohls 8504 North County Road 300 West Batesville IN 47006 (Affected Party)									
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13											
14											
15											

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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