



Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

June 30, 2003

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P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
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TO: Interested Parties / Applicant

RE: K S Bearings, Inc 031-17695-00002

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision - Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures

June 20, 2003

Mr. James Waldroup
KS Bearings, Inc.
1515 West main Street
Greensburg, IN 47240

Re: 031-17695-00002
First Administrative Amendment to
FESOP 031-14976-00002

Dear Mr. Waldroup:

KS Bearings, Inc. was issued a permit on December 12, 2002 for a stationary bearings manufacturing operation. A letter requesting a change was received on May 2, 2003. Pursuant to the provisions of 326 IAC 2-8-10, the permit is hereby administratively amended as follows:

KS Bearings, Inc. has submitted an application to change their allowable total static pressure drop range across the cyclone/bag filter combination used in conjunction with the CBS Line rough milling units from 0.5 to 4.5 inches of water to 2.5 to 8.5 inches of water.

On June 17, 2003, KS Bearings submitted a report concerning the PM/PM10 particulate testing of their CBS Line at their Greensburg facility. The testing was conducted by Air Analysis Inc. utilizing USEPA reference methods 1-5, 9, and 202. The test was observed and the protocol reviewed by the Office of Air Quality (OAQ). The results of the tests were determined to be acceptable by the OAQ and the OAQ determined that compliance with the respective limits was achieved.

After completing the testing, it was determined that the APCD pressure range that achieved compliance with the applicable limits was 6.2 - 6.6 inches of water.

KS Bearings has proposed a range of 2.5 -8.5 inches of water. Since the current allowable pressure range established in the permit is the average pressure plus or minus 2 inches, the revised pressure range that will be allowed will be a range based on the average value obtained from the test (6.4 inches of water) plus or minus 2 inches, or 4.4 inches of water to 8.4 inches of water.

The proposed pressure range change is determined to be a change in a monitoring requirement that will have no significant impact on the environment. There will be no increase in the source emissions or capacity, no changes to any existing conditions that are necessary, and no new applicable requirements that are triggered.

Therefore, the proposed pressure range shall be incorporated into the permit via an Administrative Amendment pursuant to 326 IAC 2-8-10(a)(5) which states that changes which make a change to a monitoring, maintenance, or recordkeeping requirement that is not environmentally significant, may be incorporated into the existing source FESOP via an Administrative Amendment.

To incorporate the proposed pressure range into the permit, the following changes shall be made. All additional information is indicated in bold type. All deleted information is struck-out.

Condition D.1.7(b):

Condition D.1.7(b) shall be amended as follows to change the pressure range from 0.5 - 4.5 inches of water to 4.4 - 8.4 inches of water.

D.1.7 Parametric Monitoring

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- (a) The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the CBS Line furnaces at least once per shift when the furnaces are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) The Permittee shall record the total static pressure drop across the cyclone/bag filter combination used in conjunction with the CBS Line rough milling units at least once per shift when the rough milling units are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of ~~0.5 and 4.5~~ **4.4 and 8.4** inches of water or a range established during the latest **subsequent** stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

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All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Scott Fulton, at (800) 451-6027, press 0 and ask for Scott Fulton or extension (3-5691), or dial (317) 233-5691.

Sincerely,

Original Signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
SDF

cc: File - Decatur County
U.S. EPA, Region V
Decatur County Health Department
Air Compliance Section Inspector - Patrick Burton
Compliance Data Section - Karen Nowak
Administrative and Development
Technical Support and Modeling - Michele Boner

**FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP) RENEWAL
OFFICE OF AIR QUALITY**

**KS Bearings, Inc.
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.

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.

Operation Permit No.: F 031-14976-00002	Date Issued: December 12, 2002
First Administrative Amendment 031-17695-00002	Affected Pages: 25, 26, 27, and 28
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issued: June 30, 2003

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Cast Bronze Strip (CBS) Line

One (1) Cast Bronze Strip (CBS) Line, constructed after 1990, with a maximum capacity of 2,400 pounds per hour of steel, to which with a maximum of 3,300 pounds per hour of bronze is applied, consisting of the following:

- (a) One (1) cold start furnace, identified as PT #6, controlled by the CBS baghouse and exhausting to stack #8, capacity: 0.75 tons of metal per hour.
- (b) Three (3) electric holding furnaces, identified as PT #7, #12, and #11, controlled by the CBS baghouse and exhausting to stack #8, capacity: 1.65 tons of metal per hour, each.
- (c) Two (2) on-line electric induction melting furnaces, identified as PT #2 and PT #4, controlled by the CBS baghouse and exhausting to stack #8, capacity: 1.65 tons of metal per hour, each.
- (d) One (1) hot oil quench unit, identified as PT #15.
- (e) Two (2) rough milling units, identified as PT #13, controlled by the CBS cyclone/bag filter and exhausting to stack #10.

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

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

D.1.1 Particulate Matter (PM₁₀) [326 IAC 2-8-4]

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

This is equivalent to a potential to emit PM₁₀ from the CBS Line of 84.1 tons per year, and the potential to emit PM₁₀ from the entire source of less than 100 tons per year. Therefore, the requirements of 326 IAC 2-7, Part 70, are not applicable.

D.1.2 Particulate [326 IAC 6-3-2(e)]

- (a) Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the Cast Bronze Strip (CBS) Line furnaces, all exhausting to the CBS baghouse and stack #8, shall not exceed 8.27 pounds per hour when operating at a process weight rate of 5,700 pounds per hour.

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

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

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

- (b) Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the two (2) rough milling units at the Cast Bronze Strip (CBS) Line, both exhausting to the CBS cyclone/bag filter and stack #10, shall not exceed 8.27 pounds per hour when operating at a process weight rate of 5,700 pounds per hour.

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

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

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

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

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.1.4 Particulate Control

- (a) In order to comply with Conditions D.1.1 and D.1.2, the baghouse for particulate control shall be in operation and control emissions from the Cast Bronze Strip (CBS) Line furnaces at all times that any of the furnaces are in operation.
- (b) In order to comply with Conditions D.1.1 and D.1.2, the 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.1.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

Within 90 days after issuance of this permit, in order to demonstrate compliance with Conditions D.1.1 and D.1.2, the Permittee shall perform PM and PM₁₀ testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM₁₀ includes filterable and condensable PM₁₀. Testing shall be conducted in accordance with Section C- Performance Testing.

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

D.1.6 Visible Emissions Notations

- (a) Visible emission notations of the CBS Line stacks (stack #8 and stack #10) exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.1.7 Parametric Monitoring

- (a) The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the CBS Line furnaces at least once per shift when the furnaces are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) The Permittee shall record the total static pressure drop across the cyclone/bag filter combination used in conjunction with the CBS Line rough milling units at least once per shift when the rough milling units are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.4 and 8.4 inches of water or a range established during the latest subsequent stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instruments Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.8 Baghouse Inspections

An inspection shall be performed within the last month of each calendar quarter of all bags controlling the CBS Line. All defective bags shall be replaced.

D.1.9 Cyclone Inspections

An inspection shall be performed within the last month of each calendar quarter of all cyclones controlling the CBS Line.

D.1.10 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then 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).

D.1.11 Cyclone Failure Detection

In the event that cyclone failure has been observed:

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

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

D.1.12 Record Keeping Requirements

- (a) To document compliance with Condition D.1.6, the Permittee shall maintain records of visible emission notations of the CBS Line stacks (stack #8 and stack #10) exhausts once per shift.
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain per shift records of the total static pressure drops during normal operation.
- (c) To document compliance with Conditions D.1.8 and D.1.9, the Permittee shall maintain records of the results of the inspections required under Conditions D.1.8 and D.1.9 and the dates the vents are redirected.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.