



*Mitchell E. Daniels, Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

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

TO: Interested Parties / Applicant  
DATE: May 31, 2005  
RE: Zimmer, Inc. / 085-21205-00064  
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 of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, 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  
FNPER-AM.dot 1/10/05



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
*We make Indiana a cleaner, healthier place to live.*

---

Mitchell E. Daniels, Jr.  
Governor

Thomas W. Easterly  
Commissioner

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

Mr. Rick Stair  
Zimmer, Inc.  
1800 West Center Street  
Warsaw, Indiana 46580

May 31, 2005

Re: 085-21205-00064  
Second Administrative Amendment to  
FESOP 085-12778-00064

Dear Mr. Stair:

Zimmer, Inc. was issued a Federally Enforceable State Operating Permit (FESOP) on March 11, 2003 for a prosthetic device manufacturing plant located at 1800 W Center Street, Warsaw, Indiana, 46580. A letter was received on May 2, 2005 requesting the following changes to the permit:

- (a) The source requested that permit be updated to reflect that a new building is to be added to the source, which will have the following street address: 1777 West Center Street, Warsaw, Indiana, 46580. The permit will be revised by administrative amendment pursuant to 326 IAC 2-8-10(a)(6), since this change is a revision to descriptive information where the revision will not trigger a new applicable requirement or violate a permit term;
- (b) The source plans to add an additional knee production line in the new building with a maximum capacity of 99 pounds per hour, controlled by two wet dust collectors, identified as Z-15 and Z-16. The new process is of the same type and capacity and will comply with the same applicable requirements and permit terms and conditions as the permitted prosthetic device manufacturing process constructed in 2004. The new equipment will not cause the source's potential to emit to be greater than the threshold levels specified in 326 IAC 2-2 or 326 IAC 2-3. Based on this additional equipment, the source requested that the text of Condition D.1.1 is be revised to change 26.55 tons per year to 31.38 tons per year. These changes to the permit are considered a change by administrative amendment pursuant to 326 IAC 2-8-10(a)(14);
- (c) The source plans to add an additional wet dust collector, identified as Z-14, to the existing prosthetic device manufacturing process constructed in 2004. The permit will be revised by administrative amendment pursuant to 326 IAC 2-8-10(a)(6), since this change is a revision to descriptive information where the revision will not trigger a new applicable requirement or violate a permit term;
- (d) The source requested that Condition D.1.5(a) be revised to include references to the new wet dust collectors, Z-14, Z-15, and Z-16. Since dust collectors Z-14, Z-15, and Z-16 will not vent directly to the atmosphere, visible emission notations are not required for this dust collector. Therefore no change to the permit was made for this request.

No new state rules are applicable to this source. This new source is not a major PSD stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 source categories listed in 326 IAC 2-2-1(y)(1). There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) or National Emission standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 20 and 40 CFR Part 61, 63) applicable to this source

Pursuant to the provisions of 326 IAC 2-8-10, the permit is hereby administratively amended as follows with deleted language as ~~strikeouts~~ and new language **bolded**:

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

---

The Permittee owns and operates a prosthetic device manufacturing plant.

Authorized Individual: Vice President of Operations  
Source Address: 1800 West Center Street, Warsaw, Indiana 46580  
**and**  
**1777 West Center Street, Warsaw, Indiana, 46580**  
Mailing Address: 1800 West Center Street, Warsaw, Indiana 46580  
General Source Phone: (574) 267-6131  
SIC Code: 3842  
Source Location Status: Kosciusko County  
County Status: Attainment for all criteria pollutants  
Source Status: Federally Enforceable State Operating Permit (FESOP)  
Minor Source, under PSD Rules  
Minor Source, Section 112 of the Clean Air Act  
Not 1 of 28 Source Categories

A.2 Source Definition [326 IAC 2-8-1] [326 IAC 2-7-1(22)]

---

This prosthetic device manufacturing company consists of two (2) plants:

- (a) Plant 1 is located at 1800 West Center Street, Warsaw, Indiana 46580; and
- (b) Plant 2 is located at 1777 West Center Street, Warsaw, Indiana, 46580.

Since the two (2) plants are located on contiguous or adjacent properties, belong to the same industrial grouping, and are under common control of the same entity, they will be considered one (1) source, effective from the date of issuance of this FESOP.

A.32 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:

- (d) One (1) prosthetic device manufacturing process, constructed in 2004, with a maximum capacity of 99 pounds per hour, controlled by ~~a two~~ wet dust collectors (identified as Z-13 ~~and with~~ has a maximum flow rate of 15,000 scfm, **and Z-14 with a maximum flow rate of 30,000 scfm**), ~~both and~~ exhausting into the building.
- (e) One (1) knee production line, with a maximum capacity of 99 pounds per hour, constructed in 2005, comprised of the following processes:
  - (1) Grinding using a wet dust collector (stack ID Z-15) as particulate control with a maximum flow rate of 20,000 scfm and no external exhaust.
  - (2) Polishing using a wet dust collector (stack ID Z-16) as particulate control with a maximum flow rate of 30,000 scfm and no external exhaust.

A.45 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

---

A.54 FESOP Applicability [326 IAC 2-8-2]

---

A.65 Prior Permits Superseded [326 IAC 2-1.1-9.5]

---

**SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS**

---

**Facility Description [326 IAC 2-8-4(10)]: Prosthetic device manufacturing plant**

- (d) One (1) prosthetic device manufacturing process, constructed in 2004, with a maximum capacity of 99 pounds per hour, controlled by ~~a two~~ wet dust collectors (identified as Z-13 ~~and with~~ has a maximum flow rate of 15,000 scfm, **and Z-14 with a maximum flow rate of 30,000 scfm**), ~~both and~~ exhausting into the building.

**(e) One (1) knee production line, with a maximum capacity of 99 pounds per hour, constructed in 2005, comprised of the following processes:**

- (1) Grinding using a wet dust collector (stack ID Z-15) as particulate control with a maximum flow rate of 20,000 scfm and no external exhaust.**
- (2) Polishing using a wet dust collector (stack ID Z-16) as particulate control with a maximum flow rate of 30,000 scfm and no external exhaust.**

(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 Emissions Limitations [326 IAC 2-8]**

The PM10 emissions from each of the processes listed in this section shall not exceed 0.551 pounds per hour. This limit is equivalent to emissions of ~~26.5~~ **31.38** tons per year of PM10 from the processes listed in this section. This limit is structured such that when including the PM10 emissions from the insignificant activities, source total PM10 emissions remain less than one hundred (100) tons per year. Compliance with this limit will render the requirements of 326 IAC 2-7 (Part 70 Program) not applicable.

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 Nathan C. Bell, 100 North Senate Avenue, Indianapolis, Indiana, 46204, at 317-234-3350 or at 1-800-451-6027 (ext 43350).

Sincerely,

Original signed by  
Nysa L. James, Section Chief  
Permits Branch  
Office of Air Quality

ncb

Attachment: revised permit pages

cc: File - Kosciusko County  
U.S. EPA, Region V  
IDEM Northern Regional Office  
Kosciusko County Health Department  
Air Compliance Section Inspector - Doyle Houser  
Compliance Data Section  
Administrative and Development



*Mitchell E. Daniels, Jr.*  
 Governor

*Thomas W. Easterly*  
 Commissioner

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

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

**Zimmer, Inc.  
 1800 West Center Street  
 Warsaw, Indiana 46580**

(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.: F085-12778-00064  |  |
| Issued by: Original Signed By<br>Paul Dubenetzky, Branch Chief<br>Office of Air Quality | Issuance Date: March 11, 2003<br><br>Expiration Date: March 11, 2008 |
| First Administrative Amendment 085-18978-00064, issued June 4, 2004                     |  |
| Second Administrative Amendment 085-21205-00064   | Pages Amended: 2, 5-8, 27-30   |
| Issued by: Original signed by<br>Nysa L. James, Section Chief<br>Office of Air Quality  | Issuance Date: May 31, 2005  |

## TABLE OF CONTENTS

|                  |   |    |
|------------------|---|----|
| <b>SECTION A</b> | <b>SOURCE SUMMARY</b> .....   | 4  |
| A.1              | General Information [326 IAC 2-8-3(b)]  |    |
| A.2              | Source Definition [326 IAC 2-8-1] [326 IAC 2-7-1(22)]   |    |
| A.3              | Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]  |    |
| A.4              | Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]   |    |
| A.5              | FESOP Applicability [326 IAC 2-8-2]   |    |
| A.6              | Prior Permits Superseded [326 IAC 2-1.1-9.5]  |    |
| <b>SECTION B</b> | <b>GENERAL CONDITIONS</b> .....   | 9  |
| B.1              | Permit No Defense [IC 13]   |    |
| B.2              | Definitions [326 IAC 2-8-1]   |    |
| B.3              | Permit Term [326 IAC 2-8-4(2)] IAC 2-1.1-9.5]   |    |
| B.4              | Enforceability [326 IAC 2-8-6]  |    |
| B.5              | Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3 (h)]  |    |
| B.6              | Severability [326 IAC 2-8-4(4)]   |    |
| B.7              | Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]  |    |
| B.8              | Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)][326 IAC 2-8-5(a)(4)]  |    |
| B.9              | Compliance Order Issuance [326 IAC 2-8-5(b)]  |    |
| B.10             | Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]   |    |
| B.11             | Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]  |    |
| B.12             | Annual Compliance Certification [326 IAC 2-8-5(a)(1)]   |    |
| B.13             | Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]  |    |
| B.14             | Emergency Provisions [326 IAC 2-8-12]   |    |
| B.15             | Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]  |    |
| B.16             | Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]                        |    |
| B.17             | Permit Renewal [326 IAC 2-8-3(h)]   |    |
| B.18             | Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]   |    |
| B.19             | Operational Flexibility [326 IAC 2-8-15] [326 IAC 2-8-11.1]   |    |
| B.20             | Permit Revision Requirement [326 IAC 2-8-11.1]  |    |
| B.21             | Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]   |    |
| B.22             | Transfer of Ownership or Operation [326 IAC 2-8-10]   |    |
| B.23             | Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16] [326 IAC 2-1.1-7]   |    |
| <b>SECTION C</b> | <b>SOURCE OPERATION CONDITIONS</b> .....  | 19 |
|                  | <b>Emission Limitations and Standards [326 IAC 2-8-4(1)]</b>  |    |
| C.1              | Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2] |    |
| C.2              | Overall Source Limit [326 IAC 2-8]  |    |
| C.3              | Opacity [326 IAC 5-1]   |    |
| C.4              | Open Burning [326 IAC 4-1][IC 13-17-9]  |    |
| C.5              | Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]   |    |
| C.6              | Fugitive Dust Emissions [326 IAC 6-4]   |    |
| C.7              | Operation of Equipment [326 IAC 2-8-5(a)(4)]  |    |
| C.8              | Stack Height [326 IAC 1-7]  |    |
| C.9              | Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]   |    |
|                  | <b>Testing Requirements [326 IAC 2-8-4(3)]</b>  |    |
| C.10             | Performance Testing [326 IAC 3-6]   |    |
|                  | <b>Compliance Requirements [326 IAC 2-1.1-11]</b>   |    |
| C.11             | Compliance Requirements [326 IAC 2-1.1-11]  |    |

## 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 prosthetic device manufacturing plant.

|                         |  |
|-------------------------|--|
| Authorized Individual:  | Vice President of Operations   |
| Source Address:         | 1800 West Center Street, Warsaw, Indiana 46580<br>and<br>1777 West Center Street, Warsaw, Indiana, 46580   |
| Mailing Address:        | 1800 West Center Street, Warsaw, Indiana 46580   |
| General Source Phone:   | (574) 267-6131   |
| SIC Code:               | 3842   |
| Source Location Status: | Kosciusko County   |
| County Status:          | Attainment for all criteria pollutants   |
| Source Status:          | Federally Enforceable State Operating Permit (FESOP)<br>Minor Source, under PSD Rules<br>Minor Source, Section 112 of the Clean Air Act<br>Not 1 of 28 Source Categories |

### A.2 Source Definition [326 IAC 2-8-1] [326 IAC 2-7-1(22)]

---

This prosthetic device manufacturing company consists of two (2) plants:

- (a) Plant 1 is located at 1800 West Center Street, Warsaw, Indiana 46580; and
- (b) Plant 2 is located at 1777 West Center Street, Warsaw, Indiana, 46580.

Since the two (2) plants are located on contiguous or adjacent properties, belong to the same industrial grouping, and are under common control of the same entity, they will be considered one (1) source, effective from the date of issuance of this FESOP.

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

---

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

- (a) One (1) hip and stem production line (identified as Hip), with a maximum capacity of 99 pounds per hour, constructed in 1972, comprised of the following processes:
  - (1) Collar polishing using a wet dust collector (stack ID Z-2) as particulate control with no external exhaust.
  - (2) Stem polishing using three (3) dry dust collectors (stack ID Z-8, Z-10, and Z-12) as particulate control with no external exhaust.
- (b) One (1) knee production line (identified as Knee), with a maximum capacity of 99 pounds per hour, constructed in 1972, comprised of the following processes:
  - (1) Tumbleblasting using steel shot media with dry dust collectors (stack ID ZA1-ZA2) as particulate control with external exhaust.

- (2) Grinding using a wet dust collector (stack ID Z1) as particulate control with no external exhaust.
- (3) Buffing using dry dust collectors (stack ID Z3, Z5, Z7, Z9, Z11) as particulate control with no external exhaust.
- (c) One (1) casting process line (identified as casting), with a maximum capacity of 99 pounds per hour, constructed in 1972, comprised of the following processes:
  - (1) Shell formation with two (2) fluidized bed sand units (stack ID ZA1) as particulate control with external exhaust.
  - (2) One (1) shotblast unit with stainless steel shot media and a dry dust collector (stack ID ZA1) as particulate control with external exhaust.
  - (3) One (1) tumbleblast unit with stainless steel shot media and a dry dust collector (stack ID ZA1) as particulate control with external exhaust.
  - (4) Grinding using a dry dust collector (stack ID ZA1) as particulate control with external exhaust.
  - (5) Deburring with dry dust collectors (stack ID ZA1-ZA2) as particulate control with external exhaust.
- (d) One (1) prosthetic device manufacturing process, constructed in 2004, with a maximum capacity of 99 pounds per hour, controlled by two wet dust collectors (identified as Z-13 with a maximum flow rate of 15,000 scfm, and Z-14 with a maximum flow rate of 30,000 scfm), both exhausting into the building.
- (e) One (1) knee production line, with a maximum capacity of 99 pounds per hour, constructed in 2005, comprised of the following processes:
  - (1) Grinding using a wet dust collector (stack ID Z-15) as particulate control with a maximum flow rate of 20,000 scfm and no external exhaust.
  - (2) Polishing using a wet dust collector (stack ID Z-16) as particulate control with a maximum flow rate of 30,000 scfm and no external exhaust.

A.4 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, as defined in 326 IAC 2-7-1(21):

- (a) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]
- (b) Activities with emissions equal to or less than the following thresholds: 5 tons per year PM or PM<sub>10</sub>, 10 tons per year SO<sub>2</sub>, NO<sub>x</sub>, or VOC, 0.2 tons per year Pb, 1.0 tons per year of a single HAP, or 2.5 tons per year of any combination of HAPs [326 IAC 6-3-2]:
  - (1) Stem polishing using a dry cyclone with secondary cloth filtration as particulate control with no external exhaust.
  - (2) Burr grinding using a dry cyclone with secondary cloth filtration as particulate control with no external exhaust.
  - (3) Stem polishing using cartridge filtration as particulate control with no external exhaust.

- (4) Abrasive blast cabinets using aluminum oxide or glass bead media with fabric filters as particulate control with no external exhaust.
  - (5) Buffing using a dry cyclone with secondary cloth filtration as particulate control with no external exhaust.
  - (6) Burr grinding using a dry cyclone with secondary cloth filtration as particulate control with no external exhaust.
  - (7) Grinding using an oil mist collector with electrostatic precipitation as particulate control with no external exhaust.
  - (8) Deburring with a dry cyclone as particulate control with external exhaust.
- (c) 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 4000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, an woodworking operations [326 IAC 6-3-2]:
- (1) Stem polishing using a Trimer Wet Cyclone (stack ID Z101) as particulate control with external exhaust.
  - (2) Machine rasping using a Trimer Wet Cyclone (stack ID Z102) as particulate control with external exhaust.
- (d) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:
- (1) Two (2) natural gas boilers (identified as B1 and B2) installed in 1991 and 1995, respectively, each having a maximum capacity of 500,000 BTU per hour [326 IAC 6-2-4];
  - (2) One (1) natural gas boiler (identified as B3) installed in 2000, having a maximum capacity of 1 million BTU per hour [326 IAC 6-2-4];
  - (3) Three (3) natural gas ceramic shell preheat furnaces (identified as WB1), installed in 1981, each having a maximum capacity of 2.8 million BTU per hour;
  - (4) Sixty-one (61) natural gas space heaters (identified as SH1), installed in 1972, each having a maximum capacity of 0.3 million BTU per hour; and
  - (5) Three (3) electric induction furnaces (identified as IF1), installed in 1972.
- (e) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (f) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (g) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38 degrees C).
- (h) A laboratory as defined in 326 IAC 2-7-1(21)(D).
- (i) Other emission units, not regulated by a NESHAP, with PM<sub>10</sub>, NO<sub>x</sub>, and SO<sub>2</sub> emissions less than five (5) pounds per hour or twenty-five (25) pounds per day, CO emissions less than twenty-five (25) pounds per day, VOC emissions less than three (3) pounds per hour

or fifteen (15) pounds per day, lead emissions less than six-tenths (0.6) tons per year or three and twenty-nine hundredths (3.29) pounds per day, and emitting greater than one (1) pound per day but less than five (5) pounds per day or one (1) ton per year of a single HAP, or emitting greater than one (1) pound per day but less than twelve and five tenths (12.5) pounds per day or two and five tenths (2.5) ton per year of any combination of HAPs:

- (1) One (1) pickling process, constructed in 2004, including a nitric acid (less than 80%) bath and a hydrofluoric acid (HF) bath.
  - (2) One (1) sintering process, constructed in 2004, with a maximum solvent (ethyl alcohol) usage of 55 gallons per year.
- (j) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6, including one (1) cleaning process, constructed in 2004, using isopropyl alcohol as the solvent.

A.5 FESOP Applicability [326 IAC 2-8-2]

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

A.6 Prior Permits Superseded [326 IAC 2-1.1-9.5]

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

**SECTION D.1**

**EMISSIONS UNIT OPERATION CONDITIONS**

**Facility Description [326 IAC 2-8-4(10)]: Prosthetic device manufacturing plant**

- (a) One (1) hip and stem production line (identified as Hip), with a maximum capacity of 99 pounds per hour, constructed in 1972, comprised of the following processes:
  - (1) Collar polishing using a wet dust collector (stack ID Z-2) as particulate control with no external exhaust.
  - (2) Stem polishing using three (3) dry dust collectors (stack ID Z-8, Z-10, and Z-12) as particulate control with no external exhaust.
- (b) One (1) knee production line (identified as Knee), with a maximum capacity of 99 pounds per hour, constructed in 1972, comprised of the following processes:
  - (1) Tumbleblasting using steel shot media with dry dust collectors (stack ID ZA1-ZA2) as particulate control with external exhaust.
  - (2) Grinding using a wet dust collector (stack ID Z1) as particulate control with no external exhaust.
  - (3) Buffing using dry dust collectors (stack ID Z3, Z5, Z7, Z9, Z11) as particulate control with no external exhaust.
- (c) One (1) casting process line (identified as casting), with a maximum capacity of 99 pounds per hour, constructed in 1972, comprised of the following processes:
  - (1) Shell formation with two (2) fluidized bed sand units (stack ID ZA1) as particulate control with external exhaust.
  - (2) One (1) shotblast unit with stainless steel shot media and a dry dust collector (stack ID ZA1) as particulate control with external exhaust.
  - (3) One (1) tumbleblast unit with stainless steel shot media and a dry dust collector (stack ID ZA1) as particulate control with external exhaust.
  - (4) Grinding using a dry dust collector (stack ID ZA1) as particulate control with external exhaust.
  - (5) Deburring with dry dust collectors (stack ID ZA1-ZA2) as particulate control with external exhaust.
- (d) One (1) prosthetic device manufacturing process, constructed in 2004, with a maximum capacity of 99 pounds per hour, controlled by two wet dust collectors (identified as Z-13 with a maximum flow rate of 15,000 scfm, and Z-14 with a maximum flow rate of 30,000 scfm), both exhausting into the building.
- (e) One (1) knee production line, with a maximum capacity of 99 pounds per hour, constructed in 2005, comprised of the following processes:
  - (1) Grinding using a wet dust collector (stack ID Z-15) as particulate control with a maximum flow rate of 20,000 scfm and no external exhaust.
  - (2) Polishing using a wet dust collector (stack ID Z-16) as particulate control with a maximum flow rate of 30,000 scfm and no external exhaust.

(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 Emissions Limitations [326 IAC 2-8]**

---

The PM10 emissions from each of the processes listed in this section shall not exceed 0.551 pounds per hour. This limit is equivalent to emissions of 31.38 tons per year of PM10 from the processes listed in this section. This limit is structured such that when including the PM10 emissions from the insignificant activities, source total PM10 emissions remain less than one hundred (100) tons per year. Compliance with this limit will render the requirements of 326 IAC 2-7 (Part 70 Program) not applicable.

### **D.1.2 Particulate Emission Limitations [326 IAC 6-3-2] [40 CFR 52, Subpart P]**

---

- (a) Pursuant to 40 CFR 52 Subpart P, the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
- (b) Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate 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.

### **D.1.3 Preventative 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 any control devices.

## **Compliance Determination Requirements**

### **D.1.4 Particulate**

---

In order to comply with Conditions D.1.1 and D.1.2, the filters, wet dust collectors, fluidized bed sand units, and dry dust collectors for particulate control shall be in operation and control emissions from the facilities in the hip, knee, and casting production lines at all times that the prosthetic device manufacturing plant is in operation.

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

### **D.1.5 Visible Emissions Notations**

---

- (a) Once per shift visible emission notations of Z-2, Z-8, Z-10, Z-12, ZA1-ZA2, and Z1 stack exhausts shall be performed 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 for this unit 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.1.6 Parametric Monitoring

---

The Permittee shall record the total static pressure drop across each dust collector used in the hip, knee, and casting production lines at least once per shift when the hip, knee, and casting production lines are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the dust collectors is outside the normal range of 3.0 and 6.0 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 - Failure to Take Response. 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.1.7 Baghouse and Filter Inspections

---

An inspection shall be performed during the last month of each calendar quarter of all bags and filters controlling the hip, knee, and casting production lines, when venting to the atmosphere. All defective bags and filters shall be replaced. A baghouse or filter inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors.

#### D.1.8 Broken or Failed Bag or Filter 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, 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.1.9 Record Keeping Requirements

---

- (a) To document compliance with Condition D.1.5, the Permittee shall maintain once per shift records of visible emission notations of the each stack exhaust in the hip, knee, and casting production lines when venting to the atmosphere.
- (b) To document compliance with Condition D.1.6, the Permittee shall maintain per shift records of the total static pressure drop during normal operation when venting to the atmosphere.
- (c) To document compliance with Conditions D.1.7 the Permittee shall maintain records of the results of the inspections required when venting to the atmosphere under Condition D.1.7 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.