



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: July 14, 2005
RE: Bootz Manufacturing Company / 163-17978-00011
FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

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

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

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

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

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

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

Enclosures
FNPER.dot 1/10/05



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
and EVANSVILLE ENVIRONMENTAL PROTECTION
AGENCY**

**Bootz Manufacturing Company
1400 Park Street (Plant 1)
Evansville, Indiana 47710
2301 Maryland Street (Plant 2)
Evansville, Indiana 47712**

(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 provision of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; and 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. This permit also addresses new source review requirements and is intended to fulfill the new source review procedures and permit revision requirements pursuant to 326 IAC 2-8-11.1, applicable to those conditions.

Operation Permit No.: F163-17978-00011	
Issued by: Original Signed By: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: July 14, 2005 Expiration Date: July 14, 2010

SECTION A	SOURCE SUMMARY	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)(l)]	
A.5	FESOP Applicability [326 IAC 2-8-2]	
A.6	Prior Permits Superseded [326 IAC 2-1.1-9.5]	
SECTION B	GENERAL CONDITIONS.....	6
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)][326 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 Provide Information[326 IAC 2-8-4(5)(E)]	
B.9	Compliance Order Issuance [326 IAC 2-8-5(b)]	
B.10	Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]	
B.11	Annual Compliance Certification [326 IAC 2-8-5(a)(1)]	
B.12	Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]	
B.13	Emergency Provisions [326 IAC 2-8-12]	
B.14	Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]	
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]	
B.16	Permit Renewal [326 IAC 2-8-3(h)]	
B.17	Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]	
B.18	Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]	
B.19	Permit Revision Requirement [326 IAC 2-8-11.1]	
B.20	Inspection and Entry [326 IAC 2-8-5(a)(2)][IC13-14-2-2][IC 13-17-3-2][IC13-30-3-1]	
B.21	Transfer of Ownership or Operational Control [326 IAC 2-8-10]	
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]	
B.23	Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314]	
SECTION C	SOURCE OPERATION CONDITIONS.....	17
	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 [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	Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61 Subpart M]	
	Testing Requirements [326 IAC 2-8-4(3)]	
C.9	Performance Testing [326 IAC 3-6]	
	Compliance Requirements [326 IAC 2-1.1-11]	
C.10	Compliance Requirements [326 IAC 2-1.1-11]	

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

- C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]
- C.12 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]

- C.13 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]
- C.14 Compliance Response Plan -Preparation, Implementation, Records, and Reports [326 IAC 2-8-4][326 IAC 2-8-5]
- C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

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

- C.16 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]
- C.17 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

Stratospheric Ozone Protection

- C.18 Compliance with 40 CFR 82 and 326 IAC 22-1

SECTION D.1 FACILITY OPERATION CONDITIONS

Surface Coating and Drying Furnaces..... 25

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

- D.1.1 Particulate Matter Less Than 10 Microns (PM10) [326 IAC 2-8][326 IAC 2-2]
- D.1.2 Particulate Matter (PM) [326 IAC 6-1-2][326 IAC 2-2]
- D.1.3 Particulate Matter (PM) [40 CFR 52 Subpart P]
- D.1.4 Particulate[326 IAC 6-3-2(d)]
- D.1.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements

- D.1.6 Particulate Control

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

- D.1.7 Monitoring

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

- D.1.8 Record Keeping Requirements

SECTION D.2 FACILITY OPERATION CONDITIONS

Natural gas-fired boiler 29

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

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

Certification Form 30

Emergency Occurrence Form..... 31

Quarterly Report Forms..... 33-35

Quarterly Deviation and Compliance Monitoring Report Form 36

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and Evansville EPA. The information describing the source contained in conditions A.1, A.3, and A.4 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 fabricated metal bathtub, sink, and lavatory manufacturing operation.

Authorized individual:	Thomas Bootz, Vice President of Engineering
Source Address:	1400 Park Street, Evansville, Indiana 47710 (Plant #1) 2301 Maryland Street, Evansville, Indiana 47712 (Plant #2)
Mailing Address:	P.O. Box 18010, Evansville, Indiana 47719
General Source Phone:	812-429-2240
SIC Code:	3469
Source Location Status:	Vanderburgh Nonattainment for the 8-hour ozone standard Nonattainment for PM2.5 Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD and Emission Offset rules; Minor Source, Section 112 of the Clean Air Act

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

This stationary fabricated metal bathtub, sink, and lavatory manufacturing operation consists of two (2) plants:

- (a) Plant 1 is located at 1400 Park Street, Evansville, Indiana 47710; and
- (b) Plant 2 is located at 2301 Maryland Street, Evansville, Indiana 47712.

Since the two (2) plants are located on adjacent properties, 50% of products from Plant #1 are exchanged to Plant #2, and the two (2) plants are owned by one (1) company, they are considered one (1) source effective from the date of issuance of Part 70 Permit No. T163-6551-00011, issued on June 16, 1999.

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:

Plant #2

- (a) Two (2) Largeware Porcelain Enamel booths, identified as Booths #1 and #2, both constructed prior to 1977, which are capable of coating 210 units per hour. Booth #1 is equipped with a water curtain to control the Particulate Matter (PM) overspray and exhausts to the outside air via stack S/V 7. Booth #2 (also known as the groundcoat booth) is equipped with a cartridge filter house to control the PM overspray emissions which is exhausted inside the building;

- (b) One (1) Urea Foam spray booth, constructed in 1992, capable of coating 7 units per hour. This booth is equipped with an air atomization spray system, with dry filters to control the PM over spray, exhausting to stack S/V 1;
- (c) One (1) natural gas-fired Largeware furnace, constructed prior to 1977 and modified in 1999, which is rated at 11.7 million British thermal units per hour (MMBtu/hr);
- (d) One (1) porcelain enamel cover coat spray booth, constructed in 1999, capable of coating 265 units per hour, with particulate matter overspray emissions controlled by a cartridge filter house exhausting inside the building; and
- (e) One (1) 12.35 million BTU/hr natural gas-fired porcelain furnace, constructed in 1999.

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) Natural gas fired combustion sources with heat input equal to or less than ten (10) million (MM) British thermal units (Btu) per hour:
 - (1) one (1) 6.695 MMBtu per hour natural gas-fired boiler exhausting at one (1) stack, identified as S/V-7; [326 IAC 6-2-3]
 - (2) one (1) 3.0 MMBtu per hour natural gas-fired washed ware dry-off oven;
 - (3) one (1) 1.5 MMBtu per hour natural gas-fired porcelain dry-off oven;
 - (4) one (1) 3.0 MMBtu per hour natural gas-fired porcelain dry-off oven; and
 - (5) one (1) 3.0 MMBtu per hour natural gas-fired hot water parts cleaner.
- (b) paved and unpaved roads and parking lots with public access;
- (c) asbestos abatement projects regulated by 326 IAC 14-10;
- (d) filling drums, pails, or other packaging containers with lubricating oils, waxes, and greases;
- (e) closed loop heating and cooling system;
- (f) adhesive usage with potential VOC emissions less than 3 pounds per hour or 15 pounds per day; and
- (g) one (1) welding operation using Electrode Type E70S using a maximum of 2.095 pounds of wire per hour.

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

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

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.

B.2 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.3 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5]

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

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

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

B.5 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.6 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.7 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.8 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

-
- (a) The Permittee shall furnish to IDEM, OAQ, and Evansville EPA within a reasonable time, any information that IDEM, OAQ, and Evansville EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, and Evansville EPA 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.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ and Evansville EPA 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.10 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.11 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. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

and

Evansville EPA
C.K. Newsome Center
100 E. Walnut Street, Suite 100
Evansville, IN 47713

- (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, and Evansville EPA 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, IDEM, OAQ, and Evansville EPA may require to determine the compliance status of the source.

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

B.12 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, 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 Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

and

Evansville EPA
C.K. Newsome Center
100 E. Walnut Street, Suite 100
Evansville, IN 47713

The PMP extension notification does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, and Evansville EPA upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, and Evansville EPA. IDEM, OAQ, and Evansville EPA may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "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.13 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 describes the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ and Evansville EPA, 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 No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or,

Telephone No.: 317-233-5674 (ask for Compliance Section)

Facsimile No.: 317-233-5967

and

Telephone No.: 812-435-6145 (Evansville EPA)

Facsimile No.: 812-435-6155

Telephone No.: 1-888-672-8323 (IDEM Southwest Regional Office) or,

Telephone No.: 812-380-2305

Facsimile No.: 812-380-2304

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

and

Evansville EPA
C.K. Newsome Center
100 E. Walnut Street, Suite 100
Evansville, IN 47713

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

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

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "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) IDEM, OAQ and Evansville EPA, 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 and Evansville EPA, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

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

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

B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

and

Evansville EPA
C.K. Newsome Center
100 E. Walnut Street, Suite 100
Evansville, IN 47713

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

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

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

B.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 FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "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 or Evansville EPA 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 or Evansville EPA, 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 or Evansville EPA, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ or Evansville EPA, 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 Evansville EPA and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, IN 46204

and

Evansville EPA
C.K. Newsome Center
100 E. Walnut Street, Suite 100
Evansville, IN 47713

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) 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, and Evansville EPA on or before the date it is due.
 - (2) If IDEM, OAQ and Evansville EPA upon receiving a timely and complete 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.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]

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 and Evansville EPA takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ and Evansville EPA, any additional information identified as 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

and

Evansville EPA
C.K. Newsome Center
100 E. Walnut Street, Suite 100
Evansville, IN 47713

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

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

(d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

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 this source that are described in 326 IAC 2-8-15(b) through (d), without 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 emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

and

Evansville EPA
C.K. Newsome Center
100 E. Walnut Street, Suite 100
Evansville, IN 47713

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 which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

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

- (b) **Emission Trades** [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (c) **Alternative Operating Scenarios** [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.
- (d) **Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.**

B.19 Permit Revision Requirement [326 IAC 2-8-11.1]

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

B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-17-3-2][IC13-30-3-1]

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, Evansville EPA, 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

and

Evansville EPA
C.K. Newsome Center
100 E. Walnut Street, Suite 100
Evansville, IN 47713

The application which shall be submitted by the Permittee does require the certification by the "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, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

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

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

B.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

Emissions 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 [40 CFR 52 Subpart P][326 IAC 6-3-2]

- (a) Pursuant to 40 CFR 52 Subpart P, particulate matter emissions 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), 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. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and Nonattainment NSR not applicable;
 - (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 (Prevention of Significant Deterioration (PSD)), potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period.
- (c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.
- (d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.3 Opacity [326 IAC 5-1]

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

- (a) Opacity shall not exceed an average of thirty percent (30%) 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(3)]

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

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

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

C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

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

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

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

and

Evansville EPA
C.K. Newsome Center
100 E. Walnut Street, Suite 100
Evansville, IN 47713

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

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

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

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

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

and

Evansville EPA
C.K. Newsome Center
100 E. Walnut Street, Suite 100
Evansville, IN 47713

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

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "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 and Evansville EPA not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, and Evansville EPA, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within thirty (30) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within thirty (30) days, the Permittee may extend the compliance schedule related to the equipment for an additional thirty (30) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

and

Evansville EPA
C.K. Newsome Center
100 E. Walnut Street, Suite 100
Evansville, IN 47713

in writing, prior to the end of the initial thirty (30) day compliance schedule with full justification of the reasons for inability to meet this date.

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

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

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

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

C.13 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.14 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ and Evansville EPA upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:
- (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected time frame for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
- (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

- (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be ten (10) days or more until the unit or device will be shut down, then the Permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down. The notification shall also include the status of the applicable compliance monitoring parameter with respect to normal, and the results of the response actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-8-12 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

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

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

C.16 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or Evansville EPA makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or Evansville EPA within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.17 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

and

Evansville EPA
C.K. Newsome Center
100 E. Walnut Street, Suite 100
Evansville, IN 47713

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

- (e) The first report covered the period commencing on the date of issuance of the original FESOP and ended on the last day of the reporting period. All subsequent reporting periods shall be 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.18 Compliance with 40 CFR 82 and 326 IAC 22-1

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

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY OPERATION CONDITIONS

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

Plant #2

- (a) Two (2) Largeware Porcelain Enamel booths, identified as Booths #1 and #2, both constructed prior to 1977, which are capable of coating 210 units per hour. Booth #1 is equipped with a water curtain to control the Particulate Matter (PM) overspray and exhausts to the outside air via stack S/V 7. Booth #2 (also known as the groundcoat booth) is equipped with a cartridge filter house to control the PM overspray emissions which is exhausted inside the building;
- (b) One (1) Urea Foam spray booth, constructed in 1992, capable of coating 7 units per hour. This booth is equipped with an air atomization spray system, with dry filters to control the PM over spray, exhausting to stack S/V 1;
- (c) One (1) natural gas-fired Largeware furnace, constructed prior to 1977 and modified in 1999, which is rated at 11.7 million British thermal units per hour (MMBtu/hr);
- (d) One (1) porcelain enamel cover coat spray booth, constructed in 1999, capable of coating 265 units per hour, with particulate matter overspray emissions controlled by a cartridge filter house exhausting inside the building; and
- (e) One (1) 12.35 million BTU/hr natural gas-fired porcelain furnace, constructed in 1999.

(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 Less than 10 Microns (PM10) [326 IAC 2-8][326 IAC 2-2]

- (a) Pursuant to 326 IAC 2-8-4, PM10 emissions from each of the two (2) Largeware porcelain enamel spray booths, the Urea Foam spray booth, and the cover coat spray booth, shall be limited as follows:
 - (1) The total amount of solids delivered to the applicators of the one (1) Largeware porcelain enamel spray booth (Booth #1) exhausting through stack S/V 7 and the one (1) Largeware porcelain enamel spray booth (Booth #2) exhausting through the cartridge filter house exhaust shall not exceed 26,864 tons per twelve (12) consecutive month period, with compliance determined at the end of each month, based on a spray coating transfer efficiency of 85% and 99% control efficiency of each of the water curtain and the cartridge filter house;
 - (2) The solids delivered to the applicators of the Urea Foam spray booth exhausting through S/V 1 shall not exceed 995.72 tons per twelve (12) consecutive month period, with compliance determined at the end of each month, based on a spray coating transfer efficiency of 85% and 90% control efficiency of the dry filters; and
 - (3) The solids delivered to the applicators of the cover coat spray booth exhausting through the cartridge filter house exhaust shall not exceed 251,120 tons per twelve (12) consecutive month period, with compliance determined at the end of each month, based on a spray coating transfer efficiency of 85% and 99.9% control efficiency of the cartridge filter house.

- (b) These emission limits yield a source-wide PM10 emission limit of 94.32 tons per year including potential PM10 emissions from combustion and welding. Therefore the Part 70 rules (326 IAC 2-7) do not apply. These limits will also render the requirements of 326 IAC 2-2 (PSD) not applicable.

D.1.2 Particulate Matter (PM) [326 IAC 6-1-2][326 IAC 2-2]

- (a) Pursuant to 326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from each of the two (2) Largeware porcelain enamel spray booths, the Urea Foam spray booth, and the cover coat spray booth shall be limited to 0.03 grain per dry standard cubic foot of exhaust air.
- (b) Based on a maximum flow rate of 14,749 dry standard cubic feet per minute (dscfm) from each of stacks S/V 1 and S/V 7, a maximum flow rate of 25,000 dscfm from the cartridge filters controlling the second Largeware spray booth, and a maximum flow rate of 37,156 dscfm from the cartridge filters controlling the cover coat spray booth, this is equivalent to the following emission limits:
 - (1) 3.79 pounds PM per hour from the one (1) Largeware porcelain enamel spray booth exhausting through stack S/V 7;
 - (2) 6.43 pounds PM per hour from the one (1) Largeware porcelain enamel spray booth cartridge filter exhaust;
 - (3) 3.79 pounds PM per hour from the Urea Foam spray booth exhausting through S/V 1; and
 - (4) 9.55 pounds PM10 per hour from the cover coat spray booth cartridge filter exhaust.
- (c) Based on operation of each of the spray booths at a maximum of 8,760 hours per year, these emission limits yield a source-wide PM emission limit of 103.60 tons per year including potential PM emissions from combustion and welding. Therefore, these limits will also render the requirements of 326 IAC 2-2 (PSD) not applicable.

D.1.3 Particulate Matter (PM) [40 CFR 52 Subpart P]

- (a) Pursuant to T163-17978-00011, issued on June 16, 1999 and 40 CFR 52, Subpart P, the PM from each of the Urea Foam spray booth and the two (2) Largeware porcelain enamel spray booths shall not exceed the pound per hour emission rate established as E in the following formula:

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:

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

- (b) Pursuant to Significant Source Modification No. 163-11340-00011, issued on November 15, 1999, and 40 CFR 52, Subpart P, the PM from the cover coat spray booth shall not exceed the pound per hour emission rate established as E in the following formula:

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:

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

D.1.4 Particulate [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), particulate from the each of the Urea Foam spray booth, the two (2) Largeware porcelain enamel spray booths, and the cover coat booth shall be controlled by a dry particulate filter, waterwash, or a cartridge filter dust collector, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

D.1.5 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 this facility and any control devices.

Compliance Determination Requirements

D.1.6 Particulate Control

- (a) Pursuant to T163-17978-00011, issued on June 16, 1999, and in order to comply with conditions D.1.1, D.1.2, and D.1.3:
- (1) the water curtain for particulate control shall be in operation and control emissions from Booth #1 at all times that Booth #1 is in operation.
 - (2) the cartridge filter house for particulate control shall be in operation and control emissions from Booth #2 at all times that Booth #2 is in operation.
 - (3) the dry filters for particulate control shall be in operation and control emissions from the Urea Foam spray booth at all times that the Urea Foam spray booth is in operation.
- (b) Pursuant to Significant Source Modification No. 163-11340-00011, issued on November 15, 1999, and in order to comply with conditions D.1.1, D.1.2, and D.1.3, the cartridge filter house for particulate control shall be in operation and control emissions from the cover coat spray booth at all times that the cover coat spray booth is in operation.

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

D.1.7 Monitoring

- (a) Daily inspections shall be performed to verify the water level for the water curtain for the one (1) Largeware porcelain enamel Booth #1 meets the manufacturer's suggested level. To monitor the performance of the water curtain, weekly visual inspections shall be made of the water curtain to identify any gaps or other disruptions in water flow and to verify that the water is kept free of solids and floating material that reduces the capture efficiency of the water curtain. Additionally, weekly observations shall be made of the overspray from the surface coating booth stack (S/V 7) while the Largeware porcelain enamel Booth #1 is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- (b) Daily inspections shall be performed to verify the placement, integrity and particle loading of the dry filters and the cartridge filters controlling emissions from the one (1) Largeware porcelain enamel spray booth (Booth #2), the Urea Foam spray booth, and the cover coat spray booth. To monitor the performance of the dry filters controlling emissions from the Urea Foam spray booth which exhausts to the atmosphere, weekly observations shall be made of the overspray from the surface coating booth stack (S/V 1) while the booth is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

- (c) Monthly inspections shall be performed of the coating emissions from stacks S/V 1 and S/V 7 and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- (d) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

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

D.1.8 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1(a), the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the solids usage limits and the PM10 emission limits established in Condition D.1.1(a). Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
 - (1) The solids content of each coating material used.
 - (2) The amount of coating material less water used on a monthly basis.

Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
 - (3) The total solids usage, in tons, for each month.
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.9 Reporting Requirements

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

SECTION D.2

FACILITY OPERATION CONDITIONS

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

Insignificant Activity

- (a) Natural gas fired combustion sources with heat input equal to or less than ten (10) million (MM) British thermal units (Btu) per hour:
 - (1) one (1) 6.695 MMBtu per hour natural gas-fired boiler exhausting at one (1) stack, identified as S/V-7; [326 IAC 6-2-3]

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

Pursuant to 326 IAC 6-2-3 (d) (Particulate Emission Limitations for Sources of Indirect Heating: emission limitations for facilities specified in 326 IAC 6-2-1 (b)), PM emissions from the 6.695 MMBtu per hour boiler used for indirect heating purposes which was existing and in operation on or before June 8, 1972, shall in no case exceed 0.8 pounds of particulate matter per million British thermal units heat input.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
and EVANSVILLE EPA**

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

Source Name: Bootz Manufacturing Company
Source Address: 1400 Park Street, Evansville, Indiana 47719 (Plant #1)
2301 Maryland Street, Evansville, Indiana 47719 (Plant #2)
Mailing Address: P.O. Box 18010, Evansville, Indiana 47719
FESOP No.: F163-17978-00011

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

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify) _____
- Report (specify) _____
- Notification (specify) _____
- Affidavit (specify) _____
- Other (specify) _____

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

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
Indianapolis, Indiana 46204
Phone: 317-233-5674
Fax: 317-233-5967**

and EVANSVILLE EPA

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT**

Source Name: Bootz Manufacturing Company
Source Address: 1400 Park Street, Evansville, Indiana 47719 (Plant #1)
2301 Maryland Street, Evansville, Indiana 47719 (Plant #2)
Mailing Address: P.O. Box 18010, Evansville, Indiana 47719
FESOP No.: F163-17978-00011

This form consists of 2 pages

Page 1 of 2

- This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
 - The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

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

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

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

Page 2 of 2

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

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE DATA SECTION
 and EVANSVILLE EPA**

FESOP Quarterly Report

Source Name: Bootz Manufacturing Company
 Source Address: 1400 Park Street, Evansville, Indiana 47710 (Plant 1)
 2301 Maryland Street, Evansville, Indiana 47712 (Plant 2)
 Mailing Address: P.O. Box 18010, Evansville, Indiana 47719
 FESOP No.: F163-17978-00011
 Facility: two (2) Largeware porcelain enamel spray booths (Booths #1 and #2)
 Parameter: PM10 emissions
 Limit: The total amount of solids delivered to the applicators of the one (1) Largeware porcelain enamel spray booth (Booth #1) exhausting through stack S/V 7 and the one (1) Largeware porcelain enamel spray booth (Booth #2) exhausting through the cartridge filter house exhaust shall not exceed 26,864 tons per twelve (12) consecutive month period, with compliance determined at the end of each month, based on a spray coating transfer efficiency of 85% and 99% control efficiency of each of the water curtain and the cartridge filter house.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	Solids Input This Month (tons)	Solids Input Previous 11 Months (tons)	12 Month Total Solids Input (tons)
Month 1			
Month 2			
Month 3			

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.
 Deviation has been reported on: _____

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

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE DATA SECTION
 and EVANSVILLE EPA**

FESOP Quarterly Report

Source Name: Bootz Manufacturing Company
 Source Address: 1400 Park Street, Evansville, Indiana 47710 (Plant 1)
 2301 Maryland Street, Evansville, Indiana 47712 (Plant 2)
 Mailing Address: P.O. Box 18010, Evansville, Indiana 47719
 FESOP No.: F163-17978-00011
 Facility: Urea Foam spray booth
 Parameter: PM10 emissions
 Limit: The solids delivered to the applicators of the Urea Foam spray booth exhausting through S/V 1 shall not exceed 995.72 tons per twelve (12) consecutive month period, with compliance determined at the end of each month, based on a spray coating transfer efficiency of 85% and 90% control efficiency of the dry filters

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	Solids Input This Month (tons)	Solids Input Previous 11 Months (tons)	12 Month Total Solids Input (tons)
Month 1			
Month 2			
Month 3			

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.
 Deviation has been reported on: _____

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

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and EVANSVILLE EPA**

FESOP Quarterly Report

Source Name: Bootz Manufacturing Company
Source Address: 1400 Park Street, Evansville, Indiana 47710 (Plant 1)
2301 Maryland Street, Evansville, Indiana 47712 (Plant 2)
Mailing Address: P.O. Box 18010, Evansville, Indiana 47719
FESOP No.: F163-17978-00011
Facility: cover coat spray booth
Parameter: PM10 emissions
Limit: The solids delivered to the applicators of the cover coat spray booth exhausting through the cartridge filter house exhaust shall not exceed 251,120 tons per twelve (12) consecutive month period, with compliance determined at the end of each month, based on a spray coating transfer efficiency of 85% and 99.9% control efficiency of the cartridge filter house

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	Solids Input This Month (tons)	Solids Input Previous 11 Months (tons)	12 Month Total Solids Input (tons)
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and EVANSVILLE EPA**

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

Source Name: Bootz Manufacturing Company
Source Address: 1400 Park Street, Evansville, Indiana 47719 (Plant #1)
2301 Maryland Street, Evansville, Indiana 47719 (Plant #2)
Mailing Address: P.O. Box 18010, Evansville, Indiana 47719
FESOP No.: F163-17978-00011

Months: _____ to _____ Year: _____

Page 1 of 2

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

NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

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

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**Indiana Department of Environmental Management
Office of Air Quality
And Evansville Environmental Protection Agency**

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

Source Background and Description

Source Name:	Bootz Manufacturing Company
Source Location:	1400 Park Street, Evansville, IN 47719 (Plant 1) 2301 Maryland St., Evansville, IN 47719 (Plant 2)
County:	Vanderburgh
SIC Code:	3469
Operation Permit No.:	T163-6551-00011
Operation Permit Issuance Date:	June 16, 1999
FESOP No.:	F163-17978-00011
Permit Reviewer:	Trish Earls/EVP

The Office of Air Quality (OAQ) has reviewed a FESOP application from Bootz Manufacturing Company relating to the operation of a stationary fabricated metal bathtub, sink, and lavatory manufacturing operation.

History

On September 9, 2003, IDEM, OAQ received a timely application from Bootz Manufacturing Company requesting approval for a renewal to their existing Part 70 Permit No. 163-6551-00011, issued on June 16, 1999. However, due to the removal of the entire painting operation from Plant #1 as well as the removal of other emission units, this source has controlled emissions of each regulated pollutant that are less than 100 tons per year. Therefore, this source qualifies for a Federally Enforceable State Operating Permit (FESOP) pursuant to 326 IAC 2-8. As such, Bootz Manufacturing Company has requested that this application for a Part 70 permit renewal be transitioned to an initial FESOP application. OAQ agrees with this request and this permit is being reviewed pursuant to the requirements of 326 IAC 2-8 (FESOP).

This permit also addresses new source review requirements and is intended to fulfill the new source review procedures and permit revision requirements pursuant to 326 IAC 2-8-11.1, applicable to those conditions.

Source Definition

This Source Definition from the previous Part 70 permit was incorporated into this permit as follows:

This stationary fabricated metal bathtub, sink, and lavatory manufacturing operation consists of two (2) plants:

- (a) Plant 1 is located at 1400 Park Street, Evansville, Indiana 47719; and
- (b) Plant 2 is located at 2301 Maryland Street, Evansville, Indiana 47719.

Since the two (2) plants are located on adjacent properties, 50% of products from Plant #1 are exchanged to Plant #2, and the two (2) plants are owned by one (1) company, they will be considered one (1) source.

Permitted Emission Units and Pollution Control Equipment

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

Plant #2

- (a) Two (2) Largeware Porcelain Enamel booths, both constructed prior to 1977, which are capable of coating 165 units per hour. One (1) booth is equipped with water wash spray to control the Particulate Matter (PM) overspray exhausting to stack S/V 7 and the other booth is equipped with cartridge filters to control the PM overspray emissions which are exhausted inside the building;
- (b) One (1) Urea Foam spray booth, constructed in 1992, capable of coating 7 units per hour. This booth is equipped with an air atomization spray system, with dry filters to control the PM over spray, exhausting to stack S/V 1;
- (c) One (1) natural gas-fired Largeware furnace, constructed prior to 1977 and modified in 1999, which is rated at 11.7 million British thermal units per hour (MMBtu/hr);
- (d) One (1) porcelain enamel cover coat spray booth, constructed in 1999, capable of coating 265 units per hour, with particulate matter overspray emissions controlled by cartridge filters exhausting inside the building; and
- (e) One (1) 12.35 million BTU/hr natural gas-fired porcelain furnace, constructed in 1999.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted emission units operating at this source during this review process.

Emission Units and Pollution Control Equipment Removed From This Source

The following permitted emission units have been removed from this source:

- (a) One (1) natural gas-fired Smallware furnace, constructed prior to 1977, which is rated at 4.6 MMBtu/hr; and
- (b) one (1) epoxy resin dip tank exhausting at one (1) stack, identified as S/V-6.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas fired combustion sources with heat input equal to or less than ten (10) million (MM) British thermal units (Btu) per hour:
 - (1) one (1) 6.695 MMBtu per hour natural gas-fired boiler exhausting at one (1) stack, identified as S/V-7; [326 IAC 6-2-3]
 - (2) one (1) 3.0 MMBtu per hour natural gas-fired washed ware dry-off oven;
 - (3) two (2) 3.0 MMBtu per hour natural gas-fired porcelain dry-off ovens; and
 - (4) one (1) 3.0 MMBtu per hour natural gas-fired hot water parts cleaner.
- (b) paved and unpaved roads and parking lots with public access;
- (c) asbestos abatement projects regulated by 326 IAC 14-10;

- (d) filling drums, pails, or other packaging containers with lubricating oils, waxes, and greases;
- (e) closed loop heating and cooling system;
- (f) adhesive usage with potential VOC emissions less than 3 pounds per hour or 15 pounds per day; and
- (g) one (1) welding operation using Electrode Type E70S using a maximum of 2.095 pounds of wire per hour.

Existing Approvals

The source has been operating under the previous Part 70 Permit No. 163-6551-00011 issued on June 16, 1999, and the following amendments and revisions:

- (a) First Administrative Amendment No.: 163-10961-00011, issued on September 21, 1999;
- (b) First Significant Source Modification No.: 163-11340-00011, issued on November 15, 1999;
- (c) Second Administrative Amendment No.: 163-14995-00011, issued on October 23, 2001;
- (d) First Reopening No.: 163-13500-00011, issued on November 1, 2001;
- (e) Third Administrative Amendment No.: 163-11560-00011, issued on July 14, 2003; and
- (f) Fourth Administrative Amendment No.: 163-19148-00011, issued on July 6, 2004.

All conditions from previous approvals were incorporated into this FESOP except the following:

- (a) All conditions pursuant to 326 IAC 2-7 (Part 70).

Reason changed: The source is transitioning from an existing Part 70 permit to a FESOP as discussed in this document. Therefore, the existing Part 70 permit is superseded by this FESOP.

- (b) Part 70 Permit No. 163-6551-00011, Conditions D.2.1 and D.4.1

D.2.1 Particulate Matter (PM) and Particulate Matter Less Than 10 Microns (PM-10) [326 IAC 2-2]

Total PM and PM-10 emissions from the one (1) Urea Foam spray booth shall be limited to less than 5.70 and 3.42 pounds per hour, respectively, therefore, the requirements of 326 IAC 2-2 (PSD) do not apply.

D.4.1 Particulate Matter (PM) and Particulate Matter Less Than 10 Microns (PM-10) [326 IAC 2-2]

Total PM and PM-10 emissions from this facility shall remain less than 5.7 pounds per hour (25 tons per year) and 3.4 pounds per hour (15 tons per year), respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) do not apply.

Reason Not Incorporated: When the painting line in Plant #1 was removed from the source in 2003, this source became a minor source under the PSD rules because the potential to emit after control of all criteria pollutants was less than 250 tons per year. Therefore, the above PSD minor limits for the Urea Foam spray booth and the cover coat spray booth are no longer necessary to render PSD not applicable. The PM10 limits pursuant to 326 IAC 2-8 (FESOP) that will now apply will render the requirements of PSD not applicable to this source for PM10 and will make this a minor PSD source. An additional PSD minor limit for PM emissions will also be included in the FESOP to render the requirements of PSD not applicable and make this a minor PSD source.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

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

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

The existing Part 70 permit for this source will be transitioned to a FESOP during this approval. An administratively complete Part 70 permit renewal application for the purposes of this review was received on September 9, 2003.

There was no notice of completeness letter mailed to the source.

Emission Calculations

See Appendix A of this document for detailed emission calculations (7 pages).

Potential to Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential to Emit (tons/yr)
PM	Greater than 250
PM-10	Greater than 250
SO ₂	Less than 25
VOC	Less than 25
CO	Less than 25
NO _x	Less than 25

HAPs	Potential to Emit (tons/yr)
Hexane	Less than 1.0
Manganese	Less than 1.0
MDI	Less than 1.0
Total	Less than 25

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM10 are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 2-7. The source will be issued a FESOP because the source will limit its emissions below the Title V levels.
- (b) **Fugitive Emissions**
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Potential to Emit After Issuance

The source has opted to become a FESOP source. The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of this FESOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit. Since the source has not constructed any new emission units, the source's potential to emit is based on the emission units included in the original Part 70 permit.

Process/emission unit	Potential To Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Plant #2 Urea Foam Spray Booth	13.84	13.84	--	--	--	--	Negl.
Plant #2 Largeware Booths	4.69	4.69	--	--	--	--	--
Plant #2 Cover Coat Booth	0.82	0.82	--	--	--	--	--
Largeware and Porcelain furnaces	0.20	0.80	0.06	0.58	8.84	10.53	0.20
Insignificant Activities*	0.21	0.67	0.05	3.60	6.89	8.19	0.44
Total Emissions	19.76	20.82	0.11	4.18	15.73	18.72	0.64

*Insignificant activities include one (1) boiler, three (3) dry-off ovens, one (1) parts cleaner, adhesive usage, and welding.

County Attainment Status

The source is located in Vanderburgh County.

Pollutant	Status
PM-10	Attainment
SO ₂	Attainment
NO ₂	Attainment
1-hour Ozone	Attainment
8-hour Ozone	Basic nonattainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. Vanderburgh County has been designated as basic nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for nonattainment new source review.
- (b) Vanderburgh County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source Part 70 Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	Less than 100
PM-10	Less than 100
SO ₂	Less than 100
VOC	Less than 100
CO	Less than 100
NO _x	Less than 100
Single HAP	Less than 10
Combination HAPs	Less than 25

- (a) This existing source is **not** a major 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 listed source categories.
- (b) This existing source is **not** a major stationary source because no nonattainment regulated pollutant is emitted at a rate of 100 tons per year or greater, and it is not in one of the 28 listed source categories.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in this permit.
- (b) The 6.695 MMBtu per hour boiler is not subject to the requirements of the New Source Performance Standards, 326 IAC 12 (40 CFR 60.40 – 60.46 and 40 CFR 60.40a – 60.49a), Subparts D and Da, because it is rated at less than 250 MMBtu per hour.

- (c) The 6.695 MMBtu per hour boiler is not subject to the requirements of the New Source Performance Standards, 326 IAC 12 (40 CFR 60.40b – 60.49b and 40 CFR 60.40c – 60.48c), Subparts Db and Dc, because it was constructed prior to June 19, 1984, which is the earliest applicability date of these rules.
- (d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) included in this permit.
- (e) None of the combustion units at this source are subject to the requirements of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD because this rule only applies to boilers or process heaters located at a major source of HAPs. This source is not a major source of HAPs.
- (f) The requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable to this source. Such requirements apply to a pollutant-specific emissions unit (PSEU), as defined in 40 CFR 64.1, at a major source that is required to obtain a Part 70 or 71 permit if the PSEU meets the following criteria:
 - (1) The unit is subject to an emission limitation or standard for an applicable regulated air pollutant,
 - (2) The unit uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard, and
 - (3) The unit has a potential to emit (PTE) before controls equal to or greater than 100 percent of the amount (tons per year) of the pollutant required for a source to be classified as a Part 70 major source.

This source is a FESOP source and is not a major Part 70 source. Therefore, the requirements of 40 CFR 64, Compliance Assurance Monitoring, are not applicable to this source.

State Rule Applicability – Entire Source

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

This source was originally constructed prior to 1977 and the units that were present at the source prior to 1977 had potential VOC emissions that were greater than 250 tons per year. Therefore, this source was considered a major PSD source when the Urea Foam spray booth was constructed in 1992 and when the cover coat spray booth was constructed in 1999. Because the source was an existing major PSD source when both modifications were done, PM and PM10 emissions from each of the Urea Foam spray booth and the cover coat spray booth were limited to less than 25 and 15 tons per year, respectively so that these were minor modifications to a major PSD source. However, since the entire paint line at Plant #1 was removed from the source in 2003, this source became a minor source under the PSD rules because the potential to emit after control of all criteria pollutants was less than 250 tons per year. Therefore, the existing PSD minor limits for the Urea Foam spray booth and the cover coat spray booth are no longer necessary to render PSD not applicable. The PM10 limits pursuant to 326 IAC 2-8 (FESOP) that will now apply will render the requirements of PSD not applicable to this source and will make this a minor PSD source. Additionally, the applicable PM limits pursuant to 326 IAC 6-1-2 (Particulate Emission Limitations) that apply to the surface coating booths will limit source-wide PM emissions to less than 250 tons per year and will render the requirements of PSD not applicable and make this a minor PSD source.

326 IAC 2-6 (Emission Reporting)

Since this source is complying with 326 IAC 2-8 (FESOP) and is not required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, this source is not subject to 326 IAC 2-6 (Emission Reporting).

326 IAC 2-8 (FESOP)

In order to comply with 326 IAC 2-8, emissions of PM10 must be limited to less than 100 tons per year. PM10 emissions from each of the two (2) Largeware porcelain enamel spray booths, the Urea Foam spray booth, and the cover coat spray booth, shall be limited to 0.027 grains per dry standard cubic foot (gr/dscf). Based on a maximum flow rate of 14,749 dry standard cubic feet per minute (dscfm) from each of stacks S/V 1 and S/V 7, a maximum flow rate of 25,000 dscfm from the cartridge filters controlling the second Largeware spray booth, and a maximum flow rate of 37,156 dscfm from the cartridge filters controlling the cover coat spray booth, this is equivalent to a PM10 emission limit of 3.41 pounds per hour from the one (1) Largeware porcelain enamel spray booth exhausting through stack S/V 7, a PM10 emission limit of 5.79 pounds per hour from the one (1) Largeware porcelain enamel spray booth cartridge filters exhaust, a PM10 emission limit of 3.41 pounds per hour from the Urea Foam spray booth exhausting through S/V 1, and a PM10 emission limit of 8.60 pounds per hour from the cover coat spray booth cartridge filters exhaust. Based on operation of the spray booths at a maximum of 8,760 hours per year, these emission limits yield a source-wide PM10 emission limit of 94.37 tons per year including potential PM10 emissions from combustion and welding. These limits will also render the requirements of 326 IAC 2-2 (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 thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

This source will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

State Rule Applicability – Individual Facilities

326 IAC 6-1-2 (Particulate Emission Limitations)

The particulate matter emissions from the two (2) Largeware porcelain enamel spray booths, the Urea Foam spray booth, and the cover coat spray booth are subject to the requirements of 326 IAC 6-1-2(a) (Nonattainment Area Particulate Limitations) because this source is located in one of the counties listed in 326 IAC 6-1-7 and is not a specifically listed source in 326 IAC 6-1-12 and actual PM emissions are greater than 10 tons per year. Pursuant to 326 IAC 6-1-2(a), PM emissions from each of these spray booths are limited to 0.03 grains per dry standard cubic foot (gr/dscf). The source will comply with the particulate matter emission limitations by:

- (a) using water wash spray and cartridge filters to control particulate emissions from the two (2) Largeware porcelain enamel spray booths;
- (b) using dry filters to control particulate emissions from the Urea Foam spray booth; and
- (c) using cartridge filters to control particulate emissions from the cover coat spray booth.

326 IAC 6-2-3 (Particulate Emission Limitations for Sources of Indirect Heating)

The 6.695 MMBtu per hour boiler is subject to 326 IAC 6-2-3 because it is an indirect heating facility that was in operation prior to September 21, 1983. Pursuant to this rule, particulate emissions from indirect heating facilities existing and in operation before September 21, 1983, shall be limited by the following equation:

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

Q = 6.695 MMBtu/hr
C = 50 ug/m³
a = 0.67 for Q less than or equal to 1,000 MMBtu/hr
h = 20 ft
N = 1

Pt = 2.1 lb/MMBtu

The allowable particulate emission rate from the 6.695 MMBtu per hour boiler, based on the above equation, is 2.1 pounds per MMBtu heat input. However, pursuant to 326 IAC 6-2-3(d), the allowable PM emission rate from the boiler, existing and in operation before June 8, 1972, is truncated to 0.8 pounds per MMBtu heat input. The 6.695 MMBtu per hour boiler emits less than 0.8 pounds per MMBtu, therefore, it will comply with 326 IAC 6-2-3 (see Appendix A, page 4 of 7 for detailed calculations).

326 IAC 6-3-2 (Process Operations)

On June 12, 2002, revisions to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) became effective; this rule was previously referred to as 326 IAC 6-3(Process Operations). As of the date this permit is being issued these revisions have not been approved by EPA into the Indiana State Implementation Plan (SIP); therefore, the following requirements from the previous version of 326 IAC 6-3 (Process Operations) which has been approved into the SIP will remain applicable requirements until the revisions to 326 IAC 6-3 are approved into the SIP and the condition is modified in a subsequent permit action.

Pursuant to T163-17978-00011, issued on June 16, 1999 and 40 CFR 52, Subpart P the particulate matter (PM) from each of the Urea Foam spray booth and the two (2) Largeware porcelain enamel spray booths shall be limited by the following:

Interpolation and extrapolation 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 and
P = process weight rate in tons per hour

Pursuant to Significant Source Modification No. 163-11340-00011, issued on November 15, 1999, and 40 CFR 52, Subpart P the particulate matter (PM) from the cover coat spray booth shall be limited by the following:

Interpolation and extrapolation 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 and
P = process weight rate in tons per hour

Under the rule revision, particulate from each of the Urea Foam spray booth, the two (2) Largeware porcelain enamel spray booths, and the cover coat spray booth shall be controlled by a dry particulate filter, waterwash, or a cartridge filter dust collector, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

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

The requirements of 326 IAC 6-3-2 were not included in the Part 70 permit for the welding operation. Pursuant to 326 IAC 6-3-1(b)(9), welding that consumes less than 625 pounds of rod or wire per day are exempt from 326 IAC 6-3. The welding operation consumes less than 625 pounds of wire per day and is therefore exempt from this rule.

326 IAC 8-1-6 (New Facilities, General Reduction Requirements)

The surface coating booths at this source are not subject to the requirements of 326 IAC 8-1-6. This rule applies to facilities constructed after January 1, 1980, with potential VOC emissions of 25 tons or more per year. The two (2) Largeware booths, the Urea Foam spray booth, and the cover coat booth use water based or non-VOC coatings and do not emit VOC. Therefore, they are not subject to this rule. The adhesive usage has potential VOC emissions that are less than 25 tons per year, therefore, it is not subject to this rule.

326 IAC 8-2-9 (Miscellaneous Metal Coating)

The surface coating booths at this source are not subject to the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations). Facilities constructed prior to July 1, 1990, such as the two (2) Largeware spray booths, are only subject to this rule if they are located in Clark, Floyd, St. Joseph, Elkhart, Lake, Porter, or Marion counties. The two (2) Largeware booths were constructed prior to 1977 and are not located in one of the above listed counties, therefore, 326 IAC 8-2-9 does not apply to these booths. For facilities constructed after July 1, 1990, such as the Urea Foam spray booth and the cover coat spray booth, this rule applies if actual VOC emissions are greater than fifteen (15) pounds per day. The Urea Foam spray booth, constructed in 1992, and the cover coat spray booth, constructed in 1999, use water based coatings and do not emit VOC. Therefore, 326 IAC 8-2-9 does not apply to these booths.

326 IAC 8-3 (Organic Solvent Degreasing Operations)

The 3.0 MMBtu per hour natural gas-fired hot water parts cleaner is not subject to the requirements of 326 IAC 8-3 because the operation does not use organic solvents and is therefore not an organic solvent degreasing operation.

326 IAC 8-6 (Organic Solvent Emission Limitations)

This source is not subject to the requirements of 326 IAC 8-6-1. Pursuant to 326 IAC 8-6-1, this rule applies to existing sources as of January 1, 1980, located in Lake and Marion Counties, and sources commencing operation after October 7, 1974, and prior to January 1, 1980, located anywhere in the state with potential VOC emissions greater than 100 tons per year, not limited by other rules in Article 8. This source was constructed between October 7, 1974 and January 1, 1980, however, potential VOC emissions are less than 100 tons per year, therefore, this rule does not apply.

There are no other 326 IAC Article 8 rules that apply.

Testing Requirements

This source is not required to perform stack testing because compliance with the particulate matter emission limits for the surface coating operations can be determined by compliance monitoring of the control devices and emissions calculations based on the solids content of the coatings which can be obtained from MSDS.

Compliance Requirements

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

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

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

1. The two (2) Largeware porcelain enamel spray booths, the Urea Foam spray booth, and the cover coat spray booth have applicable compliance monitoring conditions as specified below:
 - (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the dry filters, the water wash spray and the cartridge filters controlling emissions from the two (2) Largeware porcelain enamel spray booths, the Urea Foam spray booth, and the cover coat spray booth. To monitor the performance of the dry filters and the water wash spray controlling emissions from the one (1) Largeware porcelain enamel spray booth and the Urea Foam spray booth which exhaust to the atmosphere, weekly observations shall be made of the overspray from the surface coating booth stacks (S/V 1 and S/V 7) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
 - (b) Monthly inspections shall be performed of the coating emissions from the stacks and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
 - (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

These monitoring conditions are necessary because the dry filters, water wash spray and cartridge filters for the two (2) Largeware porcelain enamel spray booths, the Urea Foam spray booth, and the cover coat spray booth must operate properly to ensure compliance with 326 IAC 6-1-2 (Particulate Emission Limitations), 326 IAC 6-3 (Process Operations) and 326 IAC 2-8 (FESOP).

Conclusion

The operation of this fabricated metal bathtub, sink, and lavatory manufacturing operation shall be subject to the conditions of the FESOP 163-17978-00011.

**Indiana Department of Environmental Management
Office of Air Quality
And Evansville Environmental Protection Agency**

**Addendum to the
Technical Support Document (TSD) for a Federally Enforceable State Operating
Permit (FESOP)**

Source Background and Description

Source Name: Bootz Manufacturing Company
Source Location: 1400 Park Street, Evansville, Indiana 47710 (Plant 1)
 2301 Maryland Street, Evansville, Indiana 47712 (Plant 2)
County: Vanderburgh
SIC Code: 3469
Operation Permit No.: F163-17978-00011
Permit Reviewer: Trish Earls / EVP

On January 26, 2005, the Office of Air Quality (OAQ) had a notice published in the Evansville Courier in Evansville, Indiana, stating that Bootz Manufacturing Company had applied for a Federally Enforceable State Operating Permit (FESOP) to operate a stationary fabricated metal bathtub, sink, and lavatory manufacturing operation. The notice also stated that OAQ proposed to issue a FESOP for this operation and provided information on how the public could review the proposed FESOP and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this FESOP should be issued as proposed.

On February 11, 2005, comments were received from Roberta L. Smith of the Evansville EPA on the proposed permit. The following changes have been made as a result of those comments (additions in bold, deletions in strikeout):

1. The zip code for Plant 1 has been corrected from 47719 to 47710 and the zip code for Plant 2 has been corrected from 47719 to 47712.

Also, the 8 hour ozone nonattainment designations in 69 FR 23858 have been incorporated in 326 IAC 1-4-1 effective December 12, 2004. Therefore provisions of 326 IAC 2-3 are applicable in these areas. IDEM has deleted the Nonattainment NSR term from the permit and replaced it with the appropriate term in 326 IAC 2-3 as Emission Offset. Sections A.1 and A.2 are revised to read as follows:

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

The Permittee owns and operates a stationary fabricated metal bathtub, sink, and lavatory manufacturing operation.

Authorized individual: Thomas Bootz, Vice President of Engineering
Source Address: 1400 Park Street, Evansville, Indiana 4771**90** (Plant #1)
 2301 Maryland Street, Evansville, Indiana 4771**92** (Plant #2)
Mailing Address: P.O. Box 18010, Evansville, Indiana 47719
General Source Phone: 812-429-2240
SIC Code: 3469

Source Location Status: Vanderburgh
Nonattainment for the 8-hour ozone standard
Attainment for all other criteria pollutants

Source Status: Federally Enforceable State Operating Permit (FESOP)
Minor Source, under PSD **and Emission Offset** rules **and Nonattainment NSR**;
Minor Source, Section 112 of the Clean Air Act

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

This stationary fabricated metal bathtub, sink, and lavatory manufacturing operation consists of two (2) plants:

- (a) Plant 1 is located at 1400 Park Street, Evansville, Indiana 477190; and
- (b) Plant 2 is located at 2301 Maryland Street, Evansville, Indiana 477192.

Since the two (2) plants are located on adjacent properties, 50% of products from Plant #1 are exchanged to Plant #2, and the two (2) plants are owned by one (1) company, they are considered one (1) source effective from the date of issuance of Part 70 Permit No. T163-6551-00011, issued on June 16, 1999.

2. The equipment descriptions in section A.3 have been revised for clarification as follows:

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:

Plant #2

- (a) Two (2) Largeware Porcelain Enamel booths, **identified as Booths #1 and #2**, both constructed prior to 1977, which are capable of coating 165 units per hour. ~~One (1) booth Booth #1~~ **Booth #1** is equipped with ~~water wash spray~~ **a water curtain** to control the Particulate Matter (PM) overspray **and** exhausting **to the outside air via** stack S/V 7. ~~and the other booth Booth #2 (also known as the groundcoat booth)~~ **Booth #2 (also known as the groundcoat booth)** is equipped with **a** cartridge filters **house** to control the PM overspray emissions which ~~are~~ **is** exhausted inside the building;
- (b) One (1) Urea Foam spray booth, constructed in 1992, capable of coating 7 units per hour. This booth is equipped with an air atomization spray system, with dry filters to control the PM over spray, exhausting to stack S/V 1;
- (c) One (1) natural gas-fired Largeware furnace, constructed prior to 1977 and modified in 1999, which is rated at 11.7 million British thermal units per hour (MMBtu/hr);
- (d) One (1) porcelain enamel cover coat spray booth, constructed in 1999, capable of coating 265 units per hour, with particulate matter overspray emissions controlled by **a** cartridge filters **house** exhausting inside the building; and
- (e) One (1) 12.35 million BTU/hr natural gas-fired porcelain furnace, constructed in 1999.

The equipment descriptions in the facility description box of section D.1 were also revised as noted above.

3. The equipment description for the two (2) natural gas-fired porcelain dry-off ovens listed in section A.4, Insignificant Activities, has been corrected to show that one oven is rated at 1.5 MMBtu per hour and the other is rated at 3.0 MMBtu per hour.

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) Natural gas fired combustion sources with heat input equal to or less than ten (10) million (MM) British thermal units (Btu) per hour:
 - (1) one (1) 6.695 MMBtu per hour natural gas-fired boiler exhausting at one (1) stack, identified as S/V-7; [326 IAC 6-2-3]
 - (2) one (1) 3.0 MMBtu per hour natural gas-fired washed ware dry-off oven;
 - (3) one (1) 1.5 MMBtu per hour natural gas-fired porcelain dry-off oven;**
 - ~~(3)(4) two (2) one (1) 3.0 MMBtu per hour natural gas-fired porcelain dry-off ovens;~~ and
 - ~~(4)(5) one (1) 3.0 MMBtu per hour natural gas-fired hot water parts cleaner.~~
 - (b) paved and unpaved roads and parking lots with public access;
 - (c) asbestos abatement projects regulated by 326 IAC 14-10;
 - (d) filling drums, pails, or other packaging containers with lubricating oils, waxes, and greases;
 - (e) closed loop heating and cooling system;
 - (f) adhesive usage with potential VOC emissions less than 3 pounds per hour or 15 pounds per day; and
 - (g) one (1) welding operation using Electrode Type E70S using a maximum of 2.095 pounds of wire per hour.
4. Indiana was required to incorporate credible evidence provisions into state rules consistent with the SIP call published by U.S. EPA in 1997 (62 FR 8314). Indiana has incorporated the credible evidence provision in 326 IAC 1-1-6. This rule is effective March 16, 2005; therefore, the condition reflecting this rule has been revised in the permit as follows:

B.23 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] **[326 IAC 1-1-6]**

~~Notwithstanding the conditions of this permit that state specific methods that may be used to demonstrate compliance with, or a violation of, applicable requirements, any person (including the Permittee) may also use other credible evidence to demonstrate compliance with, or a violation of, any term or condition of this permit.~~ **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.**

5. Condition C.1 of the FESOP has been revised to correct the formatting to conform with the remainder of the permit as follows:

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]

- ~~(1)(a)~~ Pursuant to 40 CFR 52 Subpart P, particulate matter emissions 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.
- ~~(2)(b)~~ 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.

6. The PM10 emission limit in condition D.1.1 pursuant to 326 IAC 2-8 (FESOP) has been revised to remove the grain loading limit of 0.027 gr/dscf for the spray booths. This is because variability in parameters such as exhaust flow rate and temperature can make compliance with the pound per hour limits difficult. Instead, the input of solids to the spray booths will be limited based on the spray coating transfer efficiency and control device overall control efficiency. Condition D.1.1 is revised as follows:

D.1.1 Particulate Matter Less than 10 Microns (PM10) [326 IAC 2-8][326 IAC 2-2]

- (a) Pursuant to 326 IAC 2-8-4, PM10 emissions from each of the two (2) Largeware porcelain enamel spray booths, the Urea Foam spray booth, and the cover coat spray booth, shall be limited to ~~0.027 grains per dry standard cubic foot (gr/dscf)~~. **as follows:**
- (b) ~~Based on a maximum flow rate of 14,749 dry standard cubic feet per minute (dscfm) from each of stacks S/V 1 and S/V 7, a maximum flow rate of 25,000 dscfm from the cartridge filters controlling the second Largeware spray booth, and a maximum flow rate of 37,156 dscfm from the cartridge filters controlling the cover coat spray booth, this is equivalent to the following emission limits:~~
- (1) **The total amount of solids delivered to the applicators of the one (1) Largeware porcelain enamel spray booth (Booth #1) exhausting through stack S/V 7 and the one (1) Largeware porcelain enamel spray booth (Booth #2) exhausting through the cartridge filter house exhaust shall not exceed 26,864 tons per twelve (12) consecutive month period, with compliance determined at the end of each month, based on a spray coating transfer efficiency of 85% and 99% control efficiency of each of the water curtain and the cartridge filter house 3.41 pounds PM10 per hour from the one (1) Largeware porcelain enamel spray booth exhausting through stack S/V 7;**
 - (2) ~~5.79 pounds PM10 per hour from the one (1) Largeware porcelain enamel spray booth cartridge filters exhaust;~~
 - ~~(3)~~(2) **The solids delivered to the applicators of the Urea Foam spray booth exhausting through S/V 1 shall not exceed 995.72 tons per twelve (12) consecutive month period, with compliance determined at the end of each month, based on a spray coating transfer efficiency of 85% and 90% control efficiency of the dry filters 3.41 pounds PM10 per hour from the Urea Foam spray booth exhausting through S/V 1; and**
 - ~~(4)~~(3) **The solids delivered to the applicators of the cover coat spray booth exhausting through the cartridge filter house exhaust shall not exceed 251,120 tons per twelve (12) consecutive month period, with compliance determined at the end of each month, based on a spray coating transfer efficiency of 85% and 99.9% control efficiency of the cartridge filter house 8.60 pounds PM10 per hour from the cover coat spray booth cartridge filters exhaust.**
- (c)(b) ~~Based on operation of each of the spray booths at a maximum of 8,760 hours per year, †These emission limits yield a source-wide PM10 emission limit of 94.372 tons per year including potential PM10 emissions from combustion and welding. Therefore the Part 70 rules (326 IAC 2-7) do not apply. These limits will also render the requirements of 326 IAC 2-2 (PSD) not applicable.~~

Additional record keeping requirements have been added to condition D.1.8 for the solids input as follows:

D.1.8 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1(a), the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the solids usage limits and the PM10 emission limits established in Condition D.1.1(a). Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.**
- (1) The solids content of each coating material and solvent used.**
 - (2) The amount of coating material and solvent less water used on a monthly basis.**
 - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.**
 - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;**
 - (3) The total solids usage for each month; and**
 - (4) The weight of PM10 emitted for each compliance period.**
- ~~(a)(b)~~ **(b) To document compliance with Condition D.1.7, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.**
- ~~(b)(c)~~ **(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.**

A new condition including reporting requirements to document compliance with the PM10 emission limits in condition D.1.1 has been added to the FESOP as follows:

D.1.9 Reporting Requirements

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

New quarterly report forms for each spray booth to document compliance with the emission limits in condition D.1.1 have been added to the FESOP as shown on the following pages:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE DATA SECTION
 and EVANSVILLE EPA**

FESOP Quarterly Report

Source Name: Bootz Manufacturing Company
 Source Address: 1400 Park Street, Evansville, Indiana 47710 (Plant 1)
 2301 Maryland Street, Evansville, Indiana 47712 (Plant 2)
 Mailing Address: P.O. Box 18010, Evansville, Indiana 47719
 FESOP No.: F163-17978-00011
 Facility: two (2) Largeware porcelain enamel spray booths (Booths #1 and #2)
 Parameter: PM10 emissions
 Limit: The total amount of solids delivered to the applicators of the one (1) Largeware porcelain enamel spray booth (Booth #1) exhausting through stack S/V 7 and the one (1) Largeware porcelain enamel spray booth (Booth #2) exhausting through the cartridge filter house exhaust shall not exceed 26,864 tons per twelve (12) consecutive month period, with compliance determined at the end of each month, based on a spray coating transfer efficiency of 85% and 99% control efficiency of each of the water curtain and the cartridge filter house.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	Solids Input This Month (tons)	Solids Input Previous 11 Months (tons)	12 Month Total Solids Input (tons)
Month 1			
Month 2			
Month 3			

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.
 Deviation has been reported on: _____

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

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and EVANSVILLE EPA**

FESOP Quarterly Report

Source Name: Bootz Manufacturing Company
Source Address: 1400 Park Street, Evansville, Indiana 47710 (Plant 1)
2301 Maryland Street, Evansville, Indiana 47712 (Plant 2)
Mailing Address: P.O. Box 18010, Evansville, Indiana 47719
FESOP No.: F163-17978-00011
Facility: Urea Foam spray booth
Parameter: PM10 emissions
Limit: The solids delivered to the applicators of the Urea Foam spray booth exhausting through S/V 1 shall not exceed 995.72 tons per twelve (12) consecutive month period, with compliance determined at the end of each month, based on a spray coating transfer efficiency of 85% and 90% control efficiency of the dry filters

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	Solids Input This Month (tons)	Solids Input Previous 11 Months (tons)	12 Month Total Solids Input (tons)
Month 1			
Month 2			
Month 3			

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.
Deviation has been reported on: _____

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

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE DATA SECTION
 and EVANSVILLE EPA**

FESOP Quarterly Report

Source Name: Bootz Manufacturing Company
 Source Address: 1400 Park Street, Evansville, Indiana 47710 (Plant 1)
 2301 Maryland Street, Evansville, Indiana 47712 (Plant 2)
 Mailing Address: P.O. Box 18010, Evansville, Indiana 47719
 FESOP No.: F163-17978-00011
 Facility: cover coat spray booth
 Parameter: PM10 emissions
 Limit: The solids delivered to the applicators of the cover coat spray booth exhausting through the cartridge filter house exhaust shall not exceed 251,120 tons per twelve (12) consecutive month period, with compliance determined at the end of each month, based on a spray coating transfer efficiency of 85% and 99.9% control efficiency of the cartridge filter house

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	Solids Input This Month (tons)	Solids Input Previous 11 Months (tons)	12 Month Total Solids Input (tons)
Month 1			
Month 2			
Month 3			

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.
 Deviation has been reported on: _____

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

Attach a signed certification to complete this report.

7. Condition D.1.6 has been revised as follows for clarity:

D.1.6 Particulate Control

- (a) Pursuant to T163-17978-00011, issued on June 16, 1999, and in order to comply with conditions D.1.1, D.1.2, and D.1.3,:
- (1) the water wash spray curtain, cartridge filters and dry filters for particulate control shall be in operation and control emissions from the two (2) Largeware porcelain enamel spray booths and the Urea Foam spray booth **Booth #1** at all times that these facilities are **Booth #1** is in operation.
 - (2) the cartridge filter house for particulate control shall be in operation and control emissions from **Booth #2** at all times that **Booth #2** is in operation.
 - (3) the dry filters for particulate control shall be in operation and control emissions from the Urea Foam spray booth at all times that the Urea Foam spray booth is in operation.
- (b) Pursuant to Significant Source Modification No. 163-11340-00011, issued on November 15, 1999, and in order to comply with conditions D.1.1, D.1.2, and D.1.3, the cartridge filters **house** for particulate control shall be in operation and control emissions from the cover coat spray booth at all times that the cover coat spray booth is in operation.

8. Condition D.1.7 has been revised to include more specific compliance monitoring for the water curtain controlling emissions from Largeware porcelain enamel Booth #1 as follows:

D.1.7 Monitoring

- (a) **Daily inspections shall be performed to verify the water level for the water curtain for the one (1) Largeware porcelain enamel Booth #1 meets the manufacturer's suggested level. To monitor the performance of the water curtain, weekly visual inspections shall be made of the water curtain to identify any gaps or other disruptions in water flow and to verify that the water is kept free of solids and floating material that reduces the capture efficiency of the water curtain. Additionally, weekly observations shall be made of the overspray from the surface coating booth stack (S/V 7) while the Largeware porcelain enamel Booth #1 is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.**
- ~~(a)~~(b) Daily inspections shall be performed to verify the placement, integrity and particle loading of the dry filters, the water wash spray and the cartridge filters controlling emissions from the two (2) **one (1)** Largeware porcelain enamel spray booths (**Booth #2**), the Urea Foam spray booth, and the cover coat spray booth. To monitor the performance of the dry filters and the water wash spray controlling emissions from the one (1) Largeware porcelain enamel spray booth and the Urea Foam spray booth which exhausts to the atmosphere, weekly observations shall be made of the overspray from the surface coating booth stacks (S/V 1 and S/V 7) while ~~one or more of the booths are~~ **is** in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

- (b)(c) Monthly inspections shall be performed of the coating emissions from ~~the~~ stacks **S/V 1 and S/V 7** and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- (e)(d) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

On February 11, 2005, Michael R. Cira of Bruce Carter Associates, L.L.C. submitted comments on behalf of Bootz Manufacturing Company on the proposed permit. As stated by Mr. Cira, the comments were made in response to the comments made by the Evansville EPA (EEPA) on the proposed permit. The comments and associated responses are as follows:

Comment #1

Sections A.1 and A.2 - Zip code changes are required for the Park Street Facility (47710) and the Maryland Street Facility (47712).

Response #1

The changes to the permit as a result of the zip code changes are shown under item 1 of the changes made as a result of the comments from EEPA above.

Comment #2

Section A.3(a) - We do not believe that there is anything to be gained in listing manufacturer names or model names in the equipment listings. The following description would be adequate to identify the differentiation between the two (2) Largeware Porcelain Enamel booths. In the EEPA suggested revision, Booth #2 is referred to as the "Top Coat" booth. It is actually known as the "Ground Coat" booth. The EEPA suggested wording also states that the filtered air from Booth 2 returns to the booth. The filtered air is exhausted inside the building. We suggest the following wording:

"Two (2) Largeware Porcelain Enamel booths, both constructed prior to 1977, which are capable of coating 165 units per hour. Booth 1 is equipped with a water curtain for PM control, exhausting to the outside air via Stack S/V 7. Booth 2 (also known as the groundcoat booth) is equipped with cartridge filters for PM control, exhausting inside the building.

Response #2

After further investigation by EEPA, it was determined that the cartridge filter house controlling emissions from Booth #2 does exhaust inside the building and not directly back into the booth. Also, IDEM typically does not identify control equipment manufacturers in permits. The descriptions are not federally enforceable and IDEM does not want to have the specific manufacturer names in equipment descriptions so that if a control device is changed out, and a permit approval is not required for the change, the permit does not have to be amended just to change the manufacturer name. See item 2 under the changes made as a result of the comments from EEPA above for changes to the equipment descriptions in section A.3.

Comment #3

Section A.3(d) – We disagree that manufacturer information is required in equipment descriptions. We believe that the equipment description contained in A.3(d) is sufficient to identify the process and associated control equipment. Additionally, the filtered air exhausts inside the facility, not inside the booth.

Response #3

IDEM agrees that the manufacturer name is not required in the equipment description. However, some minor changes were made to the equipment description in section A.3(d) as shown in item 2 under the changes made as a result of the comments from EEPA above.

Comment #4

Section A.4(a)(3) - The two natural gas bake-off ovens are incorrectly listed as both being 3.0 MMBtu/hr. One oven is 1.5 MMBtu/hr, the other is 3.0 MMBtu/hr.

Response #4

See item 3 under the changes made as a result of the comments from EEPA above for changes to the equipment descriptions in section A.4.

Comment #5

Section C.1 - We agree with EEPA that the numbering format should remain consistent, with the indicators (1) and (2) being replaced with (a) and (b).

Response #5

See item 4 under the changes made as a result of the comments from EEPA above for changes to condition C.1.

Comment #6

Section D.1(a) – We disagree that manufacturer information is required in equipment descriptions. We believe that the equipment description contained in D.1(a) is sufficient to identify the process, associated control equipment, and PM limitations.

Response #6

IDEM agrees that the manufacturer name is not required in the equipment description. However, some changes were made to the equipment description in section D.1(a) as shown in item 2 under the changes made as a result of the comments from EEPA above.

Comment #7

Section D.1.1(a) – The rates are established in the TSD under the State Rule Applicability – Individual facilities (326 IAC 6-1-2(a)). The limit of 0.027 gr/dscf is applied as a ‘less than 0.03 grains per dscf’ number. The facility compliance with the emission limitations can be adequately demonstrated via calculations involving the quantity of coating applied, pounds of solids per gallon of coating applied and transfer efficiency, and therefore, there is no reason to require stack testing.

Response #7

The PM10 emission limit in condition D.1.1 pursuant to 326 IAC 2-8 (FESOP) has been revised to remove the grain loading limit of 0.027 gr/dscf for the spray booths. This is because variability in parameters such as exhaust flow rate and temperature can make compliance with the pound per hour limits difficult. Instead, the input of solids to the spray booths will be limited based on the spray coating transfer efficiency and control device overall control efficiency. Compliance will be demonstrated through record keeping and reporting of the solids input. See item 5 under the changes made as a result of the comments from EEPA above for the revised condition D.1.1.

Comment #8

Section D.1.1(b) – We disagree that manufacturer information is required in equipment descriptions. We believe that the equipment description contained in D.1.1(b) is sufficient to identify the process, associated control equipment, and PM limitations.

Response #8

IDEM agrees that the manufacturer name is not required when identifying control devices in the permit. See item 5 under the changes made as a result of the comments from EEPA above for the revised condition D.1.1.

Comment #9

Section D.1.6 – We disagree that manufacturer information is required in equipment descriptions. We believe that the equipment description contained in D.1.6 is sufficient to identify the process, associated control equipment, and PM limitations. The changes proposed by the EEPA present no improvement in the monitoring of compliance from that which was proposed by IDEM.

Response #10

IDEM agrees that the manufacturer name is not required when identifying control devices in the permit. However, condition D.1.6 was revised for clarity as requested by EEPA. See item 6 under the changes made as a result of the comments from EEPA above for the revised condition D.1.6.

On July 6, 2005, Elizabeth Hill of Bruce Carter Associates, L.L.C. submitted additional comments on behalf of Bootz Manufacturing Company on the proposed permit. The additional comments and associated responses are as follows:

Comment #1

The facility description information for the two (2) Largeware Porcelain Enamel booths should be corrected in the facility description in Sections A and D.1 to read as follows:

Two (2) Largeware Porcelain Enamel booths, identified as Booths #1 and #2, both constructed prior to 1977, which are capable of coating ~~465~~ **210** units per hour. Booth #1 is equipped with a water curtain to control the Particulate Matter (PM) overspray and exhausts to the outside air via stack S/V 7. Booth #2 (also known as the groundcoat booth) is equipped with a cartridge filter house to control the PM overspray emissions which is exhausted inside the building;

Response #1

The facility description for the Largeware Porcelain Enamel booths in sections A.3 and D.1 is revised as follows:

- (a) Two (2) Largeware Porcelain Enamel booths, identified as Booths #1 and #2, both constructed prior to 1977, which are capable of coating ~~465~~ **210** units per hour. Booth #1 is equipped with a water curtain to control the Particulate Matter (PM) overspray and exhausts to the outside air via stack S/V 7. Booth #2 (also known as the groundcoat booth) is equipped with a cartridge filter house to control the PM overspray emissions which is exhausted inside the building;

The emission calculation spreadsheet in Appendix A of the Technical Support Document has been updated to reflect the maximum throughput of 210 units per hour for the Largeware booths. This does not affect any of the FESOP limits for these booths.

Comment #2

Condition D.1.8(a)(1) Record Keeping Requirements require tracking of solids content of each coating material and solvent used. D.1.8(a)(2) Record Keeping Requirements require tracking of amount of coating material and solvent less water used on a monthly basis and also requires the solvent usage records to differentiate between those added to coatings and those used as clean up solvents. Bootz does not use any solvents in this process and therefore are requesting that the language be corrected to reflect this. Bootz is also requesting that the requirement to track the weight of PM10 emitted for each compliance period be removed. The source will track the amount of material used as required for both recordkeeping and reporting requirements. The following is suggested language to incorporate these changes:

D.1.8 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1(a), the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the solids usage limits and the PM10 emission limits established in Condition D.1.1(a). Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
- (1) The solids content of each coating material ~~and solvent~~ used.
- (2) The amount of coating material ~~and solvent~~ less water used on a monthly basis.
- (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
- ~~(B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;~~
- (3) The total solids usage for each month; ~~and~~
- ~~(4) The weight of PM10 emitted for each compliance period.~~
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Response #2

Since Bootz does not use any additional solvents in the coating operations references to solvent usage will be removed from condition D.1.8. Also, because the solids usage limits were calculated so that the equivalent PM10 emissions would be limited to comply with 326 IAC 2-8 (FESOP), record keeping and reporting of solids usage alone will be sufficient to demonstrate compliance. Condition D.1.8 is revised as follows:

D.1.8 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1(a), the Permittee shall maintain records in accordance with (1) through ~~(4)~~**(3)** below. Records maintained for (1) through ~~(4)~~**(3)** shall be taken monthly and shall be complete and sufficient to establish compliance with the solids usage limits and the PM10 emission limits established in Condition D.1.1(a). Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
- (1) The solids content of each coating material ~~and solvent~~ used.
- (2) The amount of coating material ~~and solvent~~ less water used on a monthly basis.
- ~~(A)~~ Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
- ~~(B)~~ ~~Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;~~
- (3) The total solids usage, **in tons**, for each month; ~~and~~
- ~~(4)~~ ~~The weight of PM10 emitted for each compliance period.~~
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Upon further review IDEM, OAQ has made the following changes to the FESOP (additions in bold, deletions in ~~strikeout~~):

1. Condition B.22 has been revised to include the correct phone number for the Billing, Licensing and Training Section as follows:

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, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-~~4320~~ **4230** (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

2. Vanderburgh County has been designated as non-attainment for PM 2.5 in 70 FR 943 dated January 5, 2005. According to the April 5, 2005 EPA memo titled "Implementation of New Source Review Requirements in PM2.5 Nonattainment Areas" authored by Steve Page, Director of OAQPS, until EPA promulgates the PM 2.5 major NSR regulations, states should assume that a major stationary source's PM10 emissions represent PM2.5 emissions. IDEM will use the PM10 nonattainment major NSR program as a surrogate to address the requirements of nonattainment major NSR for the PM2.5 NAAQS. A major source in a nonattainment area is a source that emits or has the potential to emit 100 tons per year of any regulated pollutant. Bootz Manufacturing Company has a limited potential to emit of PM10 below 100 tons per year. Therefore, assuming that PM10 emissions represent PM2.5 emissions, 326 IAC 2-3 (Emission Offset) does not apply.

The following has been added to A.1 General Information:

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

The Permittee owns and operates a stationary fabricated metal bathtub, sink, and lavatory manufacturing operation.

Authorized individual:	Thomas Bootz, Vice President of Engineering
Source Address:	1400 Park Street, Evansville, Indiana 47710 (Plant #1) 2301 Maryland Street, Evansville, Indiana 47712 (Plant #2)
Mailing Address:	P.O. Box 18010, Evansville, Indiana 47719
General Source Phone:	812-429-2240
SIC Code:	3469
Source Location Status:	Vanderburgh Nonattainment for the 8-hour ozone standard Nonattainment for PM2.5 Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD and Emission Offset rules; Minor Source, Section 112 of the Clean Air Act

Although the TSD itself will not be revised as it is a historical document and the TSD was correct at the time of public notice, the following is being provided to show how the county attainment status has been affected as a result of the PM2.5 standard designations. The county attainment status regarding other pollutants remains unchanged; therefore will not be shown below other than in the table.

County Attainment Status

The source is located in Vanderburgh County.

Pollutant	Status
PM2.5	Nonattainment
PM-10	Attainment
SO ₂	Attainment
NO ₂	Attainment
1-hour Ozone	Attainment
8-hour Ozone	Basic nonattainment
CO	Attainment
Lead	Attainment

- (a) U.S.EPA in Federal Register Notice 70 FR 943 dated January 5, 2005 has designated Vanderburgh County as nonattainment for PM2.5. On March 7, 2005 the Indiana Attorney General's Office on behalf of IDEM filed a law suit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of non-attainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for violation of the Clean Air Act, the OAQ is following the U.S. EPA's guidance to regulate PM10 emissions as surrogate for PM2.5 emissions pursuant to the Non-attainment New Source Review requirements.

Appendix A: Emission Calculations

Company Name: Bootz Manufacturing Company
Address City IN Zip: 1400 Park Street, Evansville, Indiana 47710 (Plant #1)
 2301 Maryland Street, Evansville, Indiana 47712 (Plant #2)
Operation Permit No.: F163-17978
Plt ID: 163-00011
Reviewer: Trish Earls

Total Potential To Emit (tons/year)				
Emissions Generating Activity				
Pollutant	Surface Coating	Natural Gas Combustion	Welding and Adhesive Usage	TOTAL
PM	1558.06	0.34	0.05	1558.45
PM10	1558.06	1.37	0.05	1559.48
SO2	0.00	0.11	0.00	0.11
NOx	0.00	18.07	0.00	18.07
VOC	0.00	0.99	3.15	4.14
CO	0.00	15.17	0.00	15.17
total HAPs	negl.	0.34	0.29	0.63
worst case single HAP	negl.	(Hexane) 0.33	(Manganese) 0.29	(Hexane) 0.33
Total emissions based on rated capacities at 8,760 hours/year.				
**For the purposes of determining Title V applicability, PM10 (not PM) is the regulated pollutant in consideration				
Controlled Emissions (tons/year)				
Emissions Generating Activity				
Pollutant	Surface Coating	Natural Gas Combustion	Welding and Adhesive Usage	TOTAL
PM	20.63	0.34	0.05	21.02
PM10	20.63	1.37	0.05	22.05
SO2	0.00	0.11	0.00	0.11
NOx	0.00	18.07	0.00	18.07
VOC	0.00	0.99	3.15	4.14
CO	0.00	15.17	0.00	15.17
total HAPs	negl.	0.34	0.29	0.63
worst case single HAP	negl.	(Hexane) 0.33	(Manganese) 0.29	(Hexane) 0.33
Total emissions based on rated capacities at 8,760 hours/year.				
**For the purposes of determining Title V applicability, PM10 (not PM) is the regulated pollutant in consideration				

**Appendix A: Emission Calculations
VOC and Particulate
From Surface Coating Operations**

Company Name: Bootz Manufacturing Company
Address City IN Zip: 1400 Park Street, Evansville, Indiana 47710 (Plant #1)
 2301 Maryland Street, Evansville, Indiana 47712 (Plant #2)
Operation Permit No.: F163-17978
Plt ID: 163-00011
Reviewer: Trish Earls

Potential Uncontrolled Emissions:																		
Material (as applied)	Process	Density (Lb/Gal)	Weight % Volatile (H2O& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency	
PLANT #2																		
Syniron Urea	Urea Foam Spray Booth	9.20	0.00%	0.00%	0.00%	0.00%	100.00%	3.270	7.00	0.0	0.00	0.00	0.00	0.00	138.36	0.00	85.00%	
Frit	Largeware Booths	14.50	30.60%	30.60%	0.00%	30.60%	46.80%	0.430	210.00	0.0	0.00	0.00	0.00	0.00	597.01	0.00	85.00%	
Frit	Cover Coat Spray Booth	14.19	26.00%	26.00%	0.00%	53.00%	47.00%	0.450	265.00	0.0	0.00	0.00	0.00	0.00	822.69	0.00	85.00%	
Adhesive Usage																		
M3001FB Basin Mastic Adhesive	Insignificant Activity	10.77	15.41%	0.00%	15.41%	0.00%	71.60%	0.062	7.00	1.7	1.66	0.72	17.29	3.15	0.00	2.32	99.99%	
H2315-02 Hot Melt Adhesive	Insignificant Activity	7.83	0.00%	0.00%	0.00%	0.00%	100.00%	1.000	48.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	100.00%	
Total State Potential Emissions (FOR PLANT #2):												0.72	17.29	3.15	1558.06			
Potential Controlled Emissions:																		
										Material Usage Limitation	Control Efficiency:		Controlled VOC lbs per Hour	Controlled VOC lbs per Day	Controlled VOC tons per Year	Controlled PM tons/yr		
										N/A	VOC	PM						
Total Federal Potential Emissions Urea Foam Spray Booth:										N/A	0.00%	90.00%	0.00	0.00	0.00	13.84		
Total Federal Potential Emissions Largeware Booths:										N/A	0.00%	99.00%	0.00	0.00	0.00	5.97		
Total Federal Potential Emissions Cover Coat Spray Booth:										N/A	0.00%	99.90%	0.00	0.00	0.00	0.82		
Total Federal Potential Emissions Insignificant Activities:										N/A	0.00%	90.00%	0.72	17.29	3.15	0.00		
Total Federal Potential Emissions (FOR PLANT #2):													0.72	17.29	3.15	20.63		

Methodology:
 Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
 Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
 Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
 Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
 Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
 Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)
 Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids) * Transfer Efficiency
 Total = Worst Coating + Sum of all solvents used
 Controlled emission rate = uncontrolled emission rate * (1 - control efficiency)
 Note: Adhesives do not contain HAPs.

Appendix A: Emission Calculations
HAP Emissions - Potential to Emit

Company Name: Bootz Manufacturing Company
Address City IN Zip: 1400 Park Street, Evansville, Indiana 47710 (Plant #1)
 2301 Maryland Street, Evansville, Indiana 47712 (Plant #2)
Operation Permit No.: F163-17978
Plt ID: 163-00011
Reviewer: Trish Earls

PLANT #2

Using the Society of Plastics Industry method of MDI estimations (taken from SMF # 163-8330-00021)
 Methylene Diphenyl Diisocyanate (MDI) from Syniron Urea:

$$W = [25.4 * Pt * Mt * (u^{0.78}) * A]/T$$

where:

W = evaporation rate of MDI (gram/sec) = 6.75E-03 gr/sec
 Pt = liquid vapor pressure (atm.) = 1.80E-04 atm.
 Mt = average molecular wt. = 250 for MDI
 T = temp. (Kelvin) = 343 Kelvin
 u = airflow (m/sec.) = 0.66 m/sec
 A = area exposed (sq. meters) = 2.80 ft²

Given: fan capacity = 19,000 cfm
 Area of booth = 145.7 ft²

$$u = \frac{19,000 \text{ cfm} * 1 \text{ min}}{145.7 \text{ ft}^2 * 60 \text{ sec}} = \frac{316.7 \text{ ft}^3}{8742 \text{ ft}^3} = 0.362 \text{ ft/sec} = 0.110 \text{ m/sec}$$

Temperature T = 158 deg. F = 343 deg. K

Vapor Pressure of MDI at 70 deg. C = 1.40E-01 mm Hg

$$Pt = \frac{1.40E-01 \text{ mm Hg}}{760} = 1.84E-04 \text{ atm}$$

$$\text{Area Exposed} = \frac{30.5 \text{ ft}^2 * 1 \text{ m}^2}{10.7 \text{ ft}^2} = 2.85 \text{ ft}^2$$

$$\text{Bath Tub Mold: MDI per mold/tub} = (6.75 * 10^{-3} \text{ gr/sec}) * (10 \text{ sec/mold}) * (1 \text{ lb}/454 \text{ gr})$$

$$= 1.50E-06 \text{ lb/tub}$$

$$\text{Total MDI Emission} = (1.5 * 10^{-6} \text{ lb/tub}) * (40 \text{ tubs/day}) * (365 \text{ days/yr}) * (1 \text{ ton}/2000 \text{ lb})$$

$$= 1.09E-05 \text{ ton/yr}$$

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler**

Company Name: Bootz Manufacturing Company
Address City IN Zip: 1400 Park Street, Evansville, Indiana 47710 (Plant #1)
 2301 Maryland Street, Evansville, Indiana 47712 (Plant #2)
Operation Permit No.: F163-17978
Pit ID: 163-00011
Reviewer: Trish Earls

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

6.70	Boiler	58.6
7.50	Dry-off ovens	65.7
11.70	Largeware Furnace	102.5
3.00	Parts Washer	26.3
12.35	Porcelain Furnace	108.2

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Boiler Potential Emission in tons/yr	0.06	0.22	0.02	2.93	0.16	2.46
Ovens Potential Emissions in tons	0.06	0.25	0.02	3.29	0.18	2.76
Largeware Furn. Potential Emissions in tons	0.10	0.39	0.03	5.12	0.28	4.30
Parts Washer Potential Emissions in tons	0.02	0.10	0.01	1.31	0.07	1.10
Porcelain Furn. Potential Emissions in tons	0.10	0.41	0.03	5.41	0.30	4.54
Total Emissions in tons	0.34	1.37	0.11	18.07	0.99	15.17

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

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

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

See page 5 for HAPs emissions calculations.

**Appendix A: Emissions Calculations
 Natural Gas Combustion Only
 MM BTU/HR <100
 Small Industrial Boiler
 HAPs Emissions**

Company Name: Bootz Manufacturing Company
Address City IN Zip: 1400 Park Street, Evansville, Indiana 47710 (Plant #1)
 2301 Maryland Street, Evansville, Indiana 47712 (Plant #2)
Operation Permit No.: T163-17978
Pit ID: 163-00011
Reviewer: Trish Earls

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	3.8E-04	2.2E-04	1.4E-02	3.3E-01	6.1E-04

HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	9.0E-05	2.0E-04	2.5E-04	6.9E-05	3.8E-04

Methodology is the same as page 4.

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

Appendix A: Emissions Calculations

Welding and Thermal Cutting

Company Name: Bootz Manufacturing Company
Address City IN Zip: 1400 Park Street, Evansville, Indiana 47710 (Plant #1)
 2301 Maryland Street, Evansville, Indiana 47712 (Plant #2)
Operation Permit No.: F163-17978
Plt ID: 163-00011
Reviewer: Trish Earls

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											
Gas Metal Arc Welding	1	2.095	0.0052	0.0318	0.0001	0.0001	0.011	0.067	0.000	0.0002095	0.067
EMISSION TOTALS											
Potential Emissions lbs/hr							0.011	0.067	0.000	0.000	0.067
Potential Emissions lbs/day							0.261	1.599	0.005	0.005	1.609
Potential Emissions tons/year							0.048	0.292	0.001	0.001	0.294

METHODOLOGY

*Emission Factors are values for E70S electrode type.

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 lb

Refer to AP-42, Chapter 12.19 for emission factors for welding.

welding.xls (11/99)

**Appendix A: Emission Calculations
Miscellaneous Information**

Company Name: Bootz Manufacturing Company
Address City IN Zip: 1400 Park Street, Evansville, Indiana 47710 (Plant #1)
 2301 Maryland Street, Evansville, Indiana 47712 (Plant #2)
Operation Permit No.: F163-17978
Pit ID: 163-00011
Reviewer: Trish Earls

326 IAC 6-1-2 (Particulate Emission Limitations) Compliance Calculations

The following calculations determine compliance with 326 IAC 6-1-2, which limits stack emissions from each paint spray booth to 0.03 gr/dscf.

Urea Foam Spray Booth

13.84 ton/yr *	2000 lb/ton *	7000 gr/lb =	0.025 gr/dscf	(will comply)
<hr/>				
525,600 min/yr *	14,749 dscf/min			

Note:

$$\text{SCFM} = 15,000 \text{ acfm} * (460 + 68) / (460 + 77)$$

$$= 14,749 \text{ scfm}$$

Allowable particulate emissions pursuant to 326 IAC 6-1-2 equate to 16.61 tons/year or 3.79 lbs/hr

Largeware Booth #1

4.69 ton/yr *	2000 lb/ton *	7000 gr/lb =	0.008 gr/dscf	(will comply)
<hr/>				
525,600 min/yr *	14,749 dscf/min			

Note:

$$\text{SCFM} = 15,000 \text{ acfm} * (460 + 68) / (460 + 77)$$

$$= 14,749 \text{ scfm}$$

Allowable particulate emissions pursuant to 326 IAC 6-1-2 equate to 16.61 tons/year or 3.79 lbs/hr

Largeware Booth #2

4.69 ton/yr *	2000 lb/ton *	7000 gr/lb =	0.005 gr/dscf	(will comply)
<hr/>				
525,600 min/yr *	25,000 dscf/min			

Note:

$$\text{SCFM} = 25,000 \text{ acfm} * (460 + 68) / (460 + 77)$$

$$= 25,000 \text{ scfm}$$

Allowable particulate emissions pursuant to 326 IAC 6-1-2 equate to 28.16 tons/year or 6.43 lbs/hr

Cover Coat Spray Booth

0.82 ton/yr *	2000 lb/ton *	7000 gr/lb =	0.001 gr/dscf	(will comply)
<hr/>				
525,600 min/yr *	37,156 dscf/min			

Note:

$$\text{SCFM} = 38,000 \text{ acfm} * (460 + 68) / (460 + 80)$$

$$= 37,156 \text{ scfm}$$

Allowable particulate emissions pursuant to 326 IAC 6-1-2 equate to 41.85 tons/year or 9.55 lbs/hr