



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: April 24, 2007
RE: Robus Leather Corporation / 077-23120-00015
FROM: Nisha Sizemore
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 03/23/06



Mitchell E. Daniels, Jr.
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 Commissioner

100 North Senate Avenue
 Indianapolis, Indiana 46204-2251
 (317) 232-8603
 (800) 451-6027
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**FEDERALLY ENFORCEABLE STATE
 OPERATING PERMIT (FESOP)
 OFFICE OF AIR QUALITY**

**Robus Leather Corporation
 1100 W. Hutchinson Lane
 Madison, Indiana 47250**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

| | |
|--|--|
| Operation Permit No.: F077-23120-00015 | |
| Issued by: <i>Nisha Sizemore</i> Nisha Sizemore, Chief Permits Branch Office of Air Quality | Issuance Date: April 24, 2007 Expiration Date: April 24, 2012 |

TABLE OF CONTENTS

| | |
|--|----|
| A. SOURCE SUMMARY | 4 |
| A.1 General Information [326 IAC 2-8-3(b)] | |
| A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)] | |
| A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)] | |
| A.4 FESOP Applicability [326 IAC 2-8-2] | |
| B. GENERAL CONDITIONS | 7 |
| B.1 Definitions [326 IAC 2-8-1] | |
| B.2 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)] | |
| B.3 Term of Conditions [326 IAC 2-1.1-9.5] | |
| B.4 Enforceability [326 IAC 2-8-6] | |
| B.5 Severability [326 IAC 2-8-4(4)] | |
| B.6 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)] | |
| B.7 Duty to Provide Information [326 IAC 2-8-4(5)(E)] | |
| B.8 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)] | |
| B.9 Annual Compliance Certification [326 IAC 2-8-5(a)(1)] | |
| B.10 Compliance Order Issuance [326 IAC 2-8-5(b)] | |
| B.11 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)] | |
| B.12 Emergency Provisions [326 IAC 2-8-12] | |
| B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5] | |
| B.14 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)] | |
| B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)] | |
| B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8] | |
| B.17 Permit Renewal [326 IAC 2-8-3(h)] | |
| B.18 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1] | |
| B.19 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1] | |
| B.20 Source Modification Requirement [326 IAC 2-8-11.1] | |
| B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2] [IC 13-30-3-1] | |
| B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10] | |
| B.23 Annual Fee Payment [326 IAC 2-7-19][326 IAC 2-8-4(6)][326 IAC 2-8-16] [326 IAC 2-1.1-7] | |
| B.24 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314][326 IAC 1-1-6] | |
| C. SOURCE OPERATION CONDITIONS | 16 |
| Emission Limitations and Standards [326 IAC 2-8-4(1)] | |
| C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2] | |
| 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] | |
| C.6 Fugitive Dust Emissions [326 IAC 6-4] | |
| C.7 Asbestos Abatement Projects [326 IAC 14-10][326 IAC 18][40 CFR 61, Subpart M] | |
| Testing Requirements [326 IAC 2-8-4(3)] | |
| C.8 Performance Testing [326 IAC 3-6] | |
| Compliance Requirements [326 IAC 2-1.1-11] | |
| C.9 Compliance Requirements [326 IAC 2-1.1-11] | |

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

- C.10 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]
- C.11 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]
- C.12 Instrument Specifications [326 IAC 2-1.1-11][326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]

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

- C.13 Emergency Reduction Plans [326 IAC 1-5-2][326 IAC 1-5-3]
- C.14 Risk Management Plan [326 IAC 2-8-4][40 CFR 68]
- C.15 Response to Excursions or Exceedances [326 IAC 2-8-4][326 IAC 2-8-5]
- C.16 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.17 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]
- C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)][326 IAC 2-1.1-11]

Stratospheric Ozone Protection

- C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

D.1. EMISSIONS UNIT OPERATION CONDITIONS 23

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

- D.1.1 PM, PM10, and Hazardous Air Pollutant (HAP) Limitations [326 IAC 2-2][326 IAC 2-3][326 IAC 2-8-4]
- D.1.2 Particulate [326 IAC 6-2]
- D.1.3 Particulate [326 IAC 6-3-2]
- D.1.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements

- D.1.5 Particulate Control
- D.1.6 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

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

- D.1.7 Visible Emissions Notations
- D.1.8 Parametric Monitoring
- D.1.9 Broken or Failed Bag Detection
- D.1.10 Monitoring

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

- D.1.11 Record Keeping Requirements

E.1 40 CFR Part 60, Subpart VVV – Standards of Performance for Polymeric Coating of Supporting Substrates Facilities 28

- E.1.1 General Provisions Relating to National Source Performance Standards under 40 CFR Part 60 [326 IAC 12-1][40 CFR Part 60, Subpart A]
- E.1.2 Applicability of Polymeric Coating of Supporting Substrates Facilities NSPS Requirements [40 CFR Part 60, Subpart VVV]
- E.1.3 Polymeric Coating of Supporting Substrates Facilities Requirements [40 CFR Part 60, Subpart VVV][326 IAC 12]
- E.1.4 Deadlines Relating to the Standards of Performance for Polymeric Coating of Supporting Substrates Facilities [40 CFR Part 60, Subpart VVV]

Certification Form 37

Emergency Occurrence Form 38

Quarterly Deviation and Compliance Monitoring Report Form 40

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.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 coated bonded leather manufacturing plant.

| | |
|------------------------------|--|
| Source Address: | 1100 W. Hutchinson Lane, Madison, Indiana 47250 |
| Mailing Address: | 1100 W. Hutchinson Lane, Madison, Indiana 47250 |
| General Source Phone Number: | (812) 273-4183 |
| SIC Code: | 2631 |
| County Location: | Jefferson |
| Source Location Status: | Nonattainment for PM 2.5 standard Attainment for all other criteria pollutants |
| Source Status: | Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories |

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

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

- (a) one (1) bonded leather manufacturing process, constructed in 1970, consisting of three (3) lines with a total maximum capacity of 750 yards of bonded leather sheet/rolls per hour, including the following equipment:
 - (1) three (3) leather scrap storage silos, identified as LS1 through LS3, each constructed in 1970, and other leather scrap storage piles, weigh scales, and transfer equipment;
 - (2) one (1) leather scrap pulping process, constructed in 1970, including equipment for crushing and milling leather scrap, and equipment and vessels for mixing the ground leather with water, binders, dyes, or other additives;
 - (3) three (3) fourdrinier-type wet machines, each constructed in 1970, for draining water from the leather pulp on a continuously moving wire screen to produce a continuous roll of bonded leather, with vacuum suction provided by one (1) centrifugal exhauster, designated as V1, with water vapor exhausted to stack V1;
 - (4) one (1) continuous steam heated drying oven, identified as D1, constructed in 1971, for drying the bonded leather, with water vapor exhausted to stacks 6 through 9;
 - (5) one (1) continuous steam heated drying oven, identified as D2, constructed in 1971, for drying the bonded leather, with water vapor exhausted to stacks 15 through 18;
 - (6) one (1) continuous steam heated drying oven, identified as D3, constructed in 1996, for drying the bonded leather, with water vapor exhausted to stacks 21 through 23;

- (7) one (1) continuous steam heated drying oven, identified as D4, constructed in 1981, for drying the bonded leather, with water vapor exhausted to stack 19;
 - (8) two (2) steam boilers, each burning natural gas as the primary fuel source and No. 2 fuel oil as an alternative fuel, identified as B1 and B2, constructed in 1971 and 1982, respectively, rated at 10 MMBtu/hr and 10.3 MMBtu/hr, and exhausting to stacks C1 and C2, respectively, supplying steam to drying ovens D1 through D4 and the dryers associated with coating lines CL1 and CL2;
 - (9) four (4) buffing machines, each constructed in 1970, with particulate matter emissions controlled by one (1) baghouse, identified as BH1, constructed in 1985, exhausting to the atmosphere. The collected dust is directed to a mixing tank on the inside of the building, where it is turned into a slurry and pumped back to storage tanks for reuse in the pulping process;
 - (10) one (1) calendaring machine, constructed in 1970;
 - (11) one (1) laminator, designated as L1, constructed in 1993;
 - (12) six (6) embossing machines, each constructed in 1993;
 - (13) one (1) cold cleaning parts washer, designated as PW1, constructed in 1970, used to perform non-halogenated organic solvent cleaning of parts and/or tools, utilizing 5 gallons of solvent per year. The cold cleaner is an offline system, batch type, which uses immersion, and is equipped with drain and remote reservoir with insignificant exposure to outside air;
 - (14) four (4) re-roll inspection units, each constructed in 1993;
 - (15) one (1) general building exhaust fan, designated as E1, exhausting to stack E1; and
 - (16) one (1) staking machine, constructed in 1993.
- (b) one (1) bonded leather coating process, constructed in 1993, including the following equipment:
- (1) one (1) coating line, designated as CL1, constructed in 1993, with a maximum capacity of 150 yards of bonded leather sheet per hour, consisting of the following:
 - (A) one (1) roller coater for application of a base coat;
 - (B) one (1) feed end dryer;
 - (C) one (1) spray booth, utilizing low pressure air atomization spray guns to apply either a top coat or an emboss coat, with particulate matter emissions controlled by a dry filter, exhausting to stack 1A;
 - (D) one (1) spray booth, utilizing low pressure air atomization spray guns to apply either a top coat or an emboss coat, with particulate matter emissions controlled by a dry filter, exhausting to stack 2A; with additional flash off vapor emissions exhausted to stack 2B; stack 2B has no potential to emit particulate matter; and
 - (E) one (1) wind up dryer; with vapor emissions exhausted to stack 4A. Stack 4A has no potential to emit particulate matter.

- (2) one (1) coating line, designated as CL2, constructed in 1993, with a maximum capacity of 150 yards of bonded leather sheet per hour, consisting of the following:
 - (A) one (1) roller coater for application of a base coat;
 - (B) one (1) feed end dryer;
 - (C) one (1) spray booth, utilizing High Volume Low Pressure (HVLV) spray guns to apply either a top coat or an emboss coat, with particulate matter emissions controlled by a dry filter, exhausting to stack 3A; with additional flash off vapor emissions exhausted to stack 3B; stack 3B has no potential to emit particulate matter; and
 - (D) one (1) wind up dryer; with vapor emissions exhausted to stack 5A. Stack 5A has no potential to emit particulate matter.

Under the NSPS for Polymeric Coating of Supporting Substrates Facilities (40 CFR 60, Subpart VVV), the coating lines CL1 and CL2 and any onsite coating mix preparation are considered an affected facility.

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

This stationary source also includes the following insignificant activities:

- (a) storage and use of lubricating oils, hydraulic oils, machining oils, and/or machining fluids (including coolants);
- (b) storage and use of binders, dyes, oils, or other additives;

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

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

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

- (a) This permit, F077-23120-00015, 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 of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

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

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

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

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

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

B.5 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

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

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U.S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

- (a) 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.9 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. 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 no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.10 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.11 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][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 46204-2251

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

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

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

- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

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

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

The notification which shall be submitted by the Permittee does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
 - (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
 - (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
 - (g) Operations may continue during an emergency only if the following conditions are met:

- (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

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

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

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

- (a) All terms and conditions of permits established prior to F077-23120-00015 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted
- (b) All previous registrations and permits are superseded by this permit.

B.14 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.15 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 Provisions), 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 46204-2251

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 an "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.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
- (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:
- (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

- (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.18 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 46204-2251

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d) without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
 - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b) through (d). The Permittee shall make such records available, upon reasonable request, for public review.

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

- (b) **Emission Trades [326 IAC 2-8-15(c)]**
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(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.20 Source Modification 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.21 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 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 46204-2251

The application which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19][326 IAC 2-8-4(6)][326 IAC 2-8-16][326 IAC 2-1.1-7]

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

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period.
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) The 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. This limitation shall make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) not applicable.

(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 forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

C.4 Open Burning [326 IAC 4-1][IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.5 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 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 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 46204-2251

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

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

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

C.8 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 46204-2251

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

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 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.10 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 ninety (90) 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 ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

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

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

C.11 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.

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

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

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

C.13 Emergency Reduction Plans [326 IAC 1-5-2][326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

within ninety (90) days after the date of issuance of this permit.

The ERP does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.14 Risk Management Plan [326 IAC 2-8-4][40 CFR 68]

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

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

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or

- (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
 - (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

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

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall 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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)][326 IAC 2-1.1-11]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. 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 an "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 Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

- (d) 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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

- (f) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

Stratospheric Ozone Protection

C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

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

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) one (1) bonded leather manufacturing process, constructed in 1970, consisting of three (3) lines with a total maximum capacity of 750 yards of bonded leather sheet/rolls per hour, including the following equipment:
- (1) three (3) leather scrap storage silos, identified as LS1 through LS3, each constructed in 1970, and other leather scrap storage piles, weigh scales, and transfer equipment;
 - (2) one (1) leather scrap pulping process, constructed in 1970, including equipment for crushing and milling leather scrap, and equipment and vessels for mixing the ground leather with water, binders, dyes, or other additives;
 - (3) three (3) fourdrinier-type wet machines, each constructed in 1970, for draining water from the leather pulp on a continuously moving wire screen to produce a continuous roll of bonded leather, with vacuum suction provided by one (1) centrifugal exhauster, designated as V1, with water vapor exhausted to stack V1;
 - (4) one (1) continuous steam heated drying oven, identified as D1, constructed in 1971, for drying the bonded leather, with water vapor exhausted to stacks 6 through 9;
 - (5) one (1) continuous steam heated drying oven, identified as D2, constructed in 1971, for drying the bonded leather, with water vapor exhausted to stacks 15 through 18;
 - (6) one (1) continuous steam heated drying oven, identified as D3, constructed in 1996, for drying the bonded leather, with water vapor exhausted to stacks 21 through 23;
 - (7) one (1) continuous steam heated drying oven, identified as D4, constructed in 1981, for drying the bonded leather, with water vapor exhausted to stack 19;
 - (8) two (2) steam boilers, each burning natural gas as the primary fuel source and No. 2 fuel oil as an alternative fuel, identified as B1 and B2, constructed in 1971 and 1982, respectively, rated at 10 MMBtu/hr and 10.3 MMBtu/hr, and exhausting to stacks C1 and C2, respectively, supplying steam to drying ovens D1 through D4 and the dryers associated with coating lines CL1 and CL2;
 - (9) four (4) buffing machines, each constructed in 1970, with particulate matter emissions controlled by one (1) baghouse, identified as BH1, constructed in 1985, exhausting to the atmosphere. The collected dust is directed to a mixing tank on the inside of the building, where it is turned into a slurry and pumped back to storage tanks for reuse in the pulping process;
 - (10) one (1) calendaring machine, constructed in 1970;
 - (11) one (1) laminator, designated as L1, constructed in 1993;
 - (12) six (6) embossing machines, each constructed in 1993;
 - (13) one (1) cold cleaning parts washer, designated as PW1, constructed in 1970, used to perform non-halogenated organic solvent cleaning of parts and/or tools, utilizing 5 gallons of solvent per year. The cold cleaner is an offline system, batch type, which uses immersion, and is equipped with drain and remote reservoir with insignificant exposure to outside air;

Emissions Unit Description: continued

- (14) four (4) re-roll inspection units, each constructed in 1993;
 - (15) one (1) general building exhaust fan, designated as E1, exhausting to stack E1; and
 - (16) one (1) staking machine, constructed in 1993.
- (b) one (1) bonded leather coating process, constructed in 1993, including the following equipment:
- (1) one (1) coating line, designated as CL1, constructed in 1993, with a maximum capacity of 150 yards of bonded leather sheet per hour, consisting of the following:
 - (A) one (1) roller coater for application of a base coat;
 - (B) one (1) feed end dryer;
 - (C) one (1) spray booth, utilizing low pressure air atomization spray guns to apply either a top coat or an emboss coat, with particulate matter emissions controlled by a dry filter, exhausting to stack 1A;
 - (D) one (1) spray booth, utilizing low pressure air atomization spray guns to apply either a top coat or an emboss coat, with particulate matter emissions controlled by a dry filter, exhausting to stack 2A; with additional flash off vapor emissions exhausted to stack 2B; stack 2B has no potential to emit particulate matter; and
 - (E) one (1) wind up dryer; with vapor emissions exhausted to stack 4A. Stack 4A has no potential to emit particulate matter.
 - (2) one (1) coating line, designated as CL2, constructed in 1993, with a maximum capacity of 150 yards of bonded leather sheet per hour, consisting of the following:
 - (A) one (1) roller coater for application of a base coat;
 - (B) one (1) feed end dryer;
 - (C) one (1) spray booth, utilizing High Volume Low Pressure (HVLP) spray guns to apply either a top coat or an emboss coat, with particulate matter emissions controlled by a dry filter, exhausting to stack 3A; with additional flash off vapor emissions exhausted to stack 3B; stack 3B has no potential to emit particulate matter; and
 - (D) one (1) wind up dryer; with vapor emissions exhausted to stack 5A. Stack 5A has no potential to emit particulate matter.
- Under the NSPS for Polymeric Coating of Supporting Substrates Facilities (40 CFR 60, Subpart VVV), the coating lines CL1 and CL2 and any onsite coating mix preparation are considered an affected facility.
- (c) Insignificant activities consisting of the following:
- (1) storage and use of lubricating oils, hydraulic oils, machining oils, and/or machining fluids (including coolants); and
 - (2) storage and use of binders, dyes, oils, or other additives.

(The information describing the processes 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 PM, PM10, and Hazardous Air Pollutant (HAP) Limitations [326 IAC 2-2][326 IAC 2-3] [326 IAC 2-8-4]

- (a) The total potential to emit particulate matter (PM) from the four (4) buffing machines shall not exceed 44.75 pounds per hour.

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

- (b) The total potential to emit PM10 from the four (4) buffing machines shall not exceed 10.50 pounds per hour

Compliance with this limit combined with the potential PM10 emissions from all other emission units at this source will limit the source-wide total potential to emit of PM10 to less than 100 tons per 12 consecutive month period and will render 326 IAC 2-3 (Emission Offset) and 326 IAC 2-7 (Part 70 Permits) not applicable.

- (c) The total potential to emit chromium from the four (4) buffing machines shall not exceed 0.80 pounds per hour.

Compliance with these limits combined with the potential HAP emissions from all other emission units at this source will limit the source-wide total potential to emit any single HAP to less than ten (10) tons per 12 consecutive month period and total HAPs to less than twenty-five (25) tons per 12 consecutive month period and will render 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants) and 326 IAC 2-7 (Part 70 Permits) not applicable.

D.1.2 Particulate [326 IAC 6-2]

- (a) Pursuant to 326 IAC 6-2-3(d) (Particulate Emission Limitations for Sources of Indirect Heating), the particulate matter emissions from the boiler B1 shall not exceed 0.8 pounds per million British thermal unit.

- (b) Pursuant to 326 IAC 6-2-3(e) (Particulate Emission Limitations for Sources of Indirect Heating), the particulate matter emissions from the boiler B2 shall not exceed 0.6 pounds per million British thermal unit.

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

- (a) Pursuant to 326 IAC 6-3-2(d) (Particulate Emission Limitations for Manufacturing Processes), particulate from each of the coating lines (CL1 and CL2) shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emissions from each of the buffing machines shall not exceed 3.43 pounds per hour based on a process weight rate equal to 0.77 tons of bonded leather per hour.

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

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

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

D.1.4 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 coating lines (CL1 and CL2), the four (4) buffing machines, and any control devices.

Compliance Determination Requirements

D.1.5 Particulate Control

- (a) In order to comply with Conditions D.1.1 and D.1.3(b), baghouse BH1 for particulate control shall be in operation and control emissions from the buffing machines at all times that the buffing machines are in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.1.6 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

In order to demonstrate compliance with Conditions D.1.1 and D.1.3(b), the Permittee shall perform PM, PM10, and chromium testing for baghouse BH1 within 180 days after issuance of this permit, utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing. PM-10 includes filterable and condensable PM-10.

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

D.1.7 Visible Emissions Notations

- (a) Visible emission notations of the baghouse stack exhaust shall be performed once per day during normal daylight operations. A trained employee or a trained contractor shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee or contractor is a person who has worked or trained at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.8 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouse used in conjunction with the buffing machines, at least once per day when these units are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 to 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.1.9 Broken or Failed Bag Detection

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

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

D.1.10 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the dry particulate filters controlling each of the coating lines (CL1 and CL2). To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the coating lines (CL1 and CL2) stacks (1A, 2A, 3A) while one or more of the facilities are in operation. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, 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. When there is a noticeable change in overspray emissions, or when evidence of overspray emissions is observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.1.11 Record Keeping Requirements

- (a) To document compliance with Condition D.1.7, the Permittee shall maintain a daily record of visible emission notations of baghouse BH1 stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the process did not operate that day).
- (b) To document compliance with Condition D.1.8, the Permittee shall maintain a daily record of the pressure drop across baghouse BH1. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the process did not operate that day).
- (c) To document compliance with Condition D.1.10, the Permittee shall maintain a log of weekly overspray observations, and daily and monthly inspections.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION E.1 40 CFR Part 60, Subpart VVV – Standards of Performance for Polymeric Coating of Supporting Substrates Facilities

Emissions Unit Description:

- (b) one (1) bonded leather coating process, constructed in 1993, including the following equipment:
 - (1) one (1) coating line, designated as CL1, constructed in 1993, with a maximum capacity of 150 yards of bonded leather sheet per hour, consisting of the following:
 - (A) one (1) roller coater for application of a base coat;
 - (B) one (1) feed end dryer;
 - (C) one (1) spray booth, utilizing low pressure air atomization spray guns to apply either a top coat or an emboss coat, with particulate matter emissions controlled by a dry filter, exhausting to stack 1A;
 - (D) one (1) spray booth, utilizing low pressure air atomization spray guns to apply either a top coat or an emboss coat, with particulate matter emissions controlled by a dry filter, exhausting to stack 2A; with additional flash off vapor emissions exhausted to stack 2B; stack 2B has no potential to emit particulate matter; and
 - (E) one (1) wind up dryer; with vapor emissions exhausted to stack 4A. Stack 4A has no potential to emit particulate matter.
 - (2) one (1) coating line, designated as CL2, constructed in 1993, with a maximum capacity of 150 yards of bonded leather sheet per hour, consisting of the following:
 - (A) one (1) roller coater for application of a base coat;
 - (B) one (1) feed end dryer;
 - (C) one (1) spray booth, utilizing High Volume Low Pressure (HVLV) spray guns to apply either a top coat or an emboss coat, with particulate matter emissions controlled by a dry filter, exhausting to stack 3A; with additional flash off vapor emissions exhausted to stack 3B; stack 3B has no potential to emit particulate matter; and
 - (D) one (1) wind up dryer; with vapor emissions exhausted to stack 5A. Stack 5A has no potential to emit particulate matter.

Under the NSPS for Polymeric Coating of Supporting Substrates Facilities (40 CFR 60, Subpart VVV), the coating lines CL1 and CL2 and any onsite coating mix preparation are considered an affected facility.

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

E.1.1 General Provisions Relating to National Source Performance Standards under 40 CFR Part 60 [326 IAC 12-1][40 CFR Part 60, Subpart A]

- (a) Pursuant to 40 CFR Part 60, Subpart VVV, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1-1, for coating lines CL1 and CL2 and any onsite coating mix preparation at this source.
- (b) The Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch – Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

E.1.2 Applicability of Polymeric Coating of Supporting Substrates Facilities NSPS Requirements
[40 CFR Part 60, Subpart VVV]

The provisions of 40 CFR Part 60, Subpart VVV (Standards of Performance for Polymeric Coating of Supporting Substrates Facilities) apply to coating lines CL1 and CL2 and any onsite coating mix preparation at this source. A copy of this rule is available on the US EPA Website.

E.1.3 Polymeric Coating of Supporting Substrates Facilities Requirements
[40 CFR Part 60, Subpart VVV][326 IAC 12]

Pursuant to 40 CFR 60.740, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart VVV, which are incorporated by reference as 326 IAC 12, for coating lines CL1 and CL2 and any onsite coating mix preparation at this source immediately upon startup as specified below:

§ 60.740 Applicability and designation of affected facility.

(a) The affected facility to which the provisions of this subpart apply is each coating operation and any onsite coating mix preparation equipment used to prepare coatings for the polymeric coating of supporting substrates.

(b) Any affected facility for which the amount of VOC used is less than 95 Mg per 12-month period is subject only to the requirements of §§60.744(b), 60.747(b), and 60.747(c). If the amount of VOC used is 95 Mg or greater per 12-month period, the facility is subject to all the requirements of this subpart. Once a facility has become subject to the requirements of this subpart, it will remain subject to those requirements regardless of changes in annual VOC use.

(c) This subpart applies to any affected facility for which construction, modification, or reconstruction begins after April 30, 1987, except for the facilities specified in paragraph (d) of this section.

(d) This subpart does not apply to the following:

(1) Coating mix preparation equipment used to manufacture coatings at one plant for shipment to another plant for use in an affected facility (coating operation) or for sale to another company for use in an affected facility (coating operation);

(2) Coating mix preparation equipment or coating operations during those times they are used to prepare or apply waterborne coatings so long as the VOC content of the coating does not exceed 9 percent by weight of the volatile fraction;

(3) Web coating operations that print an image on the surface of the substrate or any coating applied on the same printing line that applies the image.

§ 60.741 Definitions, symbols, and cross-reference tables.

(a) All terms used in this subpart not defined below have the meaning given to them in the Act and in subpart A of this part.

Coating applicator means any apparatus used to apply a coating to a continuous substrate.

Coating mix preparation equipment means all mixing vessels in which solvent and other materials are blended to prepare polymeric coatings.

Coating operation means any coating applicator(s), flashoff area(s), and drying oven(s) located between a substrate unwind station and a rewind station that coats a continuous web to produce a substrate with a polymeric coating. Should the coating process not employ a rewind station, the end of the coating operation is after the last drying oven in the process.

Common emission control device means a device controlling emissions from an affected coating operation as well as from any other emission source.

Concurrent means the period of time in which construction of an emission control device serving an affected facility is commenced or completed, beginning 6 months prior to the date that construction of the affected facility commences and ending 2 years after the date that construction of the affected facility is completed.

Control device means any apparatus that reduces the quantity of a pollutant emitted to the air.

Cover means, with respect to coating mix preparation equipment, a device that fits over the equipment opening to prevent emissions of volatile organic compounds (VOC) from escaping.

Drying oven means a chamber within which heat is used to dry a surface coating; drying may be the only process or one of multiple processes performed in the chamber.

Equivalent diameter means four times the area of an opening divided by its perimeter.

Flashoff area means the portion of a coating operation between the coating applicator and the drying oven where VOC begins to evaporate from the coated substrate.

Natural draft opening means any opening in a room, building, or total enclosure that remains open during operation of the facility and that is not connected to a duct in which a fan is installed. The rate and direction of the natural draft across such an opening is a consequence of the difference in pressures on either side of the wall or barrier containing the opening.

Nominal 1-month period means a calendar month or, if established prior to the performance test in a statement submitted with notification of anticipated startup pursuant to 40 CFR 60.7(a)(2), a similar monthly time period (e.g., 30-day month or accounting month).

Onsite coating mix preparation equipment means those pieces of coating mix preparation equipment located at the same plant as the coating operation they serve.

Polymeric coating of supporting substrates means a web coating process that applies elastomers, polymers, or prepolymers to a supporting web other than paper, plastic film, metallic foil, or metal coil.

Substrate means the surface to which a coating is applied.

Temporary enclosure means a total enclosure that is constructed for the sole purpose of measuring the fugitive VOC emissions from an affected facility.

Total enclosure means a structure that is constructed around a source of emissions and operated so that all VOC emissions are collected and exhausted through a stack or duct. With a total enclosure, there will be no fugitive emissions, only stack emissions. The drying oven itself may be part of the total enclosure.

Vapor capture system means any device or combination of devices designed to contain, collect, and route solvent vapors released from the coating mix preparation equipment or coating operation.

VOC in the applied coating means the product of Method 24 VOC analyses or formulation data (if those data are demonstrated to be equivalent to Method 24 results) and the total volume of coating fed to the coating applicator.

VOC used means the amount of VOC delivered to the coating mix preparation equipment of the affected facility (including any contained in premixed coatings or other coating ingredients prepared off the plant site) for the formulation of polymeric coatings to be applied to supporting substrates at the coating operation, plus any solvent added after initial formulation is complete (e.g., dilution solvent added at the coating operation). If premixed coatings that require no mixing at the plant site are used, "VOC used" means the amount of VOC delivered to the coating applicator(s) of the affected facility.

Volatile organic compounds or *VOC* means any organic compounds that participate in atmospheric photochemical reactions; or that are measured by a reference method, an equivalent method, an alternative method, or that are determined by procedures specified under any subpart.

Waterborne coating means a coating which contains more than 5 weight percent water in its volatile fraction.

Web coating means the coating of products, such as fabric, paper, plastic film, metallic foil, metal coil, cord, and yarn, that are flexible enough to be unrolled from a large roll; and coated as a continuous substrate by methods including, but not limited to, knife coating, roll coating, dip coating, impregnation, rotogravure, and extrusion.

(b) The nomenclature used in this subpart has the following meaning:

A_k =the area of each natural draft opening (k) in a total enclosure, in square meters.

C_{aj} =the concentration of VOC in each gas stream (j) exiting the emission control device, in parts per million by volume.

C_{bi} =the concentration of VOC in each gas stream (i) entering the emission control device, in parts per million by volume.

C_{di} =the concentration of VOC in each gas stream (i) entering the emission control device from the affected coating operation, in parts per million by volume.

C_{fk} =the concentration of VOC in each uncontrolled gas stream (k) emitted directly to the atmosphere from the affected coating operation, in parts per million by volume.

C_{gv} =the concentration of VOC in the gas stream entering each individual carbon adsorber vessel (v), in parts per million by volume. For purposes of calculating the efficiency of the individual adsorber vessel, C_{gv} may be measured in the carbon adsorption system's common inlet duct prior to the branching of individual inlet ducts.

C_{hv} =the concentration of VOC in the gas stream exiting each individual carbon adsorber vessel (v), in parts per million by volume.

E =the control device efficiency achieved for the duration of the emission test (expressed as a fraction).

F =the VOC emission capture efficiency of the vapor capture system achieved for the duration of the emission test (expressed as a fraction).

FV =the average inward face velocity across all natural draft openings in a total enclosure, in meters per hour.

H_v =the individual carbon adsorber vessel (v) efficiency achieved for the duration of the emission test (expressed as a fraction).

H_{sys} =the carbon adsorption system efficiency calculated when each adsorber vessel has an individual exhaust stack.

M_{ci} =the total mass (kg) of each coating (i) applied to the substrate at an affected coating operation during a nominal 1-month period as determined from facility records.

M_r =the total mass (kg) of VOC recovered for a nominal 1-month period.

Q_{aj} =the volumetric flow rate of each gas stream (j) exiting the emission control device, in dry standard cubic meters per hour when Method 18 or 25 is used to measure VOC concentration or in standard cubic meters per hour (wet basis) when Method 25A is used to measure VOC concentration.

Q_{bi} =the volumetric flow rate of each gas stream (i) entering the emission control device, in dry standard cubic meters per hour when Method 18 or 25 is used to measure VOC concentration or in standard cubic meters per hour (wet basis) when Method 25A is used to measure VOC concentration.

Q_{di} =the volumetric flow rate of each gas stream (i) entering the emission control device from the affected coating operation, in dry standard cubic meters per hour when Method 18 or 25 is used to measure VOC concentration or in standard cubic meters per hour (wet basis) when Method 25A is used to measure VOC concentration.

Q_{fk} =the volumetric flow rate of each uncontrolled gas stream (k) emitted directly to the atmosphere from the affected coating operation, in dry standard cubic meters per hour when Method 18 or 25 is used to measure VOC concentration or in standard cubic meters per hour (wet basis) when Method 25A is used to measure VOC concentration.

Q_{gv} =the volumetric flow rate of the gas stream entering each individual carbon adsorber vessel (v), in dry standard cubic meters per hour when Method 18 or 25 is used to measure VOC concentration or in standard cubic meters per hour (wet basis) when Method 25A is used to measure VOC concentration. For purposes of calculating the efficiency of the individual adsorber vessel, the value of Q_{gv} can be assumed to equal the value of Q_{hv} measured for that adsorber vessel.

Q_{hv} =the volumetric flow rate of the gas stream exiting each individual carbon adsorber vessel (v), in dry standard cubic meters per hour when Method 18 or 25 is used to measure VOC concentration or in standard cubic meters per hour (wet basis) when Method 25A is used to measure VOC concentration.

Q_{ini} =the volumetric flow rate of each gas stream (i) entering the total enclosure through a forced makeup air duct, in standard cubic meters per hour (wet basis).

Q_{outj} =the volumetric flow rate of each gas stream (j) exiting the total enclosure through an exhaust duct or hood, in standard cubic meters per hour (wet basis).

R =the overall VOC emission reduction achieved for the duration of the emission test (expressed as a fraction).

RS_i =the total mass (kg) of VOC retained on the coated substrate after oven drying or contained in waste coating for a given combination of coating and substrate.

W_{oi} =the weight fraction of VOC in each coating (i) applied at an affected coating operation during a nominal 1-month period as determined by Method 24.

(c) Tables 1a and 1b present a cross reference of the affected facility status and the relevant section(s) of the regulation.

| Table 1a Cross Reference ^{a,b} | | |
|--|--|------------------------------------|
| Status | Standard | Compliance provisions §60.743 |
| A. Coating operation: | | |
| 1. If projected VOC use is <95 Mg/yr. | §60.740(b): Monitor VOC use. | Not applicable. |
| 2. If projected VOC use is >=95 Mg/yr. | §60.742(b)(1): Reduce VOC emissions to the atmosphere from the coating operation by at least 90 percent; or. | (a)(1), (a)(2), (a)(3), or (a)(4); |
| | §60.742(b)(2): Install, operate, and maintain a total enclosure around the coating operation and vent the captured VOC emissions from the total enclosure to a control device that is at least 95 percent efficient. | (b), (e). |
| B. Coating mix preparation equipment: | | |
| 1. If projected VOC use is >=95 Mg/yr but <130 Mg/yr. | §60.742(c)(3): (i) Install, operate, and maintain a cover on each piece of affected equipment; or (ii) install, operate, and maintain a cover on each piece of affected equipment and vent VOC emissions to a VOC control device. | (d), (e). |
| 2. If projected VOC use is >=130 Mg/yr but there is no concurrent construction of a control device. | §60.742(c)(2): (i) Install, operate, and maintain a cover on each piece of affected equipment; or (ii) install, operate, and maintain a cover on each piece of affected equipment and vent VOC emissions to a VOC control device. | (d). |
| 3. If projected VOC use is >=130 Mg/yr and there is concurrent construction of a control device. | §60.742(c)(1): Install, operate, and maintain a cover on each piece of affected equipment and vent VOC emissions from the covered equipment to a 95 percent efficient control device while preparation of the coating is taking place within the vessel. | (c), (e). |
| <p>a This table is presented for the convenience of the user and is not intended to supersede the language of the regulation. For the details of the requirements refer to the text of the regulation.</p> <p>b Refer to Table 1b to determine which subsections of §§60.744, 60.745, and 60.747 correspond to each compliance provision (§ 60.743).</p> | | |

| Table 1b Cross Reference | | | | |
|--|------------------------------|----------------------------------|---|---|
| Compliance provisions §60.743 | Test methods §60.745 | Category/equipment ^a | Monitoring requirements §60.744 | Reporting and recordkeeping requirements §60.747 |
| A. Coating operation: | | | | |
| (a)(1) Gaseous emission test for coating operations not using carbon adsorption beds with individual exhausts. | (b)-(g) | General, CA, CO, TI, CI, PE, TE. | (a), (i), (j), (k), (c)(1), (d), (e), (f), (g). | (a), (d)(7), (f), (g), (h), (d)(1)(i), (d)(2)(i), (d)(3), (d)(4), (d)(5), (d)(6). |
| (a)(2) Gaseous emission test for coating operations using carbon adsorption beds with individual exhausts. | (b)-(g) | General, CA, PE, TE. | (a), (i), (j), (k), (c)(2), (g). | (a), (d)(7), (f), (g), (h), (d)(1)(ii), (d)(2)(ii), (d)(6). |
| (a)(3) Monthly liquid material balance can be used only when a VOC recovery device controls only those emissions from one affected coating operation. | (a) | VOC recovery | (i), (k) | (e), (f), (g), (h). |
| (a)(4) Short-term (3 to 7 day) liquid material balance may be used as an alternative to (a)(3). | (a) | General, CA, CO, PE, TE. | (a), (i), (j), (k), (c)(1), (c)(2), (d), (g). | (a), (d)(7), (f), (g), (h), (d)(1), (d)(2), (d)(3), (d)(6). |
| (b) Alternative standard for coating operation demonstrate use of approved total enclosure and emissions vented to a 95 percent efficient control device. | (b)-(g) | General, CA, CO, TI, CI, PE, TE. | (a), (i), (j), (k), (c)(1), (c)(2), (d), (e), (f), (h). | (a), (d)(7), (f), (g), (h), (d)(1), (d)(2), (d)(3), (d)(4), (d)(5), (d)(6). |
| B. Coating mix preparation equipment: | | | | |
| (c) Standard for equipment servicing a coating operation with concurrent construction of a control device that uses at least 130 Mg/yr of VOC demonstrate that covers meeting specifications are installed and used properly; procedures detailing proper use are posted; the mix equipment is vented to a 95 percent efficient control device. | (b)-(g) | General, CA, TI, CI. | (a), (i), (j), (k), (c)(1), (c)(2), (e), (f). | (a), (d)(7), (f), (g), (h), (d)(1), (d)(2), (d)(4), (d)(5). |
| (d) Standard for equipment servicing a coating operation that does not have concurrent construction of a control device but uses at least 130 Mg/yr of VOC or for equipment servicing a coating operation that uses <130 Mg/yr but >=95 Mg/yr of VOC demonstrate that covers meeting specifications are installed and used properly; procedures detailing proper use are posted; the mix equipment is vented to a control device (optional). | No other requirements apply. | | | |
| a CA=carbon adsorber; CO=condenser; TI=thermal incinerator; CI=catalytic incinerator; PE=partial enclosure; TE=total enclosure. | | | | |

§ 60.744 Monitoring requirements.

(b) Each owner or operator of an affected facility that uses less than 95 Mg of VOC per year and each owner or operator of an affected facility subject to the provisions specified in §60.742(c)(3) shall:

(1) Make semiannual estimates of the projected annual amount of VOC to be used for the manufacture of polymeric coated substrate at the affected coating operation in that year; and

(2) Maintain records of actual VOC use.

§ 60.747 Reporting and recordkeeping requirements.

(b) Each owner or operator of an affected facility subject to the provisions specified in §60.742(c)(3) and claiming to use less than 130 Mg of VOC in the first year of operation and each owner or operator of an affected facility claiming to use less than 95 Mg of VOC in the first year of operation shall submit to the Administrator, with the notification of anticipated startup required under §60.7(a)(2) of the General Provisions, a material flow chart indicating projected VOC use. The owner or operator shall also submit actual VOC use records at the end of the initial year.

(g) The reports required under paragraphs (b), (c), (d), and (e) of this section shall be postmarked within 30 days of the end of the reporting period.

(h) Records required in §60.747 must be retained for at least 2 years.

(i) The requirements of this section remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In this event, affected sources within the State will be relieved of the obligation to comply with this subsection, provided that they comply with the requirements established by the State.

§ 60.748 Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under section 111(c) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) Authorities that will not be delegated to States: §§60.743(a)(3)(v) (A) and (B); 60.743(e); 60.745(a); 60.746.

E.1.4 Deadlines Relating to the Standards of Performance for Polymeric Coating of Supporting Substrates Facilities [40 CFR Part 60, Subpart VVV]

The Permittee shall comply with the following notification requirements by the dates listed for coating lines CL1 and CL2 and any onsite coating mix preparation at this source:

| Requirement | Rule Cite | Deadline |
|--|-------------------|--|
| Notification of the Date Construction (or Reconstruction) is Commenced | 40 CFR 60.7(a)(1) | Within 30 days after commencement of construction |
| Notification of the Actual Date of Initial Startup | 40 CFR 60.7(a)(3) | Within 15 days after date of initial startup |
| Notification of any Physical or Operational Change | 40 CFR 60.7(a)(4) | 60 days or more prior to commencement of change or as soon as practicable (not required if change is specifically exempted under 40 CFR 60, Subpart VVV or in 40 CFR 60.14(e)) |
| Initial Semiannual Report (including material flow chart indicating projected VOC use) | 40 CFR 60.747(b) | Initial report shall be submitted 6 months after date of initial startup. |
| Initial Annual Report (actual VOC use records at the end of the initial year) | 40 CFR 60.747(b) | Initial report shall be submitted 1 year after date of initial startup. |

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY**

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

Source Name: Robus Leather Corporation
Source Address: 1100 W. Hutchinson Lane, Madison, Indiana 47250
Mailing Address: 1100 W. Hutchinson Lane, Madison, Indiana 47250
FESOP Permit No.: F077-23120-00015

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 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865**

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

Source Name: Robus Leather Corporation
Source Address: 1100 W. Hutchinson Lane, Madison, Indiana 47250
Mailing Address: 1100 W. Hutchinson Lane, Madison, Indiana 47250
FESOP Permit No.: F077-23120-00015

This form consists of 2 pages

Page 1 of 2

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

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

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

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

Page 2 of 2

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

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

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

Source Name: Robus Leather Corporation
Source Address: 1100 W. Hutchinson Lane, Madison, Indiana 47250
Mailing Address: 1100 W. Hutchinson Lane, Madison, Indiana 47250
FESOP Permit No.: F077-23120-00015

Months: _____ to _____ Year: _____

Page 1 of 2

| | |
|---|-------------------------------|
| <p>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".</p> | |
| <input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD. | |
| <input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD | |
| Permit Requirement (specify permit condition #) | |
| Date of Deviation: | Duration of Deviation: |
| Number of Deviations: | |
| Probable Cause of Deviation: | |
| Response Steps Taken: | |
| Permit Requirement (specify permit condition #) | |
| Date of Deviation: | Duration of Deviation: |
| Number of Deviations: | |
| Probable Cause of Deviation: | |
| Response Steps Taken: | |

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**Indiana Department of Environmental Management
Office of Air Quality**

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

| |
|--|
| Source Description and Location |
|--|

| | |
|---------------------------------------|---|
| Source Name: | Robus Leather Corporation |
| Source Location: | 1100 W. Hutchinson Lane, Madison, IN 47250 |
| County: | Jefferson |
| SIC Code: | 2631 (Manufacturing of Paperboard/Leatherboard) |
| NSR and Part 70 Operating Permit No.: | 077-23120-00015 |
| Permit Writer: | Nathan C. Bell |

On March 19, 2007, the Office of Air Quality (OAQ) had a notice published in The Madison Courier, Madison, Indiana, stating that Robus Leather Corporation had applied for a Federally Enforceable State Operating Permit (FESOP). The notice also stated that the OAQ proposed to issue a FESOP for this operation and provided information on how the public could review the proposed permit 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 permit should be issued as proposed.

Comments and Responses

No comments were received during the public notice period.

Additional Changes To Permit

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD, but the permit will have the updated changes. IDEM, OAQ has decided to make the following additional revisions to the permit.

- (a) The intent of Record Keeping Requirements for Visible Emission Notations and Parametric Monitoring is that the Permittee needs to make a record of some sort every day. An example for Visible Emission Notations would be "normal" or "abnormal". Additionally, if Visible Emission Notations were not done on a particular day, the Permittee needs to specify the reason why the observation was not done. An example of this record would be "the unit was not operating" or "the unit was venting indoors". In order to clarify the Record Keeping Requirements with respect to Visible Emission Notations and Baghouse Parametric Monitoring, Condition D.1.11 is revised as follows with deleted language as ~~strikeouts~~ and new language **bolded**.

D.1.11 Record Keeping Requirements

-
- (a) To document compliance with Condition D.1.7, the Permittee shall maintain **a daily** records of ~~daily~~ visible emission notations of ~~the~~ baghouse **BH1** stack exhausts. **The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the process did not operate that day).**

- (b) To document compliance with Condition D.1.8, the Permittee shall maintain a daily records of ~~the~~ pressure drop for ~~across~~ baghouses ~~BH1~~ during normal operation. **The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the process did not operate that day).**

...

**Indiana Department of Environmental Management
Office of Air Quality**

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

Source Description and Location

Source Name: Robus Leather Corporation
 Source Location: 1100 W. Hutchinson Lane, Madison, IN 47250
 County: Jefferson
 SIC Code: 2631 (Manufacturing of Paperboard/Leatherboard)
 NSR and Part 70 Operating Permit No.: 077-23120-00015
 Permit Writer: Nathan C. Bell

History

Robus Leather Corporation was issued an air registration no. 077-3132-00015 on August 9, 1993, for a stationary coated bonded leather manufacturing plant located at 1100 Hutchinson Lane, Madison, IN 47250. On May 23, 2006, Robus Leather Corporation submitted an application to the Office of Air Quality (OAQ) in order to reapply for a valid operating permit pursuant to the requirements of 326 IAC 2. This permit is being issued to address the requirements of 326 IAC 2.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) Registered Operation Status, issued on April 14, 1981.
- (b) Registered Operation Status No. 077-3132-00015, issued on August 9, 1993.

County Attainment Status

The source is located in Jefferson County, Madison Township.

| Pollutant | Status |
|-------------------|----------------------------------|
| PM ₁₀ | Attainment or Unclassifiable |
| PM _{2.5} | Nonattainment (Madison Township) |
| SO ₂ | Attainment or Unclassifiable |
| NO ₂ | Attainment or Unclassifiable |
| 8-Hour Ozone | Attainment or Unclassifiable |
| CO | Attainment or Unclassifiable |
| Lead | Attainment or Unclassifiable |

- (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 standard. Jefferson County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NOx were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (b) Jefferson County (Madison Township) has been classified as nonattainment for PM_{2.5} in 70 FR 943 dated January 5, 2005. Until U.S. EPA adopts specific New Source Review rules for PM_{2.5} emissions, it has directed states to regulate PM₁₀ emissions as surrogate for PM_{2.5} emissions pursuant to the Non-attainment New Source Review requirements. See the State Rule Applicability for the source section.
- (c) Jefferson County has been classified as attainment or unclassifiable for all the other regulated criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (d) On October 25, 2006, 326 IAC 1-4-1 was revised to redesignate Delaware, Greene, Jackson, Vanderburgh, Vigo and Warrick Counties to attainment for the eight-hour ozone standard, redesignating Lake County to attainment for the sulfur dioxide standard, and revoke the one-hour ozone standard in Indiana.
- (e) 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.

Background and Description of Permitted Emission Units and Pollution Control Equipment

The Office of Air Quality (OAQ) has reviewed an application, submitted by Robus Leather Corporation on May 23, 2006, for a new permit in order to address to requirements of 326 IAC 2-5.5-2(b), which required existing emission sources with a valid air registration to reapply for approval by December 2000. This permit is being issued to address the requirements of this rule.

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

- (a) one (1) bonded leather manufacturing process, constructed in 1970, consisting of three (3) lines with a total maximum capacity of 750 yards of bonded leather sheet/rolls per hour, including the following equipment:
 - (1) three (3) leather scrap storage silos, identified as LS1 through LS3, each constructed in 1970, and other leather scrap storage piles, weigh scales, and transfer equipment;
 - (2) one (1) leather scrap pulping process, constructed in 1970, including equipment for crushing and milling leather scrap, and equipment and vessels for mixing the ground leather with water, binders, dyes, or other additives;
 - (3) three (3) fourdrinier-type wet machines, each constructed in 1970, for draining water from the leather pulp on a continuously moving wire screen to produce a continuous roll of bonded leather, with vacuum suction provided by one (1) centrifugal exhauster, designated as V1, with water vapor exhausted to stack V1;
 - (4) one (1) continuous steam heated drying oven, identified as D1, constructed in 1971, for drying the bonded leather, with water vapor exhausted to stacks 6 through 9;
 - (5) one (1) continuous steam heated drying oven, identified as D2, constructed in 1971, for drying the bonded leather, with water vapor exhausted to stacks 15 through 18;
 - (6) one (1) continuous steam heated drying oven, identified as D4, constructed in 1981, for drying the bonded leather, with water vapor exhausted to stack 19;

- (7) two (2) steam boilers, each burning natural gas as the primary fuel source and No. 2 fuel oil as an alternative fuel, identified as B1 and B2, constructed in 1971 and 1982, respectively, rated at 10 MMBtu/hr and 10.3 MMBtu/hr, and exhausting to stacks C1 and C2, respectively, supplying steam to drying ovens D1 through D4 and the dryers associated with coating lines CL1 and CL2;
 - (8) four (4) buffing machines, each constructed in 1970, with particulate matter emissions controlled by one (1) baghouse, identified as BH1, constructed in 1985, exhausting to the atmosphere. The collected dust is directed to a mixing tank on the inside of the building, where it is turned into a slurry and pumped back to storage tanks for reuse in the pulping process;
 - (9) one (1) calendaring machine, constructed in 1970;
 - (10) one (1) laminator, designated as L1, constructed in 1993;
 - (11) six (6) embossing machines, each constructed in 1993;
 - (12) one (1) cold cleaning parts washer, designated as PW1, constructed in 1970, used to perform non-halogenated organic solvent cleaning of parts and/or tools, utilizing 5 gallons of solvent per year. The cold cleaner is an offline system, batch type, which uses immersion, and is equipped with drain and remote reservoir with insignificant exposure to outside air;
 - (13) four (4) re-roll inspection units, each constructed in 1993;
 - (14) one (1) general building exhaust fan, designated as E1, exhausting to stack E1; and
 - (15) one (1) staking machine, constructed in 1993.
- (b) one (1) bonded leather coating process, constructed in 1993, including the following equipment:
- (1) one (1) coating line, designated as CL1, constructed in 1993, with a maximum capacity of 150 yards of bonded leather sheet per hour, consisting of the following:
 - (A) one (1) roller coater for application of a base coat;
 - (B) one (1) feed end dryer;
 - (C) one (1) spray booth, utilizing low pressure air atomization spray guns to apply either a top coat or an emboss coat, with particulate matter emissions controlled by a dry filter, exhausting to stack 1A;
 - (D) one (1) spray booth, utilizing low pressure air atomization spray guns to apply either a top coat or an emboss coat, with particulate matter emissions controlled by a dry filter, exhausting to stack 2A; with additional flash off vapor emissions exhausted to stack 2B; stack 2B has no potential to emit particulate matter; and
 - (E) one (1) wind up dryer; with vapor emissions exhausted to stack 4A. Stack 4A has no potential to emit particulate matter.
 - (2) one (1) coating line, designated as CL2, constructed in 1993, with a maximum capacity of 150 yards of bonded leather sheet per hour, consisting of the following:
 - (A) one (1) roller coater for application of a base coat;
 - (B) one (1) feed end dryer;
 - (C) one (1) spray booth, utilizing High Volume Low Pressure (HVLP) spray guns to apply either a top coat or an emboss coat, with particulate matter emissions controlled by a dry filter, exhausting to stack 3A; with additional flash off vapor emissions exhausted to stack 3B; stack 3B has no potential to emit particulate matter; and

- (D) one (1) wind up dryer; with vapor emissions exhausted to stack 5A. Stack 5A has no potential to emit particulate matter.

Under the NSPS for Polymeric Coating of Supporting Substrates Facilities (40 CFR 60, Subpart VVV), the coating lines CL1 and CL2 and any onsite coating mix preparation are considered an affected facility.

- (c) Insignificant activities consisting of the following:
 - (1) storage and use of lubricating oils, hydraulic oils, machining oils, and/or machining fluids (including coolants); and
 - (2) storage and use of binders, dyes, oils, or other additives.

New Emission Units and Pollution Control Equipment

There are no new emission units or pollution control equipment being added to this source during this review process.

Unpermitted Emission Units and Pollution Control Equipment

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

- (a) one (1) continuous steam heated drying oven, identified as D3, constructed in 1996, for drying the bonded leather, with water vapor exhausted to stacks 21 through 23;

Enforcement Issues

Robus Leather Corporation was issued an air registration no. 077-3132-00015 on August 9, 1993, for a stationary coated bonded leather manufacturing plant. On January 10, 2006, IDEM, OAQ conducted an inspection of the source and determined that the source did not reapply for a valid air registration pursuant to 326 IAC 2-5.5-2(b), which required existing emission sources with a valid air registration to reapply for approval by December 2000. On January 24, 2006, IDEM, OAQ sent a violation letter to Robus Leather Corporation that required the source to submit a new application for an air permit. On May 23, 2006, IDEM, OAQ received an application from Robus Leather Corporation.

As part of this TSD, the potential to emit air pollutants was reevaluated (see Emission Calculations and Permit Level Determination – Part 70 sections below). Based on the updated emission calculations, the source has the potential to emit air pollutants greater than the Title V major threshold levels under 326 IAC 2-7. The source will be issued a Federally Enforceable State Operating Permit (FESOP), because the source chose to limit its emissions below the Title V levels. Therefore, the submission of the permit application by Robus Leather Corporation also addresses the requirements of 326 IAC 2-7-4(a)(1)(A)(i) and 326 IAC 2-8-2(a).

IDEM is reviewing this matter and will take appropriate action.

Stack Summary

| Stack ID | Operation | Height (ft) | Diameter (ft) | Flow Rate (acfm) | Temperature (°F) |
|---------------|--------------------------------|-------------|---------------|------------------|------------------|
| 1 through 5 | Air Intake for Drying Oven D1 | NR | NR | NR | ambient |
| 6 through 9 | Drying Oven D1 (water vapor) | 26 | 1.5 | NR | 176 |
| 10 through 14 | Air Intake for Drying Oven D2 | NR | NR | NR | ambient |
| 15 through 18 | Drying Oven D2 (water vapor) | 26 | 1.5 | NR | 176 |
| 19 | Drying Oven D4 (water vapor) | 36 | 3.0 | NR | 176 |
| 20 | Air Intake for Drying Oven D4 | NR | NR | NR | ambient |
| 21 through 23 | Drying Oven D3 (water vapor) | 29 | 2.5 | NR | 176 |
| 1A | Coating Line CL1 Spray Booth | 29 | 3.0 | 7566 | 110 |
| 2A | Coating Line CL1 Spray Booth | 29 | 3.0 | 7566 | 110 |
| 2B | Coating Line CL1 Flash Off | 16 | 2.3 | 1069 | 110 |
| 4A | Coating Line CL1 Wind Up Dryer | 16 | 2.3 | 1069 | 110 |
| 3A | Coating Line CL2 Spray Booth | 16 | 3.0 | 7566 | 110 |
| 3B | Coating Line CL2 Flash Off | 16 | 2.3 | 1069 | 110 |
| 5A | Coating Line CL2 Wind Up Dryer | 16 | 2.3 | 1069 | 110 |
| C1 | Steam Boiler B1 | 36 | 1.6 | 7743 | 325-350 |
| C2 | Steam Boiler B2 | 36 | 1.6 | 7743 | 325-350 |
| E1 | General Building Exhaust Fan | NR | NR | NR | NR |
| V1 | Centrifugal Exhauster | 12 | 5 ft x 0.5 ft | NR | ambient |

NR = Not Reported

Emission Calculations

- (a) For the following emission units or processes it is estimated that potential emissions of all regulated criteria pollutants and hazardous air pollutants (HAPs) are negligible: the leather scrap storage silos; leather scrap pulping process; fourdrinier-type wet machines; calendaring machine; laminator; embossing machines; re-roll inspection units; staking machine; storage and use of lubricating oils, hydraulic oils, machining oils, and/or machining fluids (including coolants); and storage and use of binders, dyes, oils, or other additives.
- (b) For the continuous steam heated drying ovens (D1 through D4) and coating line dryers (CL1 and CL2), the potential emissions associated with combustion of natural gas or No. 2 fuel oil are already accounted for in the potential emissions for the steam boilers (B1 and B2) that supply steam heat to these units.
- (c) For buffing of the bonded leather, it is determined that the buffing dust generated is particulate matter (PM/PM10). The scrap leather, used to make bonded leather, can either be from chrome leather blue shavings, from vegetable-tanned leather scraps, or from bonded leather scraps itself. During buffing of leather made with chrome leather blue shavings, the buffing dust may contain trivalent chromium (Cr⁺³) at an average content of approximately 5% by weight, which is considered a hazardous air pollutant (HAP) under "chromium compounds". The particulate (PM/PM10) emissions from the buffing machines will be controlled by one baghouse (BH1) with an overall control efficiency of 99%. The maximum process weight rate for the buffing machines is dependent on the maximum number of yards and thickness (varying from 0.4-mm to 7.0-mm) of the bonded leather sheet being buffed per hour. Based on the information provided by the source, the worst case maximum process weight rate for each of the buffing machines is approximately 1533 pounds of dried bonded leather per hour (based on 130 yards per hour of 5.0-mm thick dried bonded leather) and the worst case maximum material removed from the 5.0-mm thick bonded leather during buffing is 16% by weight (245 pounds of PM/PM10 per hour).
- (d) See Appendix A of this TSD for detailed emissions calculations (Appendix A, pages 1 through 8).

Permit Level Determination – Part 70

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emission 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, IDEM, or the appropriate local air pollution control agency.”

The following tables reflects the PTE of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

| Pollutant | Potential To Emit (tons/year) |
|---------------------|-------------------------------|
| PM | 4314.60 |
| PM10 ⁽¹⁾ | 4314.01 |
| SO ₂ | 13.53 |
| NO _x | 12.70 |
| VOC | 37.14 |
| CO | 7.47 |

(1) Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

| HAPs | Potential To Emit (tons/year) |
|----------------------------|-------------------------------|
| Benzene | negligible |
| Dichlorobenzene | negligible |
| Ethylbenzene | negligible |
| Ethylene Glycol | 5.46 |
| Formaldehyde | negligible |
| Glycol Ethers | 6.48 |
| Hexamethylene Diisocyanate | negligible |
| n-Hexane | 0.16 |
| Naphthalene | negligible |
| Toluene | negligible |
| Triethylamine | 8.27 |
| Xylene | negligible |
| Arsenic | negligible |
| Beryllium | negligible |
| Lead | negligible |
| Cadmium | negligible |
| Chromium | 214.87 |
| Manganese | negligible |
| Mercury | negligible |
| Nickel | negligible |
| Selenium | negligible |
| TOTAL HAPs | 235.26 |

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of particulate matter with a diameter less than ten (10) micrometers (PM10) is greater than one hundred (100) tons per year. The PTE of all other regulated criteria pollutants are less than one hundred (100) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7. The source will be issued a Federally Enforceable State Operating Permit (FESOP), because the source will limit its emissions below the Title V levels.
- (b) The PTE (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is greater than ten (10) tons per year and the PTE of a combination of HAPs is greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7. The source will be issued a FESOP, because the source will limit its emissions below the Title V levels.

Permit Level Determination – PSD or Emission Offset and FESOP

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of the FESOP, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

| Process/Emission Unit | Potential to Emit After Issuance (tons/year) | | | | | | | |
|---|--|----------------------|-----------------|-----------------|-------|------|---------------------|-----------------------------------|
| | PM | PM10 ⁽¹⁾ | SO ₂ | NO _x | VOC | CO | Total HAPs | Worst Single HAP |
| Buffing Machines ⁽²⁾ | 196.00 ⁽²⁾ | 46.00 ⁽²⁾ | 0 | 0 | 0 | 0 | 3.50 ⁽²⁾ | 3.50 ⁽²⁾ (chromium) |
| Steam Boiler B1 ⁽³⁾ | 0.63 | 0.33 | 6.66 | 6.26 | 0.24 | 3.68 | 0.08 | 0.08 (n-hexane) |
| Steam Boiler B2 ⁽³⁾ | 0.64 | 0.34 | 6.86 | 6.44 | 0.25 | 3.79 | 0.09 | 0.08 (n-hexane) |
| Degreasing Operations ⁽³⁾ | 0 | 0 | 0 | 0 | 0.64 | 0 | 0.47 | 0.46 (glycol ethers) |
| Surface Coating Line CL1 | 1.00 ⁽⁴⁾ | 1.00 ⁽⁴⁾ | 0 | 0 | 18.01 | 0 | 9.88 | 4.14 (triethylamine) |
| Surface Coating Line CL2 | 0.06 ⁽⁴⁾ | 0.60 ⁽⁴⁾ | 0 | 0 | 18.01 | 0 | 9.88 | 4.14 (triethylamine) |
| Total PTE of Entire Source | 198.87 | 48.28 | 13.53 | 12.70 | 37.14 | 7.47 | 23.89 | 8.27 (triethylamine) |
| Title V | | | | | | | | |
| Major Threshold Level | NA | 100 | 100 | 100 | 100 | 100 | 25 | 10 |
| PSD | | | | | | | | |
| Major Threshold Level | 250 | NA | 250 | 250 | 250 | 250 | NA | NA |
| Emission Offset | | | | | | | | |
| Major Threshold Level | NA | 100 | NA | NA | NA | NA | NA | NA |
| negl. = negligible | | | | | | | | |
| (1) US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions. | | | | | | | | |
| (2) The source shall comply with the following emission limitations: | | | | | | | | |
| (a) In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the total potential to emit particulate matter (PM) from the four (4) buffing machines shall not exceed 44.75 pounds per hour. | | | | | | | | |
| (b) In order to render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-3 (Emission Offset) not applicable, the total potential to emit PM10 from the four (4) buffing machines shall not exceed 10.50 pounds per hour. | | | | | | | | |
| (c) In order to render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants) not applicable, the total potential to emit chromium from the four (4) buffing machines shall not exceed 0.80 pounds per hour. | | | | | | | | |
| (3) Uncontrolled PTE. | | | | | | | | |
| (4) PTE of PM/PM10 after controls. The Permittee shall use dry filters to control particulate overspray. | | | | | | | | |

- (a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because particulate matter (PM) is limited to less than 250 tons per year and all other attainment regulated pollutants have a potential to emit of less than 250 tons per year, and this source is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1). Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.
- (b) This existing source is not a major stationary source, under Emission Offset (326 IAC 2-3), because particulate matter with a diameter less than ten (10) micrometers (PM₁₀), which is regulated as a surrogate for PM_{2.5}, is limited to less than one hundred (100) tons per year. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.
- (c) This existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because HAP emissions are limited less than ten (10) tons per year for a single HAP and twenty-five (25) tons per year of total HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act.

Federal Rule Applicability Determination

The following federal rules are applicable to the source:

New Source Performance Standards (NSPS)

- (a) This source is not subject to the requirements of 326 IAC 12 or 40 CFR 60, Subpart QQ (60.430 through 60.435), Standards of Performance for the Graphic Arts Industry: Publication Rotogravure Printing, because this source does not contain rotogravure printing presses for printing on paper products.
- (b) This source is not subject to the requirements of 326 IAC 12 or 40 CFR 60, Subpart RR (60.440 through 60.447), Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations, because this source does not contain coating lines used in the manufacture of pressure sensitive tape and label materials. This source performs surface coating of bonded leather.
- (c) This source is not subject to the requirements of 326 IAC 12 or 40 CFR 60, Subpart FFF (60.580 through 60.585), Standards of Performance for Flexible Vinyl and Urethane Coating and Printing, because this source does not contain any rotogravure printing lines used to print or coat flexible vinyl or urethane products. This source performs surface coating of bonded leather.
- (d) Each of the coating lines (CL1 and CL2) and any onsite coating mix preparation at this source is subject to the requirements of 40 CFR 60, Subpart VVV (60.740 through 60.748), Standards of Performance for Polymeric Coating of Supporting Substrates Facilities (326 IAC 12), because this source perform polymeric coating of supporting substrates, defined as web coating process that apply elastomers, polymers, or prepolymers to a supporting web other than paper, plastic film, metallic foil, or metal coil (40 CFR 60.741). Web coating means the coating of products, such as fabric, paper, plastic film, metallic foil, metal coil, cord, and yarn, that are flexible enough to be unrolled from a large roll; and coated as a continuous substrate by methods including, but not limited to, knife coating, roll coating, dip coating, impregnation, rotogravure, and extrusion (40 CFR 60.741). The surface coating operations of this source include application of aqueous polymer resin and aqueous polyurethane coatings on bonded leather.

The coating lines CL1 and CL2 and any onsite coating mix preparation are considered an affected facility. Pursuant to 40 CFR 60.740(b), the affected facility is subject only to the requirements of §§60.744(b), 60.747(b), and 60.747(c), since the potential to emit VOC from the coating lines CL1 and CL2 and any onsite coating mix preparation is less than 95 Mg (104.2 tons) per 12-month period (See Table on Page 7 of this TSD).

Portions of 40 CFR 60, Subpart VVV that are not applicable to this source will not be included in this permit. The portions of 40 CFR 60, Subpart VV that are applicable to this source include:

- (1) 40 CFR 60.740;
- (2) 40 CFR 60.741;
- (3) 40 CFR 60.744(b);
- (4) 40 CFR 60.747(b), (g), (h), and (i); and
- (5) 40 CFR 60.748.

The provisions of 40 CFR 60, Subpart A – General Provisions, which are incorporated in 326 IAC 12-1, apply to the coating lines CL1 and CL2 and any onsite coating mix preparation, except when otherwise specified in 40 CFR 60, Subpart VVV.

- (e) There are no other New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in this permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (f) This source is not subject to the requirements of 40 CFR 63, Subpart KK (63.820 through 63.831), National Emission Standards for Printing and Publishing Industry (326 IAC 20-18-1), because this source does not contain publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing presses and is not a major source of HAPs as defined in 40 CFR 63.2. This source performs surface coating of bonded leather using roll coating and High Volume Low Pressure (HVLP) spray coating.
- (g) This source is not subject to the requirements of 40 CFR 63, Subpart JJJJ (63.3280 through 63.3420), National Emission Standards for Paper and Other Web Coating (326 IAC 20-65-1), because this source does not contain web coating lines engaged in the coating of metal webs that are used in flexible packaging or web coating lines engaged in the coating of fabric substrates for use in pressure sensitive tape and abrasive materials and this source is not a major source of HAPs as defined in 40 CFR 63.2. This source performs surface coating of bonded leather using roll coating and High Volume Low Pressure (HVLP) spray coating.
- (h) This source is not subject to the requirements of 40 CFR 63, Subpart OOOO (63.4280 through 63.4371), National Emission Standards for Printing, Coating, and Dyeing of Fabrics and Other Textiles (326 IAC 20-77-1), because this source does not perform printing, coating, slashing, dyeing or finishing of fabric or other textiles as defined by 40 CFR 63.4371 and is not a major source of HAPs as defined in 40 CFR 63.2. This source performs surface coating of bonded leather, which is not considered a textile as defined by 40 CFR 63.4371.
- (i) The natural gas-fired steam boilers (B1 and B2) are not subject to the requirements of 40 CFR 63, Subpart DDDDD (63.7480 through 63.7575), National Emission Standards for Industrial, Commercial, and Institutional Boilers and Process Heaters (326 IAC 20-95-1), because the source is not a major source of HAPs as defined in 40 CFR 63.2.
- (j) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 20 and 40 CFR Part 61, 63) included in the permit for this source.

State Rule Applicability Determination

The following state rules are applicable to the source:

- (a) Pursuant to 326 IAC 2-1.1-4 (Federal Provisions), in case of a conflict between the state rules and a provision of federal law or regulation, the more stringent requirement applies.

- (b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
The requirements of 326 IAC 2-2 (PSD) are not applicable to this source, since this source was initially constructed before the applicability date of August 7, 1977, it is not one of the 28 listed source categories defined in 326 IAC 2-2-1(y)(1), no major modifications were done to this source, and the potential to emit of all attainment regulated pollutants is less than, or limited to less than, 250 tons per year. The source shall comply with the following limit:
- (1) In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the total potential to emit particulate matter (PM) from the four (4) buffing machines shall not exceed 44.75 pounds per hour.
- Compliance with this limit combined with the potential PM emissions from all other emission units at this source will limit the source-wide total potential to emit of PM to less than 250 tons per 12 consecutive month period and will render 326 IAC 2-2 (PSD) not applicable.
- (c) 326 IAC 2-3 (Emission Offset)
The requirements of 326 IAC 2-3 (Emission Offset) apply to major sources or major modifications constructed in an area designated as non-attainment. This source is located in Jefferson County (Madison Township), which has been designated as basic nonattainment for the PM_{2.5} standard in 70 FR 943 dated January 5, 2005. Until U.S. EPA adopts specific New Source Review rules for PM_{2.5} emissions, it has directed states to regulate PM₁₀ emissions as surrogate for PM_{2.5} emissions pursuant to the Non-attainment New Source Review requirements. The source shall comply with the following limit:
- (1) In order to render the requirements of 326 IAC 2-3 (Emission Offset) not applicable, the total potential to emit PM₁₀ from the four (4) buffing machines shall not exceed 10.50 pounds per hour.
- Compliance with this limit combined with the potential PM₁₀ emissions from all other emission units at this source will limit the source-wide total potential to emit of PM₁₀ to less than 100 tons per 12 consecutive month period and will render 326 IAC 2-3 (Emission Offset) not applicable.
- Assuming that PM₁₀ emissions represent PM_{2.5} emissions, compliance with the PM₁₀ limit above shall also limit the source-wide potential to emit of PM_{2.5} to less than 100 tons per 12 consecutive month period and will render 326 IAC 2-3 (Emission Offset) not applicable.
- (d) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The requirements of 326 IAC 2-4.1 are not applicable to this source, since the potential to emit of any single HAP is less than or limited to less than ten (10) tons per year and the potential to emit of a combination of HAPs is limited to less than twenty-five (25) tons per year. The source shall comply with the following limits:
- (1) The total potential to emit chromium from the four (4) buffing machines shall not exceed 0.80 pounds per hour.
- Compliance with these limits combined with the potential HAP emissions from all other emission units at this source will limit the source-wide total potential to emit any single HAP to less than ten (10) tons per 12 consecutive month period and total HAPs to less than twenty-five (25) tons per 12 consecutive month period and will render 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants) not applicable.

- (e) 326 IAC 2-6 (Emission Reporting)
This source is not subject to 326 IAC 2-6 (Emission Reporting), because it is located in Jefferson County, it is not required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, and it does not emit lead into the ambient air at levels equal to or greater than five (5) tons per year.
- (f) 326 IAC 2-8-4 (FESOP)
In order to comply with the requirements of 326 IAC 2-8-4 (FESOP), the source shall comply with the following limits:
- (1) The total potential to emit PM10 from the four (4) buffing machines shall not exceed 10.50 pounds per hour.
 - (2) The total potential to emit chromium from the four (4) buffing machines shall be not exceed 0.80 pounds per hour.

Compliance with these limits combined with the potential PM10 and HAP emissions from all other emission units at this source will limit the source-wide total potential to emit of PM10 to less than 100 tons per 12 consecutive month period, any single HAP to less than ten (10) tons per 12 consecutive month period, and total HAPs to less than twenty-five (25) tons per 12 consecutive month period and will render 326 IAC 2-7 (Part 70 Permits) not applicable.

- (g) 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 this permit:
- (1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (2) 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.
- (h) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.

Buffing Machines

- (i) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
The requirements of 326 IAC 6-3 are applicable to the buffing machines. Pursuant to 326 IAC 6-3-2(e)(2), the particulate emissions from the buffing machines shall not exceed 3.43 pounds per hour based on a process weight rate equal to 0.77 tons of bonded leather per hour (1533 pounds of bonded leather per hour).

In order to comply with the allowable rate of emission, the baghouse for particulate control shall be in operation and control emissions from the buffing machines at all times that the buffing machines are in operation. The allowable rate of emission was calculated as follows:

Interpolation of the data in the table in 326 IAC 6-3-2(e)(2) for the process weight rates up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

The hourly potential particulate matter emissions from each of the buffing machines after baghouse control (assuming 99% overall control efficiency) are estimated to be 2.45 pounds per hour, which is less than the 326 IAC 6-3-2 allowable hourly rate of 3.43 pounds per hour. Therefore, compliance with 326 IAC 6-3 is expected. Testing will be required to verify compliance with 326 IAC 6-3 and non-applicability of 326 IAC 2-2 (PSD), 326 IAC 2-3 (Emission Offset), and 326 IAC 2-7 (Part 70 Permits).

Steam Boiler B1 and B2

- (j) 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)
The natural gas-fired steam boilers (B1 and B2) are subject to the requirements of 326 IAC 6-2-3, since each of the boilers are sources of indirect heating, were constructed before September 21, 1983, and are located in Jefferson County. Pursuant to this rule, particulate matter emissions from the boilers B1 and B2 shall be limited as follows:

- (1) Pursuant to 326 IAC 6-2-3(d), the particulate matter emissions from the boiler B1 shall not exceed 0.8 lb/MMBtu, since it was existing and in operation on or before June 8, 1972.
- (2) Pursuant to 326 IAC 6-2-3(e), the particulate matter emissions from the boiler B2 shall not exceed 0.6 lb/MMBtu, since it has a maximum operating capacity rating of less than 250 MMBtu/hr and began operation after June 8, 1972.

Boilers B1 and B2, each have a potential to emit particulate matter as follows:

$$\text{PTE PM} = (0.75 \text{ ton/yr PM}) * (2000 \text{ lb/ton}) / [(8760 \text{ hr/yr}) * (12 \text{ MMBtu/hr})] = 0.014 \text{ lb/MMBtu PM}$$

Therefore, boilers B1 and B2 will each comply with this rule.

- (k) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(1), the natural gas-fired steam boilers (B1 and B2) are each exempt from the requirements of 326 IAC 6-3, because they each are a source of indirect heating.
- (l) 326 IAC 7-1 (Sulfur dioxide emission limitations: applicability)
The natural gas-fired steam boilers (B1 and B2) are each not subject to the requirements of 326 IAC 7-1, because the potential and the actual emissions are less than twenty-five (25) tons per year and ten (10) pounds per hour respectively.
- (m) 326 IAC 8-1-6 (VOC rules: General Reduction Requirements for New Facilities)
The requirements of 326 IAC 8-1-6 are not applicable to steam boilers B1 and B2, since they each do not have the potential to emit greater than twenty-five (25) tons of VOCs per year.
- (n) There are no other 326 IAC 8 Rules that are applicable to the steam boilers B1 and B2.

Parts Washer PW1

- (o) 326 IAC 8-1-6 (VOC rules: General Reduction Requirements for New Facilities)
The requirements of 326 IAC 8-1-6 are not applicable to parts washer PW1, since it does not have the potential to emit greater than twenty-five (25) tons of VOCs per year.

- (p) 326 IAC 8-3-2 (VOC Rules: Cold Cleaning Operations)
Pursuant to 326 IAC 8-3-1 (Organic Solvent Degreasing Operations), parts washer PW1 is not subject to the requirements of 326 IAC 8-3-2 (Cold Cleaner Operations), since it was constructed before the January 1, 1980, applicability date and is located in Jefferson County.
- (q) 326 IAC 8-3-5 (VOC Rules: Cold Cleaner Degreaser Operation and Control)
Pursuant to 326 IAC 8-3-1 (Organic Solvent Degreasing Operations), parts washer PW1 is not subject to the requirements of 326 IAC 8-3-5, since it was constructed before the July 1, 1990, applicability date and is located in Jefferson County.
- (r) There are no other 326 IAC 8 Rules that are applicable to the parts washer PW1.
- (s) 326 IAC 20-6-1 (Halogenated Solvent Cleaning)
This source is not subject to the requirements of the 326 IAC 20-6-1, since parts washer PW1 or any other solvent cleaning at this source do not use a solvent that contains any of the halogenated compounds listed in 326 IAC 20-6-1(a).

Bonded Leather Coating Lines CL1 and CL2

- (t) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
 - (a) Pursuant to 326 IAC 6-3-1(a)(6), roll application of surface coatings in each of the coating lines (CL1 and CL2) is exempt from the requirements of 326 IAC 6-3.
 - (b) For spray application of surface coatings in each of the coating lines (CL1 and CL2), the potential particulate matter emission is each greater than five hundred fifty-one thousandths (0.551) pound per hour and the potential usage rate is each greater than five (5) gallons of surface coatings per day. Therefore, the requirements of 326 IAC 6-3-2 are applicable to each of the coating lines (CL1 and CL2). Pursuant to 326 IAC 6-3-2(d), particulate from each of the coating lines (CL1 and CL2) shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

Since each of the coating lines (CL1 and CL2) uses dry filters to control particulate overspray, they are each in compliance with 326 IAC 6-3-2.
- (u) 326 IAC 8-2-11 (Volatile Organic Compounds, Fabric and Vinyl Coating)
The requirements of 326 IAC 8-2-11 are not applicable to this source, since this source does not perform surface coating of fabric or vinyl as defined by 326 IAC 8-2-11(a). This source performs surface coating of bonded leather, which is not considered a fabric or vinyl as defined by 326 IAC 8-2-11(a).
- (v) 326 IAC 8-1-6 (VOC rules: General Reduction Requirements for New Facilities)
The requirements of 326 IAC 8-1-6 are not applicable to coating lines CL1 and CL2, since they each do not have the potential to emit greater than twenty-five (25) tons of VOCs per year.
- (w) There are no other 326 IAC 8 Rules that are applicable to the coating lines CL1 and CL2.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance determination requirements of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements. 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.

Compliance Determination Requirements

- (a) The compliance determination requirements applicable to baghouse BH1 controlling particulate emissions from each of the buffing machines are as follows:
 - (1) Baghouse BH1 for particulate control shall be in operation and control emissions from the buffing machines at all times that the buffing machines are in operation; and
 - (2) The Permittee shall perform PM, PM10, and chromium testing for baghouse BH1. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration

Compliance Monitoring Requirements

- (a) The compliance monitoring requirements applicable to baghouse BH1 controlling particulate emissions from each of the buffing machines are as follows:
 - (1) The Permittee shall perform daily visible emission notations of the baghouse BH1 stack exhaust; and
 - (2) The Permittee shall perform daily pressure drop readings of the baghouse.

These monitoring conditions are necessary because baghouse BH1 must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) and to render 326 IAC 2-2 (PSD), 326 IAC 2-3 (Emission Offset), 326 IAC 2-7 (Part 70 Permits), and 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP) not applicable.

- (b) The compliance monitoring requirements applicable to each of the coating lines (CL1 and CL2) are as follows:
 - (1) The Permittee shall perform weekly overspray observations, and daily and monthly inspections of the dry particulate filters controlling each of the coating lines (CL1 and CL2).

These monitoring conditions are necessary because the dry filters for each of the coating lines (CL1 and CL2) must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes).

Recordkeeping and Reporting Requirements

- (a) The recordkeeping and reporting requirements applicable to baghouse BH1 controlling particulate emissions from each of the buffing machines are as follows:
 - (1) The Permittee shall maintain records of daily visible emission notations of baghouse BH1 stack exhaust; and
 - (2) The Permittee shall maintain records once per day of the baghouse pressure drop during normal operation.

- (b) The recordkeeping and reporting requirements applicable to each of the coating lines (CL1 and CL2) are as follows:
 - (1) The Permittee shall maintain records of weekly overspray observations, and daily and monthly inspections, for each of the coating lines (CL1 and CL2).

| |
|--------------------------------------|
| Conclusion and Recommendation |
|--------------------------------------|

- (a) The operation of the entire source shall be subject to the conditions of the attached proposed Federally Enforceable State Operating Permit (FESOP) No. 077-23120-00015.
- (b) Unless otherwise stated, information used in this review was derived from the application and received by the Office of Air Quality (OAQ) on May 23, 2006. Additional information was received on June 5, 2006, January 3, 2007, January 4, 2007, and January 8, 2007.
- (c) Based on the facts, conditions, and evaluations made, the OAQ staff recommends to the IDEM's Commissioner that the Federally Enforceable State Operating Permit (FESOP) No. 077-23120-00015 be approved.
- (d) Copies of the preliminary findings have been provided to the Madison-Jefferson County Public Library.

| |
|---------------------|
| IDEM Contact |
|---------------------|

Questions regarding this proposed permit can be directed to Mr. Nathan Bell at the Indiana Department Environmental Management, Office of Air Quality, 100 North Senate Avenue, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-3350 or toll free at 1-800-451-6027 extension 4-3350.

Appendix A: Emissions Calculations
Emission Summary

Company Name: Robus Leather Corporation
Address City IN Zip: 1100 W. Hutchinson Lane, Madison, IN 47250
Permit Number: 077-23120
Plt ID: 077-00015
Reviewer: Nathan C. Bell
Date: January 12, 2007

| Uncontrolled Potential Emissions (tons/year) | | | | | | | | |
|--|----------------------------|------------------|------------------|------------------|-----------------------|--------------------------|--------------------------|---------------|
| Emissions Generating Activity | | | | | | | | |
| Category | Pollutant | Buffing Machines | Steam Boiler BH1 | Steam Boiler BH2 | Degreasing Operations | Surface Coating Line CL1 | Surface Coating Line CL2 | TOTAL |
| Criteria Pollutants | PM | 4297.31 | 0.63 | 0.64 | | 10.02 | 6.01 | 4314.60 |
| | PM10 | 4297.31 | 0.33 | 0.34 | | 10.02 | 6.01 | 4314.01 |
| | SO2 | | 6.66 | 6.86 | | | | 13.53 |
| | NOx | | 6.26 | 6.44 | | | | 12.70 |
| | VOC | | 0.24 | 0.25 | 0.64 | 18.01 | 18.01 | 37.14 |
| | CO | | 3.68 | 3.79 | | | | 7.47 |
| Hazardous Air Pollutants | Benzene | | 9.2E-05 | 9.5E-05 | | | | 1.9E-04 |
| | Dichlorobenzene | | 5.3E-05 | 5.4E-05 | | | | 1.1E-04 |
| | Ethylbenzene | | | | 9.3E-04 | | | 9.3E-04 |
| | Ethylene Glycol | | | | | 2.73 | 2.73 | 5.46 |
| | Formaldehyde | | 3.3E-03 | 3.4E-03 | | | | 6.7E-03 |
| | Glycol Ethers | | | | 0.46 | 3.01 | 3.01 | 6.48 |
| | Hexamethylene Diisocyanate | | | | | 5.9E-04 | 5.9E-04 | 1.2E-03 |
| | n-Hexane | | 0.08 | 0.08 | | | | 0.16 |
| | Naphthalene | | | | 9.6E-04 | | | 9.6E-04 |
| | Toluene | | 1.5E-04 | 1.5E-04 | 5.7E-05 | | | 3.6E-04 |
| | Triethylamine | | | | | 4.14 | 4.14 | 8.27 |
| | Xylene | | | | 7.0E-03 | | | 7.0E-03 |
| | Arsenic | | 1.8E-04 | 1.8E-04 | | | | 3.6E-04 |
| | Beryllium | | 1.3E-04 | 1.4E-04 | | | | 2.7E-04 |
| | Lead | | 3.9E-04 | 4.1E-04 | | | | 8.0E-04 |
| | Cadmium | | 1.3E-04 | 1.4E-04 | | | | 2.7E-04 |
| | Chromium | 214.87 | 1.3E-04 | 1.4E-04 | | | | 214.87 |
| | Manganese | | 2.6E-04 | 2.7E-04 | | | | 5.3E-04 |
| | Mercury | | 1.3E-04 | 1.4E-04 | | | | 2.7E-04 |
| | Nickel | | 1.3E-04 | 1.4E-04 | | | | 2.7E-04 |
| Selenium | | 6.6E-04 | 6.8E-04 | | | | 1.3E-03 | |
| Totals | | 214.87 | 0.08 | 0.09 | 0.47 | 9.88 | 9.88 | 235.26 |
| | | | | | | | Worse Case HAP | 214.87 |

Total emissions based on rated capacity at 8,760 hours/year.

| Controlled Potential Emissions (tons/year) | | | | | | | | |
|--|----------------------------|------------------|------------------|------------------|-----------------------|--------------------------|--------------------------|--------------|
| Emissions Generating Activity | | | | | | | | |
| Category | Pollutant | Buffing Machines | Steam Boiler BH1 | Steam Boiler BH2 | Degreasing Operations | Surface Coating Line CL1 | Surface Coating Line CL2 | TOTAL |
| Criteria Pollutants | PM | 42.97 | 0.63 | 0.64 | | 1.00 | 0.60 | 45.85 |
| | PM10 | 42.97 | 0.33 | 0.34 | | 1.00 | 0.60 | 45.25 |
| | SO2 | | 6.66 | 6.86 | | | | 13.53 |
| | NOx | | 6.26 | 6.44 | | | | 12.70 |
| | VOC | | 0.24 | 0.25 | 0.64 | 18.01 | 18.01 | 37.14 |
| | CO | | 3.68 | 3.79 | | | | 7.47 |
| Hazardous Air Pollutants | Benzene | | 9.2E-05 | 9.5E-05 | | | | 1.9E-04 |
| | Dichlorobenzene | | 5.3E-05 | 5.4E-05 | | | | 1.1E-04 |
| | Ethylbenzene | | | | 9.3E-04 | | | 9.3E-04 |
| | Ethylene Glycol | | | | | 2.73 | 2.73 | 5.46 |
| | Formaldehyde | | 3.3E-03 | 3.4E-03 | | | | 6.7E-03 |
| | Glycol Ethers | | | | 0.46 | 3.01 | 3.01 | 6.48 |
| | Hexamethylene Diisocyanate | | | | | 5.9E-04 | 5.9E-04 | 1.2E-03 |
| | n-Hexane | | 0.08 | 0.08 | | | | 0.16 |
| | Naphthalene | | | | 9.6E-04 | | | 9.6E-04 |
| | Toluene | | 1.5E-04 | 1.5E-04 | 5.7E-05 | | | 3.6E-04 |
| | Triethylamine | | | | | 4.14 | 4.14 | 8.27 |
| | Xylene | | | | 7.0E-03 | | | 7.0E-03 |
| | Arsenic | | 1.8E-04 | 1.8E-04 | | | | 3.6E-04 |
| | Beryllium | | 1.3E-04 | 1.4E-04 | | | | 2.7E-04 |
| | Lead | | 3.9E-04 | 4.1E-04 | | | | 8.0E-04 |
| | Cadmium | | 1.3E-04 | 1.4E-04 | | | | 2.7E-04 |
| | Chromium | 2.15 | 1.3E-04 | 1.4E-04 | | | | 2.15 |
| | Manganese | | 2.6E-04 | 2.7E-04 | | | | 5.3E-04 |
| | Mercury | | 1.3E-04 | 1.4E-04 | | | | 2.7E-04 |
| | Nickel | | 1.3E-04 | 1.4E-04 | | | | 2.7E-04 |
| Selenium | | 6.6E-04 | 6.8E-04 | | | | 1.3E-03 | |
| Totals | | 2.15 | 0.08 | 0.09 | 0.47 | 9.88 | 9.88 | 22.54 |
| | | | | | | | Worse Case HAP | 8.27 |

Total emissions based on rated capacity at 8,760 hours/year.

**Appendix A: Emissions Calculations
Buffing Machines**

Company Name: Robus Leather Corporation
Address City IN Zip: 1100 W. Hutchinson Lane, Madison, IN 47250
Permit Number: 077-23120
Plt ID: 077-00015
Reviewer: Nathan C. Bell
Date: January 12, 2007

Based on information provided by the source, the worst case maximum process weight rate for each of the four (4) buffing machines is approximately 1533 pounds of dried bonded leather per hour (based on 130 yards per hour of 5.0-mm thick dried bonded leather) and the worst case maximum material removed from the 5.0-mm thick bonded leather during buffing is 16% by weight (245 pounds of PM/PM10 per hour). During buffing of leather made with chrome leather blue shavings, the buffing dust may contain trivalent chromium (Cr+3) at an average content of approximately 5% by weight, which is considered a hazardous air pollutant (HAP) under "chromium compounds". The particulate (PM/PM10) emissions from the four(4) buffing machines will be controlled by one baghouse (BH1) with a control efficiency of 99%.

| Description | Maximum Worst Case Throughput of Leather in Buffing Machine (lbs/hr) | Maximum Worst Case Buffing Dust Generated During Buffing (% by weight) | Chromium (Cr ⁺³) Content (% by weight) | Uncontrolled PTE of PM/PM10 (lbs/hr) | Uncontrolled PTE of PM/PM10 (tons/yr) | Uncontrolled PTE of Chromium (tons/yr) | PM/PM10 Collection Efficiency (%) | Controlled PTE of PM/PM10 (lbs/hr) | Controlled PTE of PM/PM10 (tons/yr) | Controlled PTE of Chromium (tons/yr) |
|-----------------|--|--|--|--------------------------------------|---------------------------------------|--|-----------------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Buffing Machine | 1533 | 16.0% | 5.0% | 245.3 | 1074.3 | 53.7 | 99.0% | 2.45 | 10.7 | 0.54 |
| Buffing Machine | 1533 | 16.0% | 5.0% | 245.3 | 1074.3 | 53.7 | 99.0% | 2.45 | 10.7 | 0.54 |
| Buffing Machine | 1533 | 16.0% | 5.0% | 245.3 | 1074.3 | 53.7 | 99.0% | 2.45 | 10.7 | 0.54 |
| Buffing Machine | 1533 | 16.0% | 5.0% | 245.3 | 1074.3 | 53.7 | 99.0% | 2.45 | 10.7 | 0.54 |
| Totals | | | | 981.1 | 4297.3 | 214.9 | | 9.81 | 43.0 | 2.15 |

Methodology

Uncontrolled PTE of PM/PM10 (lbs/hr) = [Throughput of Leather in Buffing Machine (lbs/hr)]*Dust Generated During Buffing (% by weight of leather)]
 Uncontrolled PTE of PM/PM10 (tons/yr) = [Uncontrolled PTE of PM/PM10 (lbs/hr)] * [8760 hr/yr] * [1 ton/2,000 lbs]
 Uncontrolled PTE of Chromium (tons/yr) = [Uncontrolled PTE of PM/PM10 (tons/yr)] * [Percent Chromium Content]
 Controlled PTE of PM/PM10 (lbs/hr) = [Uncontrolled PTE of PM/PM10 (lbs/hr)] * [1 - Control Efficiency]
 Controlled PTE of PM/PM10 (tons/yr) = [Uncontrolled PTE of PM/PM10 (tons/yr)] * [1 - Control Efficiency]
 Controlled PTE of Chromium (tons/yr) = [Uncontrolled PTE of Chromium (tons/yr)] * [1 - Control Efficiency]

Compliance with 326 IAC 6-3-2:

| | |
|---|-------------------------------|
| Allowable Emissions, E = 4.10 * P ^{0.67} (for weight rates up to 60,000 lb/hr) | |
| where | E = emissions in lbs/hr |
| | P = process weight in tons/hr |
| | P = 1533 lbs/hr |
| | = 0.767 tons/hr |
| Allowable PM Emissions, E = | 3.43 lbs/hr |
| | = 82.3 lbs/day |
| | = 15.03 tons/yr |
| The use of baghouses ensure compliance with the allowable emission rate. | |

**Appendix A: Emissions Calculations
Natural Gas or No. 2 Fuel Oil Combustion
MM BTU/HR <100
Steam Boiler BH1**

**Company Name: Robus Leather Corporation
Address City IN Zip: 1100 W. Hutchinson Lane, Madison, IN 47250
Permit Number: 077-23120
Plt ID: 077-00015
Reviewer: Nathan C. Bell
Date: January 12, 2007**

Criteria Pollutants

| Pollutant | | | | PM* | PM10* | SO2 | NOx** | VOC | CO |
|---|-----------------------------------|------------------------------|---------------------------------|-------------------------------|-------------|-------------|-------------|-------------|-------------|
| Natural Gas Emission Factor (lb/MMCF) | | | | 1.9 | 7.6 | 0.6 | 100.0 | 5.5 | 84.0 |
| No. 2 Fuel Oil Emission Factor (lb/kgal) with weight % Sulfur = | | | | 2.0 | | 21.3 | 20.0 | 0.34 | 5.0 |
| Emission Unit | Unit Heat Input Capacity MMBtu/hr | Potential Throughput MMCF/yr | Potential Throughput kgals/year | Potential Emissions (tons/yr) | | | | | |
| | | | | PM* | PM10* | SO2 | NOx** | VOC | CO |
| Steam Boiler BH1 (Natural Gas) | 10.0 | 87.6 | NA | 0.08 | 0.33 | 0.03 | 4.38 | 0.24 | 3.68 |
| Steam Boiler BH1 (No. 2 Fuel Oil) | 10.0 | NA | 625.7 | 0.63 | | 6.66 | 6.26 | 0.11 | 1.56 |
| Worst Case PTE (tons/yr) | | | | 0.63 | 0.33 | 6.66 | 6.26 | 0.24 | 3.68 |

Hazardous Air Pollutants (HAPs)

| Pollutant*** | Benzene | DCB | Formaldehyde | Hexane | Toluene | As | Be |
|---|-------------------------------|----------------|----------------|-------------|----------------|----------------|----------------|
| Natural Gas Emission Factor (lb/MMCF) | 2.1E-03 | 1.2E-03 | 7.5E-02 | 1.8E+00 | 3.4E-03 | | |
| No. 2 Fuel Oil Emission Factor (lb/MMBtu) | | | | | | 4.0E-06 | 3.0E-06 |
| Emission Unit | Potential Emissions (tons/yr) | | | | | | |
| Steam Boiler BH1 (Natural Gas) | 9.2E-05 | 5.3E-05 | 3.3E-03 | 7.9E-02 | 1.5E-04 | | |
| Steam Boiler BH1 (No. 2 Fuel Oil) | | | | | | 1.8E-04 | 1.3E-04 |
| Worst Case PTE (tons/yr) | 9.2E-05 | 5.3E-05 | 3.3E-03 | 0.08 | 1.5E-04 | 1.8E-04 | 1.3E-04 |

| Pollutant*** | Pb | Cd | Cr | Mn | Hg | Ni | Se |
|---|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Natural Gas Emission Factor (lb/MMCF) | 5.0E-04 | 1.1E-03 | 1.4E-03 | 3.8E-04 | | 2.1E-03 | |
| No. 2 Fuel Oil Emission Factor (lb/MMBtu) | 9.0E-06 | 3.0E-06 | 3.0E-06 | 6.0E-06 | 3.0E-06 | 3.0E-06 | 1.5E-05 |
| Emission Unit | Potential Emissions (tons/yr) | | | | | | |
| Steam Boiler BH1 (Natural Gas) | 2.2E-05 | 4.8E-05 | 6.1E-05 | 1.7E-05 | | 9.2E-05 | |
| Steam Boiler BH1 (No. 2 Fuel Oil) | 3.9E-04 | 1.3E-04 | 1.3E-04 | 2.6E-04 | 1.3E-04 | 1.3E-04 | 6.6E-04 |
| Worst Case PTE (tons/yr) | 3.9E-04 | 1.3E-04 | 1.3E-04 | 2.6E-04 | 1.3E-04 | 1.3E-04 | 6.6E-04 |

Worst Case PTE of Total HAPs (tons/yr) = 0.08

*PM emission factor for natural gas 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

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

Methodology (Natural Gas Example)

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

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

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)

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu, MMCF = 1,000,000 Cubic Feet of Gas

Methodology (No. 2 Fuel Oil)

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Unit Heat Input Capacity (MMBtu/hr) * 8,760 hrs/yr * 1kgal/1000 gal * 1 gal/0.140 MM Btu

Potential Throughput (kgals/year) for Emergency Gernators (<500 hrs/yr) = Unit Heat Input Capacity (MMBtu/hr) * 500 hrs/yr * 1kgal/1000 gal * 1 gal/0.140 MM Btu

Emission Factors for Criteria Pollutants are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see erata file)

*PM emission factor for No. 2 Fuel Oil is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

Potential Emission for Criteria Pollutants (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

Potential Emissions for HAPs (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton

No data was available in AP-42 for organic HAPs.

Abbreviations

PM = Particulate Matter

PM10 = Particulate Matter (<10 um)

SO2 = Sulfur Dioxide

NOx = Nitrous Oxides

VOC - Volatile Organic Compounds

CO = Carbon Monoxide

DCB = Dichlorobenzene

As = Arsenic

Be = Beryllium

Cd = Cadmium

Cr = Chromium

Pb = Lead

Mn = Manganese

Hg = Mercury

Ni = Nickel

Se = Selenium

**Appendix A: Emissions Calculations
Natural Gas or No. 2 Fuel Oil Combustion
MM BTU/HR <100
Steam Boiler BH2**

**Company Name: Robus Leather Corporation
Address City IN Zip: 1100 W. Hutchinson Lane, Madison, IN 47250
Permit Number: 077-23120
Plt ID: 077-00015
Reviewer: Nathan C. Bell
Date: January 12, 2007**

Criteria Pollutants

| Pollutant | | | | PM* | PM10* | SO2 | NOx** | VOC | CO |
|---|-----------------------------------|------------------------------|---------------------------------|-------------------------------|-------------|-------------|-------------|-------------|-------------|
| Natural Gas Emission Factor (lb/MMCF) | | | | 1.9 | 7.6 | 0.6 | 100.0 | 5.5 | 84.0 |
| No. 2 Fuel Oil Emission Factor (lb/kgal) with weight % Sulfur = | | | | 2.0 | | 21.3 | 20.0 | 0.34 | 5.0 |
| Emission Unit | Unit Heat Input Capacity MMBtu/hr | Potential Throughput MMCF/yr | Potential Throughput kgals/year | Potential Emissions (tons/yr) | | | | | |
| | | | | PM* | PM10* | SO2 | NOx** | VOC | CO |
| Steam Boiler BH2 (Natural Gas) | 10.3 | 90.2 | NA | 0.09 | 0.34 | 0.03 | 4.51 | 0.25 | 3.79 |
| Steam Boiler BH2 (No. 2 Fuel Oil) | 10.3 | NA | 644.5 | 0.64 | | 6.86 | 6.44 | 0.11 | 1.61 |
| Worst Case PTE (tons/yr) | | | | 0.64 | 0.34 | 6.86 | 6.44 | 0.25 | 3.79 |

Hazardous Air Pollutants (HAPs)

| Pollutant*** | Benzene | DCB | Formaldehyde | Hexane | Toluene | As | Be | |
|---|-------------------------------|----------------|----------------|----------------|-------------|----------------|----------------|----------------|
| Natural Gas Emission Factor (lb/MMCF) | 2.1E-03 | 1.2E-03 | 7.5E-02 | 1.8E+00 | 3.4E-03 | | | |
| No. 2 Fuel Oil Emission Factor (lb/MMBtu) | | | | | | 4.0E-06 | 3.0E-06 | |
| Emission Unit | Potential Emissions (tons/yr) | | | | | | | |
| Steam Boiler BH2 (Natural Gas) | 9.5E-05 | 5.4E-05 | 3.4E-03 | 8.1E-02 | 1.5E-04 | | | |
| Steam Boiler BH2 (No. 2 Fuel Oil) | | | | | | 1.8E-04 | 1.4E-04 | |
| Worst Case PTE (tons/yr) | | 9.5E-05 | 5.4E-05 | 3.4E-03 | 0.08 | 1.5E-04 | 1.8E-04 | 1.4E-04 |

| Pollutant*** | Pb | Cd | Cr | Mn | Hg | Ni | Se | |
|---|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Natural Gas Emission Factor (lb/MMCF) | 5.0E-04 | 1.1E-03 | 1.4E-03 | 3.8E-04 | | 2.1E-03 | | |
| No. 2 Fuel Oil Emission Factor (lb/MMBtu) | 9.0E-06 | 3.0E-06 | 3.0E-06 | 6.0E-06 | 3.0E-06 | 3.0E-06 | 1.5E-05 | |
| Emission Unit | Potential Emissions (tons/yr) | | | | | | | |
| Steam Boiler BH2 (Natural Gas) | 2.3E-05 | 5.0E-05 | 6.3E-05 | 1.7E-05 | | 9.5E-05 | | |
| Steam Boiler BH2 (No. 2 Fuel Oil) | 4.1E-04 | 1.4E-04 | 1.4E-04 | 2.7E-04 | 1.4E-04 | 1.4E-04 | 6.8E-04 | |
| Worst Case PTE (tons/yr) | | 4.1E-04 | 1.4E-04 | 1.4E-04 | 2.7E-04 | 1.4E-04 | 1.4E-04 | 6.8E-04 |

Worst Case PTE of Total HAPs (tons/yr) = 0.09

*PM emission factor for natural gas 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

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

Methodology (Natural Gas Example)

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

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

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)

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu, MMCF = 1,000,000 Cubic Feet of Gas

Methodology (No. 2 Fuel Oil)

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Unit Heat Input Capacity (MMBtu/hr) * 8,760 hrs/yr * 1kgal/1000 gal * 1 gal/0.140 MM Btu

Potential Throughput (kgals/year) for Emergency Gernators (<500 hrs/yr) = Unit Heat Input Capacity (MMBtu/hr) * 500 hrs/yr * 1kgal/1000 gal * 1 gal/0.140 MM Btu

Emission Factors for Criteria Pollutants are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see erata file)

*PM emission factor for No. 2 Fuel Oil is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

Potential Emission for Criteria Pollutants (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

Potential Emissions for HAPs (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton

No data was available in AP-42 for organic HAPs.

Abbreviations

PM = Particulate Matter

PM10 = Particulate Matter (<10 um)

SO2 = Sulfur Dioxide

NOx = Nitrous Oxides

VOC - Volatile Organic Compounds

CO = Carbon Monoxide

DCB = Dichlorobenzene

As = Arsenic

Be = Beryllium

Cd = Cadmium

Cr = Chromium

Pb = Lead

Mn = Manganese

Hg = Mercury

Ni = Nickel

Se = Selenium

**Appendix A: Emissions Calculations
Degreasing Operations**

**Company Name: Robus Leather Corporation
Address City IN Zip: 1100 W. Hutchinson Lane, Madison, IN 47250
Permit Number: 077-23120
Plt ID: 077-00015
Reviewer: Nathan C. Bell
Date: January 12, 2007**

Volatile Organic Comounds (VOC) and Particulate Matter (PM)

| Operation and Material | Density (lb/gal) | Weight % Volatile (H2O & Organics) | Weight % Water + Non-VOCs | Weight % Solids | Weight % VOCs | Volume % Water + Non- | Volume % Solids | Maximum Usage (gal/year) | Maximum Usage (lb/hr) | VOC Content (lbs/gal) | PTE VOC (lb/hr) | PTE VOC (lb/day) | PTE VOC (tons/yr) |
|--|------------------|------------------------------------|---------------------------|-----------------|---------------|-----------------------|-----------------|--------------------------|-----------------------|-----------------------|-----------------|------------------|-------------------|
| Parts Washer (PW1) (Mac's Parts Cleaning Liquid) | 7.65 | 100.0% | 55.0% | 0.0% | 45.0% | 55.0% | 0.0% | 5.0 | 0.004 | 3.44 | 0.002 | 0.047 | 0.009 |
| Parts Washer (PW1) (Calumet Mineral Spirits) | 6.34 | 100.0% | 0.0% | 0.0% | 100.0% | 0.0% | 0.0% | 55.0 | 0.040 | 6.34 | 0.040 | 0.955 | 0.174 |
| General Clean Up (Marvella X) | 9.26 | 100.0% | 90.0% | 0.0% | 10.0% | 90.0% | 0.0% | 990.0 | 1.046 | 0.93 | 0.105 | 2.511 | 0.458 |
| Totals | | | | | | | | | | | 0.15 | 3.51 | 0.64 |

Hazardous Air Pollutants (HAPs)

| Operation and Material | Density (lb/gal) | Maximum Usage (gal/year) | Weight % Naphthalene | PTE Naphthalene (tons/yr) | Weight % Xylene* | PTE Xylene* (tons/yr) | Weight % Toluene* | PTE Toluene* (tons/yr) | Weight % EB* | PTE EB* (tons/yr) | Weight % GE | PTE GE (tons/yr) | Total (tons/yr) |
|--|------------------|--------------------------|----------------------|---------------------------|------------------|-----------------------|-------------------|------------------------|--------------|-------------------|-------------|------------------|-----------------|
| Parts Washer (PW1) (Mac's Parts Cleaning Liquid) | 7.65 | 5.00 | 5.0% | 9.6E-04 | 0.3% | 5.7E-05 | 0.3% | 5.7E-05 | 0.3% | 5.7E-05 | 0.0% | 0 | 1.1E-03 |
| Parts Washer (PW1) (Calumet Mineral Spirits) | 6.34 | 55.00 | 0.0% | 0 | 4.0% | 7.0E-03 | 0.0% | 0 | 0.5% | 8.7E-04 | 0.0% | 0 | 7.8E-03 |
| General Clean Up (Marvella X) | 9.26 | 990.00 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 10.0% | 0.46 | 4.6E-01 |
| Totals | | | | 9.6E-04 | | 7.0E-03 | | 5.7E-05 | | 9.3E-04 | | 0.46 | |

*Pursuant to 40 CFR 63, it is assumed that petroleum naphtha has a typical organic HAP composition (% by mass) of 1% Xylene, 1% Toluene, and 1% Ethylbenzene. Mac's Parts Cleaning Liquid has a petroluem naphtha content of less than 30%.

METHODOLOGY

Maximum Usage (lbs/hr) = [Maximum Usage (gal/year)] * [Density (lb/gal)] / [8760 hour/year]
 VOC Content (lbs/gal) = [Density (lb/gal)] * [Weight % VOCs]
 PTE of VOCs (lbs/hour) = [Maximum Usage (lbs/hr)] * [Weight % VOCs]
 PTE of VOCs (lbs/day) = [PTE of VOC (lbs/hr)] * [24 hours/day]
 PTE of VOCs (tons/year) = [PTE of VOCs (lbs/day)] * [365 days/yr] * [1 ton/2000 lbs]
 PTE of HAPS (tons/yr) = [Density (lb/gal)] * [Maximum Usage (gal/year)] * [Weight % HAP] * [1 ton/2000 lbs]

ACRONYMS

GE = Glycol Ethers
 EB = Ethylbenzene

Appendix A: Emissions Calculations
Surface Coating Line CL1
Volatile Organic Compounds (VOC) and Particulate Matter (PM)

Company Name: Robus Leather Corporation
Address City IN Zip: 1100 W. Hutchinson Lane, Madison, IN 47250
Permit Number: 077-23120
Plt ID: 077-00015
Reviewer: Nathan C. Bell
Date: January 12, 2007

Volatle Organic Comounds (VOC) and Particulate Matter (PM)

| Operation and Material* | Primary Type of Surface Coated | Density (lb/gal) | Weight % Volatile (H2O & Organics) | Weight % Water + Non-VOCs | Weight % Solids | Weight % VOCs | Volume % Water + Non-VOCs | Volume % Solids | Usage (gal/unit) | Maximum Capacity (unit/hr) | Maximum Usage (gal/day) | Maximum Usage (lb/hr) | per gallon of coating less water and non-VOCs | Pounds VOC per gallon of coating | PTE VOC (lb/hr) | PTE VOC (lb/day) | PTE VOC (tons/yr) | PTE PM (lb/hr) | PTE PM (tons/yr) | lb VOC per gal solids | Transfer Efficiency | | | | | | | | |
|--|--------------------------------|------------------|------------------------------------|---------------------------|-----------------|---------------|---------------------------|-----------------|------------------|----------------------------|-------------------------|-----------------------|---|----------------------------------|-----------------|------------------|-------------------|----------------|------------------|-----------------------|---------------------|--|--|--|--|--|--|--|--|
| Base Coat (Roll Coater) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RC21-086 Aqueous Compact Resin | Leather | 7.70 | 72.0% | 64.0% | 28.0% | 8.0% | 75.0% | 25.0% | 0.00957 | 150 | 34.44 | 11.05 | 2.46 | 0.62 | 0.88 | 21.21 | 3.87 | 0 | 0 | 2.46 | 100% | | | | | | | | |
| RC21-095 Aqueous Compact Resin | Leather | 8.46 | 74.0% | 73.0% | 26.0% | 1.0% | 77.0% | 23.0% | 0.00717 | 150 | 25.83 | 9.10 | 0.37 | 0.08 | 0.09 | 2.19 | 0.40 | 0 | 0 | 0.37 | 100% | | | | | | | | |
| RODA MAT D 703 Modified Leather Finish | Leather | 8.20 | 76.0% | 76.0% | 24.0% | 0.0% | 79.0% | 21.0% | 0.00143 | 150 | 5.17 | 1.77 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 100% | | | | | | | | |
| Water | Leather | 8.34 | 100.0% | 100.0% | 0.0% | 0.0% | 100.0% | 0.0% | 0.00239 | 150 | 8.61 | 2.99 | NA | 0 | 0 | 0 | 0 | 0 | 0 | NA | 100% | | | | | | | | |
| Robus 1001 | Leather | 7.71 | 100.0% | 0.0% | 0.0% | 100.0% | 100.0% | 0.0% | 0.00048 | 150 | 1.72 | 0.55 | NA | 7.71 | 0.55 | 13.28 | 2.42 | 0 | 0 | NA | 100% | | | | | | | | |
| LA1610 Levelling Aid | Leather | 8.70 | 73.0% | 53.0% | 27.0% | 20.0% | 76.0% | 24.0% | 0.00036 | 150 | 1.29 | 0.47 | 7.25 | 1.74 | 0.09 | 2.25 | 0.41 | 0 | 0 | 7.25 | 100% | | | | | | | | |
| Eudem Black B-N Pigment | Leather | 9.17 | 80.0% | 75.00% | 20.0% | 5.00% | 78.0% | 17.0% | 0.00526 | 150 | 18.94 | 7.24 | 2.09 | 0.46 | 0.36 | 8.69 | 1.59 | 0 | 0 | 2.70 | 100% | | | | | | | | |
| Totals for Base Coat | | | | | | | | | | | | | | | 1.98 | 47.61 | 8.69 | 0.00 | 0.00 | | | | | | | | | | |
| Optima Top Coat (low pressure air atomization spray coater) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RC21-086 Aqueous Compact Resin | Leather | 7.70 | 72.0% | 64.0% | 28.0% | 8.0% | 75.0% | 25.0% | 0.00411 | 150 | 14.80 | 5.33 | 2.98 | 0.87 | 0.53 | 12.80 | 2.34 | 0.85 | 3.74 | 2.98 | 50% | | | | | | | | |
| RC21-086 Aqueous Compact Resin | Leather | 7.70 | 72.0% | 64.0% | 28.0% | 8.0% | 75.0% | 25.0% | 0.00493 | 150 | 17.76 | 5.70 | 2.46 | 0.62 | 0.46 | 10.94 | 2.00 | 0.80 | 3.49 | 2.46 | 50% | | | | | | | | |
| RODA pur VL2002 polyurethane in water | Leather | 8.65 | 80.0% | 57.0% | 20.0% | 23.0% | 83.0% | 17.0% | 0.00329 | 150 | 11.84 | 4.27 | 11.70 | 1.99 | 0.98 | 23.56 | 4.30 | 0.43 | 1.87 | 11.70 | 50% | | | | | | | | |
| Esi Ceryl 325N35 HDPE Wax Emulsion | Leather | 8.32 | 62.0% | 59.0% | 38.0% | 3.0% | 65.0% | 35.0% | 0.00041 | 150 | 1.48 | 0.51 | 0.71 | 0.25 | 0.02 | 0.37 | 0.07 | 0.10 | 0.43 | 0.71 | 50% | | | | | | | | |
| Water | Leather | 8.34 | 100.0% | 100% | 0.0% | 0.0% | 100.0% | 0.0% | 0.00987 | 150 | 35.52 | 12.34 | NA | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | NA | 50% | | | | | | | | |
| LA1610 Levelling Aid | Leather | 8.70 | 73.0% | 53% | 27.0% | 20.0% | 76.0% | 24.0% | 0.00031 | 150 | 1.11 | 0.40 | 7.25 | 1.74 | 0.08 | 1.93 | 0.35 | 0.05 | 0.24 | 7.25 | 50% | | | | | | | | |
| Eudem Black B-N Pigment | Leather | 9.17 | 80.0% | 75.00% | 20.0% | 5.00% | 78.0% | 17.0% | 0.00041 | 150 | 1.48 | 0.57 | 2.09 | 0.46 | 0.03 | 0.68 | 0.12 | 0.06 | 0.25 | 2.70 | 50% | | | | | | | | |
| Totals for Top Coat | | | | | | | | | | | | | | | 2.10 | 50.28 | 9.18 | 2.29 | 10.02 | | | | | | | | | | |
| Emboss Coat/Semi-Gloss Coat (low pressure air atomization spray coater) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RC21-086 Aqueous Compact Resin | Leather | 8.65 | 80.0% | 58.00% | 32.0% | 10.00% | 71.0% | 29.0% | 0.00644 | 150 | 23.17 | 8.35 | 2.98 | 0.87 | 0.84 | 20.04 | 3.66 | 1.34 | 5.85 | 2.98 | 50% | | | | | | | | |
| RC21-086 Aqueous Compact Resin | Leather | 8.65 | 80.0% | 57.0% | 20.0% | 23.0% | 83.0% | 17.0% | 0.00368 | 150 | 13.24 | 4.77 | 11.70 | 1.99 | 1.10 | 26.34 | 4.81 | 0.48 | 2.09 | 11.70 | 50% | | | | | | | | |
| RODA pur VL2002 polyurethane in water | Leather | 8.34 | 100.0% | 100% | 0.0% | 0.0% | 100.0% | 0.0% | 0.01103 | 150 | 39.72 | 13.80 | NA | 0 | 0 | 0 | 0 | 0 | 0 | NA | 50% | | | | | | | | |
| Water | Leather | 8.34 | 100.0% | 100% | 0.0% | 0.0% | 100.0% | 0.0% | 0.01103 | 150 | 39.72 | 13.80 | NA | 0 | 0 | 0 | 0 | 0 | 0 | NA | 50% | | | | | | | | |
| LA1610 Levelling Aid | Leather | 8.70 | 73.0% | 53% | 27.0% | 20.0% | 76.0% | 24.0% | 0.00034 | 150 | 1.24 | 0.45 | 7.25 | 1.74 | 0.09 | 2.16 | 0.39 | 0.06 | 0.27 | 7.25 | 50% | | | | | | | | |
| Esi Ceryl 325N35 HDPE Wax Emulsion | Leather | 8.32 | 62.0% | 59.0% | 38.0% | 3.0% | 65.0% | 35.0% | 0.00092 | 150 | 3.31 | 1.15 | 0.71 | 0.25 | 0.03 | 0.83 | 0.15 | 0.22 | 0.96 | 0.71 | 50% | | | | | | | | |
| 5263 | Leather | 8.34 | 82.0% | 82% | 18.0% | 0.0% | 85.0% | 15.0% | 0.00046 | 150 | 1.66 | 0.58 | 0 | 0 | 0 | 0 | 0 | 0.05 | 0.23 | 0.00 | 50% | | | | | | | | |
| Eudem Black B-N Pigment | Leather | 9.17 | 80.0% | 75.00% | 20.0% | 5.00% | 78.0% | 17.0% | 0.00046 | 150 | 1.66 | 0.63 | 2.09 | 0.46 | 0.03 | 0.76 | 0.14 | 0.06 | 0.28 | 2.70 | 50% | | | | | | | | |
| Totals for Emboss Coat | | | | | | | | | | | | | | | 2.09 | 50.13 | 9.15 | 2.21 | 9.67 | | | | | | | | | | |
| Worse Case Between Top Coat and Emboss Coat | | | | | | | | | | | | | | | 2.10 | 50.28 | 9.18 | 2.29 | 10.02 | | | | | | | | | | |
| Thickeners | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EX-62-864 or RM-6540 | Leather | 8.80 | 100.0% | 80.0% | 0.0% | 20.0% | 80.0% | 0.0% | 0.00007 | 150 | 0.27 | 0.10 | 8.80 | 1.76 | 0.02 | 0.47 | 0.09 | 0 | 0 | NA | 50% | | | | | | | | |
| RODA link C70 Crosslinker | Leather | 8.35 | 100.0% | 71.7% | 0.0% | 28.3% | 71.7% | 0.0% | 0.00004 | 150 | 0.13 | 0.04 | 8.35 | 2.36 | 0.01 | 0.30 | 0.06 | 0 | 0 | NA | 50% | | | | | | | | |

*Note: Coating line CL1 cannot apply top coat and emboss coat at the same time, therefore the worst case coating is assumed.

| | | | | | | | | | |
|---|--|--|--|--|--------------|--------------|--------------|-------------|--------------|
| Total Uncontrolled Potential to Emit (PTE) = | | | | | 4.11 | 98.67 | 18.01 | 2.29 | 10.02 |
| Dry Filter Control Efficiency = | | | | | 90.0% | | | | |
| Total Controlled Potential to Emit (PTE) (tons/yr) = | | | | | 0.23 | 1.00 | | | |

METHODOLOGY

Maximum Usage (lbs/hr) = Maximum Usage (gal/day) * Density (lb/gal) / (24 hour/day)
Maximum Usage (gal/day) = Usage (gallons/unit) * Maximum Capacity (units/hour) * 24 hours/day
Pounds of VOC per Gallon Coating less Water and non-VOCs = (Density (lb/gal) * Weight % VOCs) / (1-Volume % water and non-VOCs)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % VOCs)
Potential VOC Pounds per Hour = Maximum Usage (lbs/hr) * Weight % VOCs
Potential VOC Pounds per Day = Potential VOC (lbs/hr) * (24 hours/day)
Potential VOC Tons per Year = Potential VOC (lbs/day) * (365 days/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = Density (lbs/gal) * Maximum Usage (gal/day) * (Weight % Solids) * (1-Transfer efficiency) * (365 days/yr) * (1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % VOCs) / (Volume % solids)
Controlled Potential to Emit = Uncontrolled Potential to Emit * (1 - Control Efficiency)

**Appendix A: Emissions Calculations
Surface Coating Lines CL1
Hazardous Air Pollutants (HAPs)**

**Company Name: Robus Leather Corporation
Address City IN Zip: 1100 W. Hutchinson Lane, Madison, IN 47250
Permit Number: 077-23120
Plt ID: 077-00015
Reviewer: Nathan C. Bell
Date: January 12, 2007**

| Operation and Material | Maximum | | Weight % GE | GE Emissions (tons/yr) | Weight % Triethylamine | | Weight % EG | EG Emissions (tons/yr) | Weight % HMDI | | Total (tons/yr) |
|--|---------------------|--------------------|----------------|---------------------------|----------------------------|-------------------|----------------|---------------------------|------------------|----------------|--------------------|
| | Density (lb/gal) | Usage (gal/day) | | | Triethylamine (tons/yr) | HMDI (tons/yr) | | | | | |
| Base Coat (Roll Coater) | | | | | | | | | | | |
| RC21-086 | 7.70 | 34.44 | 0% | 0 | 5.00% | 2.42 | 0% | 0 | 0% | 0 | 2.42 |
| LA1610 Levelling Aid | 8.70 | 1.29 | 0% | 0 | 0% | 0 | 25.00% | 0.51 | 0% | 0 | 0.51 |
| Euderm Black B-N Pigment | 9.17 | 18.94 | 0% | 0 | 0% | 0 | 5.00% | 1.59 | 0% | 0 | 1.59 |
| Totals for Base Coat | | | | 0 | | 2.42 | | 2.10 | | 0 | 4.52 |
| Optima Top Coat (low pressure air atomization spray coater) | | | | | | | | | | | |
| RODA pur 8222 Waterborne polyurethane dispersion | 8.65 | 14.80 | 8.00% | 1.87 | 2.00% | 0.47 | 0% | 0 | 0% | 0 | 2.34 |
| RC21-086 | 7.70 | 17.76 | 0% | 0 | 5.00% | 1.25 | 0% | 0 | 0% | 0 | 1.25 |
| LA1610 Levelling Aid | 8.70 | 1.11 | 0% | 0 | 0% | 0 | 25.00% | 0.44 | 0% | 0 | 0.44 |
| Euderm Black B-N Pigment | 9.17 | 1.48 | 0% | 0 | 0% | 0 | 5.00% | 0.12 | 0% | 0 | 0.12 |
| Totals for Top Coat | | | | 1.87 | | 1.72 | | 0.56 | | 0 | 4.15 |
| Emboss Coat/Semi-Gloss Coat (low pressure air atomization spray coater) | | | | | | | | | | | |
| RODA pur 8222 Waterborne polyurethane dispersion | 8.65 | 23.17 | 8.00% | 2.93 | 2.00% | 0.73 | 0% | 0 | 0% | 0 | 3.66 |
| LA1610 Levelling Aid | 8.70 | 1.24 | 0% | 0 | 0% | 0 | 25.00% | 0.49 | 0% | 0 | 0.49 |
| Euderm Black B-N Pigment | 9.17 | 1.66 | 0% | 0 | 0% | 0 | 5.00% | 0.14 | 0% | 0 | 0.14 |
| Totals for Emboss Coat | | | | 2.93 | | 0.73 | | 0.63 | | 0 | 4.29 |
| Worse Case Between Top Coat and Emboss Coat* | | | | 2.93 | | 1.72 | | 0.63 | | 0 | 5.27 |
| Thickeners | | | | | | | | | | | |
| EX-62-864 or RM-6540 | 8.80 | 0.27 | 20.00% | 0.09 | 0% | 0 | 0% | 0 | 0% | 0 | 0.09 |
| RODA link C70 Crosslinker | 8.35 | 0.13 | 0% | 0 | 0% | 0 | 0% | 0 | 0.30% | 5.9E-04 | 5.9E-04 |
| Totals | | | | 3.01 | | 4.14 | | 2.73 | | 5.9E-04 | 9.88 |

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Maximum Usage (gal/day) * Weight % HAP * 365 days/yr * 1 ton/2000 lbs
*Note: Coating line CL1 cannot apply top coat and emboss coat at the same time, therefore the worst case coating is assumed.

ACRONYMS

GE = Glycol Ethers
EG = Ethylene Glycol
HMDI = Hexamethylene Diisocyanate

Appendix A: Emissions Calculations
Surface Coating Line CL2
Volatile Organic Compounds (VOC) and Particulate Matter (PM)

Company Name: Robus Leather Corporation
Address City IN Zip: 1100 W. Hutchinson Lane, Madison, IN 47250
Permit Number: 077-23120
Plt ID: 077-00015
Reviewer: Nathan C. Bell
Date: January 12, 2007

Volatile Organic Comounds (VOC) and Particulate Matter (PM)

| Operation and Material* | Primary Type of Surface Coated | Density (lb/gal) | Weight % Volatile (H2O & Organics) | Weight % Water + Non-VOCs | Weight % Solids | Weight % VOCs | Volume % Water + Non-VOCs | Volume % Solids | Usage (gal/unit) | Maximum Capacity (unit/hr) | Maximum Usage (gal/day) | Maximum Usage (lb/hr) | per gallon of coating less water and non-VOCs | Pounds VOC per gallon of coating | PTE VOC (lb/hr) | PTE VOC (lb/day) | PTE VOC (tons/yr) | PTE PM (lb/hr) | PTE PM (tons/yr) | lb VOC per gal solids | Transfer Efficiency | | | | | | | | |
|--|--------------------------------|------------------|------------------------------------|---------------------------|-----------------|---------------|---------------------------|-----------------|------------------|----------------------------|-------------------------|-----------------------|---|----------------------------------|-----------------|------------------|-------------------|----------------|------------------|-----------------------|---------------------|--|--|--|--|--|--|--|--|
| Base Coat (Roll Coater) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RC21-086 Aqueous Compact Resin | Leather | 7.70 | 72.0% | 64.0% | 28.0% | 8.0% | 75.0% | 25.0% | 0.00957 | 150 | 34.44 | 11.05 | 2.46 | 0.62 | 0.88 | 21.21 | 3.87 | 0 | 0 | 2.46 | 100% | | | | | | | | |
| RC21-095 Aqueous Compact Resin | Leather | 8.46 | 74.0% | 73.0% | 26.0% | 1.0% | 77.0% | 23.0% | 0.00717 | 150 | 25.83 | 9.10 | 0.37 | 0.08 | 0.09 | 2.19 | 0.40 | 0 | 0 | 0.37 | 100% | | | | | | | | |
| RODA MAT D 703 Modified Leather Finish | Leather | 8.20 | 76.0% | 76.0% | 24.0% | 0.0% | 79.0% | 21.0% | 0.00143 | 150 | 5.17 | 1.77 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 100% | | | | | | | | |
| Water | Leather | 8.34 | 100.0% | 100.0% | 0.0% | 0.0% | 100.0% | 0.0% | 0.00239 | 150 | 8.61 | 2.99 | NA | 0 | 0 | 0 | 0 | 0 | 0 | NA | 100% | | | | | | | | |
| Robus 1001 | Leather | 7.71 | 100.0% | 0.0% | 0.0% | 100.0% | 100.0% | 0.0% | 0.00048 | 150 | 1.72 | 0.55 | NA | 7.71 | 0.55 | 13.28 | 2.42 | 0 | 0 | NA | 100% | | | | | | | | |
| LA1610 Levelling Aid | Leather | 8.70 | 73.0% | 53.0% | 27.0% | 20.0% | 76.0% | 24.0% | 0.00036 | 150 | 1.29 | 0.47 | 7.25 | 1.74 | 0.09 | 2.25 | 0.41 | 0 | 0 | 7.25 | 100% | | | | | | | | |
| Eudem Black B-N Pigment | Leather | 9.17 | 80.0% | 75.00% | 20.0% | 5.00% | 78.0% | 17.0% | 0.00526 | 150 | 18.94 | 7.24 | 2.09 | 0.46 | 0.36 | 8.69 | 1.59 | 0 | 0 | 2.70 | 100% | | | | | | | | |
| Totals for Base Coat | | | | | | | | | | | | | | | 1.98 | 47.61 | 8.69 | 0.00 | 0.00 | | | | | | | | | | |
| Optima Top Coat (HVLP Spray Coater) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RC21-086 Aqueous Compact Resin | Leather | 7.70 | 72.0% | 64.0% | 28.0% | 8.0% | 75.0% | 25.0% | 0.00411 | 150 | 14.80 | 5.33 | 2.98 | 0.87 | 0.53 | 12.80 | 2.34 | 0.51 | 2.24 | 2.98 | 70% | | | | | | | | |
| RODA pur VL2002 polyurethane in water | Leather | 8.65 | 68.0% | 58.00% | 32.0% | 10.00% | 71.0% | 29.0% | 0.00493 | 150 | 17.76 | 5.70 | 2.46 | 0.62 | 0.46 | 10.94 | 2.00 | 0.48 | 2.10 | 2.46 | 70% | | | | | | | | |
| Water | Leather | 8.34 | 100.0% | 100% | 0.0% | 0.0% | 100.0% | 0.0% | 0.00329 | 150 | 11.84 | 4.27 | 11.70 | 1.99 | 0.98 | 23.56 | 4.30 | 0.26 | 1.12 | 11.70 | 70% | | | | | | | | |
| Esi Ceryl 325N35 HDPE Wax Emulsion | Leather | 8.32 | 62.0% | 59.0% | 38.0% | 3.0% | 65.0% | 35.0% | 0.00041 | 150 | 1.48 | 0.51 | 0.71 | 0.25 | 0.02 | 0.37 | 0.07 | 0.06 | 0.26 | 0.71 | 70% | | | | | | | | |
| Water | Leather | 8.34 | 100.0% | 100% | 0.0% | 0.0% | 100.0% | 0.0% | 0.00987 | 150 | 35.52 | 12.34 | NA | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | NA | 70% | | | | | | | | |
| LA1610 Levelling Aid | Leather | 8.70 | 73.0% | 53% | 27.0% | 20.0% | 76.0% | 24.0% | 0.00031 | 150 | 1.11 | 0.40 | 7.25 | 1.74 | 0.08 | 1.93 | 0.35 | 0.03 | 0.14 | 7.25 | 70% | | | | | | | | |
| Eudem Black B-N Pigment | Leather | 9.17 | 80.0% | 75.00% | 20.0% | 5.00% | 78.0% | 17.0% | 0.00041 | 150 | 1.48 | 0.57 | 2.09 | 0.46 | 0.03 | 0.68 | 0.12 | 0.03 | 0.15 | 2.70 | 70% | | | | | | | | |
| Totals for Top Coat | | | | | | | | | | | | | | | 2.10 | 50.28 | 9.18 | 1.37 | 6.01 | | | | | | | | | | |
| Emboss Coat/Semi-Gloss Coat (HVLP Spray Coater) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RC21-086 Aqueous Compact Resin | Leather | 7.70 | 72.0% | 64.0% | 28.0% | 8.0% | 75.0% | 25.0% | 0.00644 | 150 | 23.17 | 8.35 | 2.98 | 0.87 | 0.84 | 20.04 | 3.66 | 0.80 | 3.51 | 2.98 | 70% | | | | | | | | |
| RODA pur VL2002 polyurethane in water | Leather | 8.65 | 68.0% | 57.0% | 20.0% | 23.0% | 83.0% | 17.0% | 0.00368 | 150 | 13.24 | 4.77 | 11.70 | 1.99 | 1.10 | 26.34 | 4.81 | 0.29 | 1.25 | 11.70 | 70% | | | | | | | | |
| Water | Leather | 8.34 | 100.0% | 100% | 0.0% | 0.0% | 100.0% | 0.0% | 0.01103 | 150 | 39.72 | 13.80 | NA | 0 | 0 | 0 | 0 | 0 | 0 | NA | 70% | | | | | | | | |
| LA1610 Levelling Aid | Leather | 8.70 | 73.0% | 53% | 27.0% | 20.0% | 76.0% | 24.0% | 0.00034 | 150 | 1.24 | 0.45 | 7.25 | 1.74 | 0.09 | 2.16 | 0.39 | 0.04 | 0.16 | 7.25 | 70% | | | | | | | | |
| Esi Ceryl 325N35 HDPE Wax Emulsion | Leather | 8.32 | 62.0% | 59.0% | 38.0% | 3.0% | 65.0% | 35.0% | 0.00092 | 150 | 3.31 | 1.15 | 0.71 | 0.25 | 0.03 | 0.83 | 0.15 | 0.13 | 0.57 | 0.71 | 70% | | | | | | | | |
| 5263 | Leather | 8.34 | 82.0% | 82% | 18.0% | 0.0% | 85.0% | 15.0% | 0.00046 | 150 | 1.66 | 0.58 | 0 | 0 | 0 | 0 | 0 | 0.03 | 0.14 | 0.00 | 70% | | | | | | | | |
| Eudem Black B-N Pigment | Leather | 9.17 | 80.0% | 75.00% | 20.0% | 5.00% | 78.0% | 17.0% | 0.00046 | 150 | 1.66 | 0.63 | 2.09 | 0.46 | 0.03 | 0.76 | 0.14 | 0.04 | 0.17 | 2.70 | 70% | | | | | | | | |
| Totals for Emboss Coat | | | | | | | | | | | | | | | 2.09 | 50.13 | 9.15 | 1.32 | 5.80 | | | | | | | | | | |
| Worse Case Between Top Coat and Emboss Coat* | | | | | | | | | | | | | | | 2.10 | 50.28 | 9.18 | 1.37 | 6.01 | | | | | | | | | | |
| Thickeners | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EX-62-864 or RM-6540 | Leather | 8.80 | 100.0% | 80.0% | 0.0% | 20.0% | 80.0% | 0.0% | 0.00007 | 150 | 0.27 | 0.10 | 8.80 | 1.76 | 0.02 | 0.47 | 0.09 | 0 | 0 | NA | 70% | | | | | | | | |
| RODA link C70 Crosslinker | Leather | 8.35 | 100.0% | 71.7% | 0.0% | 28.3% | 71.7% | 0.0% | 0.00004 | 150 | 0.13 | 0.04 | 8.35 | 2.36 | 0.01 | 0.30 | 0.06 | 0 | 0 | NA | 70% | | | | | | | | |

*Note: Coating line CL2 cannot apply top coat and emboss coat at the same time, therefore the worst case coating is assumed.

| | | | | | | | | | |
|---|--|--|--|--|--------------|--------------|--------------|-------------|-------------|
| Total Uncontrolled Potential to Emit (PTE) = | | | | | 4.11 | 98.67 | 18.01 | 1.37 | 6.01 |
| Dry Filter Control Efficiency = | | | | | 90.0% | | | | |
| Total Controlled Potential to Emit (PTE) (tons/yr) = | | | | | 0.14 | 0.60 | | | |

METHODOLOGY

Maximum Usage (lbs/hr) = Maximum Usage (gal/day) * Density (lb/gal) / (24 hour/day)
Maximum Usage (gal/day) = Usage (gallons/unit) * Maximum Capacity (units/hour) * 24 hours/day
Pounds of VOC per Gallon Coating less Water and non-VOCs = (Density (lb/gal) * Weight % VOCs) / (1-Volume % water and non-VOCs)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % VOCs)
Potential VOC Pounds per Hour = Maximum Usage (lbs/hr) * Weight % VOCs
Potential VOC Pounds per Day = Potential VOC (lbs/hr) * (24 hours/day)
Potential VOC Tons per Year = Potential VOC (lbs/day) * (365 days/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = Density (lbs/gal) * Maximum Usage (gal/day) * (Weight % Solids) * (1-Transfer efficiency) * (365 days/yr) * (1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % VOCs) / (Volume % solids)
Controlled Potential to Emit = Uncontrolled Potential to Emit * (1 - Control Efficiency)

**Appendix A: Emissions Calculations
Surface Coating Lines CL2
Hazardous Air Pollutants (HAPs)**

**Company Name: Robus Leather Corporation
Address City IN Zip: 1100 W. Hutchinson Lane, Madison, IN 47250
Permit Number: 077-23120
Plt ID: 077-00015
Reviewer: Nathan C. Bell
Date: January 12, 2007**

| Operation and Material | Maximum | | Weight % GE | GE Emissions (tons/yr) | Weight % Triethylamine | | Weight % EG | EG Emissions (tons/yr) | Weight % HMDI | | Total (tons/yr) |
|--|---------------------|--------------------|----------------|---------------------------|----------------------------|-------------------|----------------|---------------------------|------------------|----------------|--------------------|
| | Density (lb/gal) | Usage (gal/day) | | | Triethylamine (tons/yr) | HMDI (tons/yr) | | | | | |
| Base Coat (Roll Coater) | | | | | | | | | | | |
| RC21-086 | 7.70 | 34.44 | 0% | 0 | 5.00% | 2.42 | 0% | 0 | 0% | 0 | 2.42 |
| LA1610 Levelling Aid | 8.70 | 1.29 | 0% | 0 | 0% | 0 | 25.00% | 0.51 | 0% | 0 | 0.51 |
| Euderm Black B-N Pigment | 9.17 | 18.94 | 0% | 0 | 0% | 0 | 5.00% | 1.59 | 0% | 0 | 1.59 |
| Totals for Base Coat | | | | 0 | | 2.42 | | 2.10 | | 0 | 4.52 |
| Optima Top Coat (HVLV Spray Coater) | | | | | | | | | | | |
| RODA pur 8222 Waterborne polyurethane dispersion | 8.65 | 14.80 | 8.00% | 1.87 | 2.00% | 0.47 | 0% | 0 | 0% | 0 | 2.34 |
| RC21-086 | 7.70 | 17.76 | 0% | 0 | 5.00% | 1.25 | 0% | 0 | 0% | 0 | 1.25 |
| LA1610 Levelling Aid | 8.70 | 1.11 | 0% | 0 | 0% | 0 | 25.00% | 0.44 | 0% | 0 | 0.44 |
| Euderm Black B-N Pigment | 9.17 | 1.48 | 0% | 0 | 0% | 0 | 5.00% | 0.12 | 0% | 0 | 0.12 |
| Totals for Top Coat | | | | 1.87 | | 1.72 | | 0.56 | | 0 | 4.15 |
| Emboss Coat/Semi-Gloss Coat (HVLV Spray Coater) | | | | | | | | | | | |
| RODA pur 8222 Waterborne polyurethane dispersion | 8.65 | 23.17 | 8.00% | 2.93 | 2.00% | 0.73 | 0% | 0 | 0% | 0 | 3.66 |
| LA1610 Levelling Aid | 8.70 | 1.24 | 0% | 0 | 0% | 0 | 25.00% | 0.49 | 0% | 0 | 0.49 |
| Euderm Black B-N Pigment | 9.17 | 1.66 | 0% | 0 | 0% | 0 | 5.00% | 0.14 | 0% | 0 | 0.14 |
| Totals for Emboss Coat | | | | 2.93 | | 0.73 | | 0.63 | | 0 | 4.29 |
| Worse Case Between Top Coat and Emboss Coat* | | | | 2.93 | | 1.72 | | 0.63 | | 0 | 5.27 |
| Thickeners | | | | | | | | | | | |
| EX-62-864 or RM-6540 | 8.80 | 0.27 | 20.00% | 0.09 | 0% | 0 | 0% | 0 | 0% | 0 | 0.09 |
| RODA link C70 Crosslinker | 8.35 | 0.13 | 0% | 0 | 0% | 0 | 0% | 0 | 0.30% | 5.9E-04 | 5.9E-04 |
| Totals | | | | 3.01 | | 4.14 | | 2.73 | | 5.9E-04 | 9.88 |

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Maximum Usage (gal/day) * Weight % HAP * 365 days/yr * 1 ton/2000 lbs
*Note: Coating line CL2 cannot apply top coat and emboss coat at the same time, therefore the worst case coating is assumed.

ACRONYMS

GE = Glycol Ethers
EG = Ethylene Glycol
HMDI = Hexamethylene Diisocyanate