

Certified Mail Number: 7007 0710 0005 3966 0043



TO: Interested Parties / Applicant  
RE: Flutes, Inc. / M097-23152-00347  
FROM: Felicia A. Robinson  
Administrator

## 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 fifteen (15) calendar days of the receipt 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 Indianapolis Office of Environmental Services, Air Permits at (317) 327-2234.

Enclosures



Air Quality Hotline: 317-327-4AIR | [knozone.com](http://knozone.com)

Department of Public Works  
Office of Environmental Services

2700 Belmont Avenue  
Indianapolis, IN 46221

317-327-2234  
Fax 327-2274  
TDD 327-5186  
[indygov.org/dpw](http://indygov.org/dpw)



**Minor Source Operating Permit Renewal  
INDIANA DEPARTMENT OF ENVIRONMENTAL  
MANAGEMENT  
OFFICE OF AIR QUALITY  
AND OFFICE OF ENVIRONMENTAL SERVICES**  
Flutes, Inc.  
8252 Zionsville Road, Building 98  
Indianapolis, Indiana 46268

(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.

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 Minor Source Operating Permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: M097-23152-00347	
Issued by:	Issuance Date: June 28, 2007
Original Signed by	Expiration Date: June 28, 2012
Felicia A. Robinson, Administrator Indianapolis Office of Environmental Services	



Air Quality Hotline: 317-327-4AIR | [knozone.com](http://knozone.com)

Department of Public Works  
Office of Environmental Services

2700 Belmont Avenue  
Indianapolis, IN 46221

317-327-2234  
Fax 327-2274  
TDD 327-5186  
[indygov.org/dpw](http://indygov.org/dpw)

## TABLE OF CONTENTS

<b>A</b>	<b>SOURCE SUMMARY</b> .....	<b>4</b>
A.1	General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]	
A.2	Emission Units and Pollution Control Equipment Summary	
<b>B</b>	<b>GENERAL CONDITIONS</b> .....	<b>5</b>
B.1	Definitions [326 IAC 2-1.1-1]	
B.2	Permit Term [326 IAC 2-6.1-7(a)][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	
B.5	Severability	
B.6	Property Rights or Exclusive Privilege	
B.7	Duty to Provide Information	
B.8	Certification	
B.9	Annual Notification [326 IAC 2-6.1-5(a)(5)]	
B.10	Preventive Maintenance Plan [326 IAC 1-6-3]	
B.11	Prior Permits Superseded [326 IAC 2-1.1-9.5]	
B.12	Termination of Right to Operate [326 IAC 2-6.1-7(a)]	
B.13	Permit Renewal [326 IAC 2-6.1-7]	
B.14	Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]	
B.15	Source Modification Requirement	
B.16	Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2] [IC 13-17-3-2][IC 13-30-3-1]	
B.17	Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]	
B.18	Annual Fee Payment [326 IAC 2-1.1-7]	
B.19	Credible Evidence [326 IAC 1-1-6]	
<b>C</b>	<b>SOURCE OPERATION CONDITIONS</b> .....	<b>10</b>
C.1	Particulate Emission Limitation For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2]	
C.2	Permit Revocation [326 IAC 2-1.1-9]	
C.3	Opacity [326 IAC 5-1]	
C.4	Fugitive Dust Emissions [326 IAC 6-4]	
C.5	Stack Height [326 IAC 1-7]	
C.6	Asbestos Abatement Projects [326 IAC 14-10][326 IAC 18][40 CFR 61, Subpart M]	
	<b>Testing Requirements [326 IAC 2-6.1-5(a)(2)]</b>	
C.7	Performance Testing [326 IAC 3-6]	
	<b>Compliance Requirements [326 IAC 2-1.1-11]</b>	
C.8	Compliance Requirements [326 IAC 2-1.1-11]	
	<b>Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]</b>	
C.9	Compliance Monitoring [326 IAC 2-1.1-11]	
C.10	Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]	
C.11	Instrument Specifications [326 IAC 2-1.1-11]	
	<b>Corrective Actions and Response Steps</b>	
C.12	Response to Excursions or Exceedances	
C.13	Actions Related to Noncompliance Demonstrated by a Stack Test	
	<b>Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]</b>	
C.14	Malfunctions Report [326 IAC 1-6-2]	
C.15	General Record Keeping Requirements [326 IAC 2-6.1-5]	
C.16	General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]	

<b>D.1</b>	<b>EMISSIONS UNIT OPERATION CONDITIONS</b> .....	<b>16</b>
	<b>Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]</b>	
D.1.1	Particulate Emissions Limitations for Manufacturing Processes [326 IAC 6-3]	
D.1.2	Preventive Maintenance Plan [326 IAC 1-6-3]	
	<b>Compliance Determination Requirements</b>	
D.1.3	Testing Requirements [326 IAC 2-1.1-11]	
<b>D.2</b>	<b>EMISSIONS UNIT OPERATION CONDITIONS</b> .....	<b>18</b>
	<b>Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]</b>	
D.2.1	Particulate Emissions Limitations for Sources of Indirect Heating [326 IAC 6-2-4]	
	<b>New Source Performance Standards (NSPS) Requirements</b>	
D.2.2	General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]	
D.2.3	Standards of Performance for Small-Commercial-Institutional-Steam Generating Units Requirements [40 CFR Part 60, Subpart Dc] [326 IAC 12] [40 CFR 60.24(f)(3)]	
	<b>Certification</b> .....	<b>23</b>
	<b>Annual Notification</b> .....	<b>24</b>
	<b>Malfunction Report</b> .....	<b>25</b>

## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and Office of Environmental Services (OES). The information describing the source contained in conditions A.1 through A.2 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 2-5.1-3(c)][326 IAC 2-6.1-4(a)]

---

The Permittee owns and operates a stationary manufacturer of corrugate sheets.

Source Address:	8252 Zionsville Road, Building 98, Indianapolis, IN 46268
Mailing Address:	8252 Zionsville Road, Building 98, Indianapolis, IN 46268
General Source Phone Number:	(317) 870-6010
SIC Code:	2679
County Location:	Marion
Source Location Status:	Nonattainment for 8 hour ozone and PM 2.5; Attainment for all other criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD or Emission Offset Rules

### A.2 Emission Units and Pollution Control Equipment Summary

---

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

- (a) One Bobst/Air Equipment and Engineering MF250/MPC3 Asitrade Line/Scrap collector for the manufacturing of corrugated sheets (Emission Unit #2), with a maximum production rate of 15,000 lbs/hr and maximum corn starch glue throughput of 1,672 lbs/hr and cold set glue throughput of 384 lbs/hr, constructed in January 1999. This unit and Emission Unit #3 and #7 are controlled by a Cyclone (CE1) as primary control for particulate emissions and a Baghouse (CE2) as secondary control for particulate emissions. The baghouse discharges inside of the building.
- (b) One Bobst/Air Equipment and Engineering MF250/MPC3 Asitrade Line/Scrap collector for the manufacturing of corrugated sheets (Emission Unit #3), with a maximum production rate of 25,000 lbs/hr and maximum corn starch glue throughput of 3,345 lbs/hr and cold set glue throughput of 384 lbs/hr, constructed in May 2000 and modified in May 2001 with the addition of another single-facer and scrap collector. This unit and Emission Unit #2 and #7 are controlled by a Cyclone (CE1) as primary control for particulate emissions and a Baghouse (CE2) as secondary control for particulate emissions. The baghouse discharges inside of the building.
- (c) One natural gas fired Superior boiler (Emission Unit #1), constructed in April of 2002, with a maximum heat input capacity of 10.5 MMBtu/hr. This unit has no controls and is vented to stack 01.
- (d) Three (3) natural gas unit space heaters (Emission Units #4, #5, and #6), constructed in May 2005, with a maximum capacity of 0.3 MMBtu/hr.
- (e) One Marquip Line/Scrap collector for the manufacturing of corrugated sheets (Emission Unit #7) with a maximum production rate of 49,576 lbs/hr and maximum corn starch glue throughput of 1,629 lbs/hr and cold set glue throughput of 1071 lbs/hr, approved for construction in 2007. This unit and Emission Unit #2 and #3 are controlled by a Cyclone (CE1) as primary control for particulate emissions and a Baghouse (CE2) as secondary control for particulate emissions. The baghouse discharges inside the building.

## **SECTION B GENERAL CONDITIONS**

### **B.1 Definitions [326 IAC 2-1.1-1]**

---

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 2-1.1-1) shall prevail.

### **B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]**

---

- (a) This permit, 097-23152-00347, 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 and OES, 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.

### **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**

---

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

### **B.5 Severability**

---

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**

---

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

### **B.7 Duty to Provide Information**

---

- (a) The Permittee shall furnish to IDEM, OAQ and OES, within a reasonable time, any information that IDEM, OAQ and OES 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 and OES 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**

---

- (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 Notification [326 IAC 2-6.1-5(a)(5)]**

---

- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

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

and

Office of Environmental Services  
Air Compliance Section  
2700 South Belmont Ave.  
Indianapolis, IN 46221

- (c) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ and OES on or before the date it is due.

**B.10 Preventive Maintenance Plan [326 IAC 1-6-3]**

---

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) 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.

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ and OES upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ and OES. IDEM, OAQ and OES 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.11 Prior Permits Superseded [326 IAC 2-1.1-9.5]**

---

- (a) All terms and conditions of permits established prior to 097-23152-00347 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.12 Termination of Right to Operate [326 IAC 2-6.1-7(a)]**

---

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 ninety (90) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

**B.13 Permit Renewal [326 IAC 2-6.1-7]**

---

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and OES and shall include the information specified in 326 IAC 2-6.1-7. Such information shall be included in the application for each emission unit at this source. 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  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

Office of Environmental Services  
Air Permits Section  
2700 South Belmont Ave.  
Indianapolis, IN 46221

- (b) A timely renewal application is one that is:
  - (1) Submitted at least ninety (90) days 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, and OES 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 2-6.1 until IDEM, OAQ and OES takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ and OES any additional information identified as being needed to process the application.

**B.14 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]**

---

- (a) Permit amendments and revision are governed by the requirements of 326 IAC 2-6.1-6 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  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
  
and  
  
Office of Environmental Services  
Air Permits Section  
2700 South Belmont Ave.  
Indianapolis, IN 46221  
  
Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

**B.15 Source Modification Requirement**

---

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

**B.16 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC13-17-3-2][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, and OES or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted 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.17 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]**

---

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 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  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

Office of Environmental Services  
Air Permits Section  
2700 South Belmont Ave.  
Indianapolis, IN 46221

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 notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

**B.18 Annual Fee Payment [326 IAC 2-1.1-7]**

---

- (a) The Permittee shall pay annual fees to OES within thirty (30) calendar days of receipt of a billing.
- (b) The Permittee may call the following telephone number: 317-327-2234 (ask for OES Air Compliance), to determine the appropriate permit fee.

**B.19 Credible Evidence [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 2-6.1-5(a)(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 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, and OES the fact that continuance of this permit is not consistent with purposes of this article.

#### C.3 Opacity [326 IAC 5-1]

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

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### C.4 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.5 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.6 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  
MC 61-52 IGCN 1003

Indianapolis, Indiana 46204-2251

and

Office of Environmental Services  
Enforcement Section, Asbestos Program  
2700 South Belmont Ave.  
Indianapolis, IN 46221

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. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

### Testing Requirements [326 IAC 2-6.1-5(a)(2)]

#### C.7 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  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

Office of Environmental Services  
Air Compliance Section  
2700 South Belmont Ave.  
Indianapolis, IN 46221

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 and OES not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, and OES 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.8 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 2-6.1-5(a)(2)]**

### **C.9 Compliance Monitoring [326 IAC 2-1.1-11]**

---

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

### **C.10 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.11 Instrument Specifications [326 IAC 2-1.1-11]**

---

- (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 and OES approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

## **Corrective Actions and Response Steps**

### **C.12 Response to Excursions or Exceedances**

---

- (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;
  - (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.13 Actions Related to Noncompliance Demonstrated by a Stack Test**

---

- (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 and OES 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 and OES that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ and OES may extend the retesting deadline.
- (c) IDEM, OAQ and OES 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 2-6.1-5(a)(2)]**

**C.14 Malfunctions Report [326 IAC 1-6-2]**

---

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ), the Office of Environmental Services (OES) or an appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ and OES using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.15 General Record Keeping Requirements[326 IAC 2-6.1-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or OES makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or OES 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.16 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) 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  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

Office of Environmental Services  
Air Compliance Section  
2700 South Belmont Ave.  
Indianapolis, IN 46221

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and OES on or before the date it is due.
- (c) 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).
- (d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.



## SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (a) One Bobst/Air Equipment and Engineering MF250/MPC3 Asitrade Line/Scrap collector for the manufacturing of corrugated sheets (Emission Unit #2), with a maximum production rate of 15,000 lbs/hr and maximum corn starch glue throughput of 1,672 lbs/hr and cold set glue throughput of 384 lbs/hr, constructed in January 1999. This unit and Emission Unit #3 and #7 are controlled by a Cyclone (CE1) as primary control for particulate emissions and a Baghouse (CE2) as secondary control for particulate emissions. The baghouse discharges inside of the building.
- (b) One Bobst/Air Equipment and Engineering MF250/MPC3 Asitrade Line/Scrap collector for the manufacturing of corrugated sheets (Emission Unit #3), with a maximum production rate of 25,000 lbs/hr and maximum corn starch glue throughput of 3,345 lbs/hr and cold set glue throughput of 384 lbs/hr, constructed in May 2000 and modified in May 2001 with the addition of another single-facer and scrap collector. This unit and Emission Unit #2 and #7 are controlled by a Cyclone (CE1) as primary control for particulate emissions and a Baghouse (CE2) as secondary control for particulate emissions. The baghouse discharges inside of the building.
- (e) One Marquip Line/Scrap collector for the manufacturing of corrugated sheets (Emission Unit #7) with a maximum production rate of 49,576 lbs/hr and maximum corn starch glue throughput of 1,629 lbs/hr and cold set glue throughput of 1071 lbs/hr, approved for construction in 2007. This unit and Emission Unit #2 and #3 are controlled by a Cyclone (CE1) as primary control for particulate emissions and a Baghouse (CE2) as secondary control for particulate emissions. The baghouse discharges inside the building.

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

### Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

#### D.1.1 Particulate Emissions Limitations for Manufacturing Processes [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the:

- (a) Bobst/Air Equipment and Engineering MF250/MPC3 Asitrade Line/Scrap collector (Emission Unit #2) shall not exceed 17.2 lb/hr when operating at a process weight rate of 17,056 lb/hr (8.5 tons/hr).
- (b) Bobst/Air Equipment and Engineering MF250/MPC3 Asitrade Line/Scrap collector (Emission Unit #3) shall not exceed 24.5 lb/hr when operating at a process weight rate of 28,729 lb/hr (14.4 tons/hr).
- (c) Marquip Line/Scrap collector (Emission #7) shall not exceed 36.5 lb/hr when operating at a process weight of 52,276 lb/hr (26.1 tons/hr).

The allowable particulate emission rates above were calculated with the following equation:

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

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

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

#### D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for Emission Unit #2, Emission Unit #3, and Emission Unit #7.

### **Compliance Determination Requirements**

#### **D.1.3 Testing Requirements [326 IAC 2-1.1-11]**

---

- (a) In order to determine PM/PM10 emission factors, the Permittee shall perform PM/PM10 testing no later than 180 days after issuance of this permit on the Asitrade Line/Scrap collector, identified as Emission Unit #3, using methods as approved by the Commissioner.
  
- (b) In order to determine PM/PM10 emission factors, the Permittee shall perform PM/PM10 testing within 60 days of achieving the maximum production rate but no later than 180 days after initial startup on Emission Unit #7, using methods as approved by the Commissioner.

## SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (a) One natural gas fired Superior boiler (Emission Unit #1), constructed in April of 2002, with a maximum heat input capacity of 10.5 MMBtu/hr. This unit has no controls and is vented to stack 01.
- (b) Three (3) natural gas unit space heaters (Emission Units #4, #5, and #6), constructed in May 2005, with a maximum capacity of 0.3 MMBtu/hr.

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

### Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

#### D.2.1 Particulate Emissions Limitations for Sources of Indirect Heating [326 IAC 6-2-4 ]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) the PM emissions from the 10.5 MMBtu per hour heat input boiler (Emission Unit #1) shall be limited to 0.59 pounds per MMBtu heat input.

This limitation is based on the following equation:

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

- Where: Pt = Pounds of particulate matter emitted per million Btu (lb/mmBtu) heat input.  
Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

### New Source Performance Standards (NSPS) Requirements

#### D.2.2 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

- (a) Pursuant to 40 CFR 60.1, 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 for the boiler identified as Emission Unit #1 except as otherwise specified in 40 CFR Part 60, Subpart Dc.
- (b) Pursuant to 40 CFR 60.10, 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,  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

Indianapolis OES

Air Compliance  
2700 South Belmont Ave.  
Indianapolis, IN 46221

D.2.3 Standards of Performance for Small-Commercial-Institutional- Steam Generating Units Requirements [40 CFR Part 60, Subpart Dc] [326 IAC 12] [40 CFR 60.24(f)(3)]

---

Pursuant to 40 CFR Part 60, Subpart Dc, the Permittee shall comply with the provisions of the NSPS, which are incorporated by reference as 326 IAC 12 for the boiler, identified as Emission Unit #1 is specified as follows:

**§ 60.40c Applicability and delegation of authority.**

(a) Except as provided in paragraph (d) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million Btu per hour (Btu/hr)) or less, but greater than or equal to 2.9 MW (10 million Btu/hr).

(b) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, §60.48c(a)(4) shall be retained by the Administrator and not transferred to a State.

(c) Steam generating units which meet the applicability requirements in paragraph (a) of this section are not subject to the sulfur dioxide (SO<sub>2</sub>) or particulate matter (PM) emission limits, performance testing requirements, or monitoring requirements under this subpart (§§60.42c, 60.43c, 60.44c, 60.45c, 60.46c, or 60.47c) during periods of combustion research, as defined in §60.41c.

(d) Any temporary change to an existing steam generating unit for the purpose of conducting combustion research is not considered a modification under §60.14.

**§ 60.41c Definitions.**

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

*Annual capacity factor* means the ratio between the actual heat input to a steam generating unit from an individual fuel or combination of fuels during a period of 12 consecutive calendar months and the potential heat input to the steam generating unit from all fuels had the steam generating unit been operated for 8,760 hours during that 12-month period at the maximum design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility during a period of 12 consecutive calendar months.

*Coal* means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388-77, 90, 91, 95, or 98a, Standard Specification for Classification of Coals by Rank (IBR--see Sec. 60.17), coal refuse, and petroleum coke. Coal-derived synthetic fuels derived from coal for the purposes of creating useful heat, including but not limited to solvent refined coal, gasified coal, coal-oil mixtures, and coal-water mixtures, are also included in this definition for the purposes of this subpart.

*Coal refuse* means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (kJ/kg) (6,000 Btu per pound (Btu/lb) on a dry basis.

*Cogeneration steam generating unit* means a steam generating unit that simultaneously produces both electrical (or mechanical) and thermal energy from the same primary energy source.

*Combined cycle system* means a system in which a separate source (such as a stationary gas turbine, internal combustion engine, or kiln) provides exhaust gas to a steam generating unit.

*Combustion research* means the experimental firing of any fuel or combination of fuels in a steam generating unit for the purpose of conducting research and development of more efficient combustion or more effective prevention or control of air pollutant emissions from combustion, provided that, during these periods of research and development, the heat generated is not used for any purpose other than preheating combustion air for use by that steam generating unit (i.e., the heat generated is released to the atmosphere without being used for space heating, process heating, driving pumps, preheating combustion air for other units, generating electricity, or any other purpose).

*Conventional technology* means wet flue gas desulfurization technology, dry flue gas desulfurization technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

*Distillate oil* means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396–78, 89, 90, 92, 96, or 98, “Standard Specification for Fuel Oils” (incorporated by reference—see §60.17).

*Dry flue gas desulfurization technology* means a sulfur dioxide (SO<sub>2</sub>) control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline reagents used in dry flue gas desulfurization systems include, but are not limited to, lime and sodium compounds.

*Duct burner* means a device that combusts fuel and that is placed in the exhaust duct from another source (such as a stationary gas turbine, internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

*Emerging technology* means any SO<sub>2</sub> control system that is not defined as a conventional technology under this section, and for which the owner or operator of the affected facility has received approval from the Administrator to operate as an emerging technology under §60.48c(a)(4).

*Federally enforceable* means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR Parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 40 CFR 51.24.

*Fluidized bed combustion technology* means a device wherein fuel is distributed onto a bed (or series of beds) of limestone aggregate (or other sorbent materials) for combustion; and these materials are forced upward in the device by the flow of combustion air and the gaseous products of combustion. Fluidized bed combustion technology includes, but is not limited to, bubbling bed units and circulating bed units.

*Fuel pretreatment* means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

*Heat input* means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources (such as stationary gas turbines, internal combustion engines, and kilns).

*Heat transfer medium* means any material that is used to transfer heat from one point to another point.

*Maximum design heat input capacity* means the ability of a steam generating unit to combust a stated maximum amount of fuel (or combination of fuels) on a steady state basis as determined by the physical design and characteristics of the steam generating unit.

*Natural gas* means (1) a naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane, or (2) liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835–86, 87, 91, or 97, “Standard Specification for Liquefied Petroleum Gases” (incorporated by reference—see §60.17).

*Noncontinental area* means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

*Oil* means crude oil or petroleum, or a liquid fuel derived from crude oil or petroleum, including distillate oil and residual oil.

*Potential sulfur dioxide emission rate* means the theoretical SO<sub>2</sub> emissions (nanograms per joule [ng/J], or pounds per million Btu [lb/million Btu] heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.

*Process heater* means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

*Residual oil* means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society for Testing and Materials in ASTM D396–78, 89, 90, 92, 96, or 98, “Standard Specification for Fuel Oils” (incorporated by reference—see §60.17).

*Steam generating unit* means a device that combusts any fuel and produces steam or heats water or any other heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart.

*Steam generating unit operating day* means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

*Wet flue gas desulfurization technology* means an SO<sub>2</sub> control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a liquid material. This definition includes devices where the liquid material is subsequently converted to another form. Alkaline reagents used in wet flue gas desulfurization systems include, but are not limited to, lime, limestone, and sodium compounds.

*Wet scrubber system* means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of particulate matter (PM) or SO<sub>2</sub>.

*Wood* means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

#### **§ 60.48c Reporting and recordkeeping requirements.**

(a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by §60.7 of this part. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

(g) The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day. The owner or operator of an affected facility that only burns very low sulfur fuel oil or other liquid or gaseous fuels with potential sulfur dioxide emissions rate of 140 ng/J (0.32 lb/MMBtu) heat input or less shall record and maintain records of the fuels combusted during each calendar month.

(i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

(j) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
and  
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES**

**MINOR SOURCE OPERATING PERMIT (MSOP)  
CERTIFICATION**

**Source Name:** Flutes, Inc.  
**Source Address:** 8252 Zionsville Road, Building 98, Indianapolis, Indiana 46268  
**Mailing Address:** 8252 Zionsville Road, Building 98, Indianapolis, Indiana 46268  
**MSOP No.:** M097-23152-00347

**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 Notification
- 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  
And  
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES  
MINOR SOURCE OPERATING PERMIT  
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

<b>Company Name:</b>	<b>Flutes, Inc.</b>
<b>Address:</b>	<b>8252 Zionsville Road, Building 98</b>
<b>City:</b>	<b>Indianapolis, IN 46268</b>
<b>Phone #:</b>	<b>317-870-6010</b>
<b>MSOP #:</b>	<b>M097-23152-00347</b>

I hereby certify that Ecological Systems, Inc. is  still in operation.  
 no longer in operation.

I hereby certify that Ecological Systems, Inc. is  in compliance with the requirements of MSOP 097-23152-00347.  
 not in compliance with the requirements of MSOP 097-23152-00347.

<b>Authorized Individual (typed):</b>
<b>Title:</b>
<b>Signature:</b>
<b>Date:</b>

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

<b>Noncompliance:</b>

**MALFUNCTION REPORT**

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
FAX NUMBER - 317 233-6865  
And  
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES  
MINOR SOURCE OPERATING PERMIT**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6  
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?\_\_\_\_\_, 25 TONS/YEAR SULFUR DIOXIDE ?\_\_\_\_\_, 25 TONS/YEAR NITROGEN OXIDES?\_\_\_\_\_, 25 TONS/YEAR VOC ?\_\_\_\_\_, 25 TONS/YEAR HYDROGEN SULFIDE ?\_\_\_\_\_, 25 TONS/YEAR TOTAL REDUCED SULFUR ?\_\_\_\_\_, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?\_\_\_\_\_, 25 TONS/YEAR FLUORIDES ?\_\_\_\_\_, 100TONS/YEAR CARBON MONOXIDE ?\_\_\_\_\_, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?\_\_\_\_\_, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?\_\_\_\_\_, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?\_\_\_\_\_, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?\_\_\_\_\_. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION \_\_\_\_\_.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC \_\_\_\_\_ OR, PERMIT CONDITION # \_\_\_\_\_ AND/OR PERMIT LIMIT OF \_\_\_\_\_

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: \_\_\_\_\_ PHONE NO. ( ) \_\_\_\_\_  
LOCATION: (CITY AND COUNTY) \_\_\_\_\_  
PERMIT NO. \_\_\_\_\_ AFS PLANT ID: \_\_\_\_\_ AFS POINT ID: \_\_\_\_\_ INSP: \_\_\_\_\_  
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: \_\_\_\_\_

DATE/TIME MALFUNCTION STARTED: \_\_\_\_/\_\_\_\_/20\_\_\_\_ \_\_\_\_\_ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: \_\_\_\_\_

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE \_\_\_\_/\_\_\_\_/20\_\_\_\_ \_\_\_\_\_ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: \_\_\_\_\_

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: \_\_\_\_\_

MEASURES TAKEN TO MINIMIZE EMISSIONS: \_\_\_\_\_

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL\* SERVICES: \_\_\_\_\_

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: \_\_\_\_\_

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: \_\_\_\_\_

INTERIM CONTROL MEASURES: (IF APPLICABLE) \_\_\_\_\_

MALFUNCTION REPORTED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_  
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

\*SEE PAGE 2

**Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.**

**326 IAC 1-6-1 Applicability of rule**

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

**326 IAC 1-2-39 "Malfunction" definition**

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

\***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

---

---

**Indiana Department of Environmental Management  
Office of Air Quality  
and  
City of Indianapolis  
Office of Environmental Services**

**Addendum to the Technical Support Document  
for a Minor Source Operating Permit Renewal**

<b>Source Name:</b>	Flutes, Inc.
<b>Source Location:</b>	8252 Zionsville Road, Building 98, Indianapolis, Indiana 46268
<b>County:</b>	Marion County
<b>SIC Code:</b>	2679
<b>Operation Permit No.:</b>	M097-12706-00347
<b>Operation Permit Issuance Date:</b>	August 27, 2001
<b>Permit Renewal No.:</b>	M097-23152-00347
<b>Permit Reviewer:</b>	A. Nguyen

On April 27, 2007, the Office of Air Quality (OAQ) and the Office of Environmental Services (OES) had a notice published in the Indianapolis Star, Indianapolis, Indiana, stating that Flutes, Inc. had proposed to renew their Minor Source Operating Permit relating to the operation of a stationary manufacturer of corrugate sheets. The notice also stated that OAQ and OES proposed to issue a permit 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.

On May 25, 2007, Flutes, Inc. submitted a comment on the draft Minor Source Operating Permit Renewal. Upon further review, the OAQ and OES have decided to make the following revisions to the Minor Source Operating Permit Renewal. The TSD will remain as it originally appeared when published. Changes to the permit or technical support material that occur after the permit was published for public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. Bolded language has been added and the language with strikethrough has been deleted. The Table of Contents has been modified to reflect these changes.

The comment and response, including changes to the permit, are as follows:

**Comment 1:**

In the past, a factor was used assuming that 99.5% of the paper scrap from the corrugated sheets production was considered to be "large pieces" and would therefore not meet the definition of particulate matter. From the nature of the process, Flutes believes the "large piece" factor to be conservative, as the weight of the particle generated would be extremely small compared to the weight of the large pieces of scrap. This 99.5% number was historically accepted in previous permits in determining PM and PM10 potential emissions; however, under the current draft permit, IDEM, OAQ and OES are requiring testing to verify or establish a new emission factor as required in permit condition D.1.3. In lieu of this, Flutes has begun to track the weight of the dust generated.

Utilizing the weight of the dust and the weight of the scrap generated, a mass balance method approach can be used to determine an emission factor. The data collected so far has proven the 99.5% number to be conservative. After further analysis, Flutes feels the mass balance approach is much more accurate than assuming a "large piece" percent; therefore, a new emission factor should be developed from the

results of the mass balance. Data was submitted in this regard; however, the permit still contains a stack test requirement. Flutes believes this mass balance approach to be a conservative method for determining an emission factor for their process. Furthermore, Flutes does not want the economic burden or production disruption of performing an emissions test, considering the available data.

**Response 1:**

IDEM, OAQ and OES are aware that in order to accurately determine potential emissions the use of alternative emission factors (AEF) are acceptable in determining potential emissions. However, pursuant to IDEM's Nonrule Policy Document "Approval and Validation of Alternative Emission Factors," the use of AEFs must be approved and validated. In order to approve and validate the emission factors used to determine potential PM and PM10 emissions, stack testing will be required. No changes to the permit were made.

**IDEM, OAQ and OES Change 1:**

The mailing address for IDEM, has been updated throughout the permit as follows:

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

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
**MC 61-53 IGCN 1003**  
Indianapolis, Indiana 46204-2251

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

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue  
**MC 61-52 IGCN 1003**  
Indianapolis, Indiana 46204-2251

**IDEM, OAQ and OES Change 2:**

On May 25, 2007, Flutes, Inc. submitted an application to construct a new corrugator, identified as EU #7. The addition of this emission unit will increase PM/PM10 emissions by 44.62 and VOC emissions by 23.46 tons per year (See Appendix A to the ATSD, page 2). This PM/PM10 and VOC emission increase will not change the source's permit status, will not exceed PSD or Emission Offset Major source thresholds and adds an emission unit of the same type that is already permitted and will comply with the same applicable requirements and permit terms and conditions as the existing unit. Pursuant to 326 IAC 6-3-2, the allowable PM/PM10 emissions for EU #7 shall not exceed 36.5 lbs/hr when operating at a process weight of 52,276 lb/hr (26.1 tons/hr). The uncontrolled potential PM/PM10 emissions (10.19 lbs/hr) is less than the allowable emission rate; therefore, EU7 will be able to comply with 326 IAC 6-3-2 (See Appendix A to the ATSD, page 1). EU #7 will also emit less than 25 tons per year of VOC;

therefore, 326 IAC 8-1-6 does not apply. The facility description in Section A and D and permit conditions D.1.1, D.1.2 and D.1.3 have been changed as follows:

- (a) One Bobst/Air Equipment and Engineering MF250/MPC3 Asitrade Line/Scrap collector for the manufacturing of corrugated sheets (Emission Unit #2), with a maximum production rate of 15,000 lbs/hr and maximum corn starch glue throughput of 1,672 lbs/hr and cold set glue throughput of 384 lbs/hr, constructed in January 1999. This unit and Emission Unit #3 **and #7** are controlled by a Cyclone (CE1) as primary control for particulate emissions and a Baghouse (CE2) as secondary control for particulate emissions. The baghouse discharges inside of the building.
- (b) One Bobst/Air Equipment and Engineering MF250/MPC3 Asitrade Line/Scrap collector for the manufacturing of corrugated sheets (Emission Unit #3), with a maximum production rate of 25,000 lbs/hr and maximum corn starch glue throughput of 3,345 lbs/hr and cold set glue throughput of 384 lbs/hr, constructed in May 2000 and modified in May 2001 with the addition of another single-facer and scrap collector. This unit and Emission Unit #2 **and #7** are controlled by a Cyclone (CE1) as primary control for particulate emissions and a Baghouse (CE2) as secondary control for particulate emissions. The baghouse discharges inside of the building.

...

- (e) **One Marquip Line/Scrap collector for the manufacturing of corrugated sheets (Emission Unit #7) with a maximum production rate of 49,576 lbs/hr and maximum corn starch glue throughput of 1,629 lbs/hr and cold set glue throughput of 1071 lbs/hr, approved for construction in 2007. This unit and Emission Unit #2 and #3 are controlled by a Cyclone (CE1) as primary control for particulate emissions and a Baghouse (CE2) as secondary control for particulate emissions. The baghouse discharges inside the building.**

D.1.1 Particulate Emissions Limitations for Manufacturing Processes [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the:

- (a) Bobst/Air Equipment and Engineering MF250/MPC3 Asitrade Line/Scrap collector (Emission Unit #2) shall not exceed 17.2 lb/hr when operating at a process weight rate of 17,056 lb/hr (8.5 tons/hr).
- (b) Bobst/Air Equipment and Engineering MF250/MPC3 Asitrade Line/Scrap collector (Emission Unit #3) shall not exceed 24.5 lb/hr when operating at a process weight rate of 28,729 lb/hr (14.4 tons/hr).
- (c) **Marquip Line/Scrap collector (Emission #7) shall not exceed 36.5 lb/hr when operating at a process weight of 52,276 lb/hr (26.1 tons/hr).**

The allowable particulate emission rates above were calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by the 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.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for Emission Unit #2, ~~and~~ Emission Unit #3, **and Emission Unit #7.**

D.1.3 Testing Requirements [326 IAC 2-1.1-11]

- (a) In order to determine PM/PM10 emission factors, the Permittee shall perform PM/PM10 testing no later than 180 days after issuance of this permit on the Asitrade Line/Scrap collector, identified as Emission Unit #3, using methods as approved by the Commissioner.
- (b) **In order to determine PM/PM10 emission factors, the Permittee shall perform PM/PM10 testing within 60 days of achieving the maximum production rate but no later than 180 days after initial startup on Emission Unit #7, using methods as approved by the Commissioner.**

**IDEM, OAQ and OES Change 3:**

The July 1, 2006 version of the Code of Federal Regulations was incorporated by reference into 326 IAC 1-1-3 and became effective on May 27, 2007. The July 1, 2006 version of 40 CFR Part 60, Subpart Dc, has now been incorporated into 326 IAC 12. Permit condition D.2.4 is being removed from the permit as follows:

~~D.2.4 State Only Heat Transfer Medium NSPS Requirements [326 IAC 12]~~

~~Pursuant 326 IAC 12, the Permittee shall comply with the provisions of the July 1, 2002 version of 40 CFR 60.40c, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Intstitutional Steam Generating Units), which is incorporated by reference by 326 IAC 12 for the boiler, identified as Emission Unit #1. The Permittee shall comply with the provisions of 40 CFR Part 60, Subpart Dc, as listed in condition D.2.3, except the Permittee shall follow the requirements of the July 1, 2005 version as incorporated into 326 IAC 12, as follows:~~

~~(g) The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.~~

~~The requirement of 326 IAC 12 listed in this condition is not federally enforceable.~~

**Appendix A: Emission Calculations  
Aristrade Line Scrap Collector  
Emission Unit 3**

Appendix A of the ATSD, Page 1 of 2

**Company Name:** Flutes, LLC  
**Address City IN Zip:** 8252 Zionsville Road, Building 98, Indianapolis, IN 46268  
**Permit Number:** M097-23152-00347  
**Plt ID:** 097-00347  
**Reviewer:** A. Nguyen  
**Date:** 06/04/07

<b>Maximum Production Capacity</b>		
Paper	49576	lbs/hr
Corn Starch Glue	1629	lbs/hr
Cold Set Glue	1071	lbs/hr
Total:	52276	lbs/hr
<b>PM Emissions:</b>		
Paper Throughput	49576	lbs/hr
*% Scrap	4.11%	
Scrap	2037.5736	lbs/hr
**% Scrap considered PM	0.50%	
Potential Emissions	10.19	lbs/hr
PTE in Tons Per Year	<b>44.622862</b>	tons/year
Control Efficiency of Cyclone	85%	
Control Efficiency of Filter	99.97%	
Emissions After Control	0.0004585	lbs/hr
Emissions After Control	0.002008	tons/year
<b>VOC &amp; HAP Emissions:</b>		
Cold Set Glue Throughput	1071	lbs/hr
VOC content of cold set glue	0.50%	by weight
Potential VOC emissions	5.355	lbs/hr
Potential VOC emissions	<b>23.4549</b>	tons/yr

**Methodology**

Potential Emissions (lbs/hr) = Paper Throughput (lbs/hr) x % Scrap x % Scrap considered PM  
 Potential Emissions (tons/yr) = Potential Emissions (lbs/hr) x 8760 hrs/yr x 1 ton/2000 lbs

**326 IAC 6-3-2 Compliance Calculations**

The following calculations determine compliance with 326 IAC 6-3-2 for process weight less than 30 tons per hour.

Limit =  $4.10 \times (52276)^{0.67} = 36.5$  lbs/hr

Uncontrolled PM is 10.19 lbs/hr; therefore, the source will be able to comply with 326 IAC 6-3-2.



**Appendix A: Emission Calculations**  
**Summary of Emissions in Tons Per Year**

**Company Name: Flutes, LLC**  
**Address City IN Zip: 8252 Zionsville Road, Building 98, Indianapolis, IN 46268**  
**Permit Number: M097-23152-00347**  
**Plt ID: 097-00347**  
**Reviewer: A. Nguyen**  
**Date: 06/29/07**

<b>Potential to Emit</b>	PM	PM10	SO2	NOx	VOC	CO	Formaldehyde	Combination HAPs
EU1	0.09	0.35	0.03	4.60	0.24	3.86	0.00	0.00
EU2	20.17	20.17	0.00	0.00	8.50	0.00	0.33	0.33
EU3	33.62	33.62	0.00	0.00	8.50	0.00	0.33	0.33
EU4	0.0025	0.01	0.001	0.13	0.01	0.11	0.00	0.00
EU5	0.0025	0.01	0.001	0.13	0.01	0.11	0.00	0.00
EU6	0.0025	0.01	0.001	0.13	0.01	0.11	0.00	0.00
<b>EU7</b>	<b>44.62</b>	<b>44.62</b>	<b>0.00</b>	<b>0.00</b>	<b>23.46</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>Total</b>	<b>98.51</b>	<b>98.79</b>	<b>0.03</b>	<b>4.99</b>	<b>40.73</b>	<b>4.19</b>	<b>0.66</b>	<b>0.66</b>

<b>After Controls</b>	PM	PM10	SO2	NOx	VOC	CO	Formaldehyde	Combination HAPs
EU1	0.09	0.35	0.03	4.60	0.24	3.86	0.00	0.00
EU2	0.0009	0.0009	0.00	0.00	8.50	0.00	0.33	0.33
EU3	0.0015	0.0015	0.00	0.00	8.50	0.00	0.33	0.33
EU4	0.0025	0.01	0.001	0.13	0.01	0.11	0.00	0.00
EU5	0.0025	0.01	0.001	0.13	0.01	0.11	0.00	0.00
EU6	0.0025	0.01	0.001	0.13	0.01	0.11	0.00	0.00
<b>EU7</b>	<b>0.0020</b>	<b>0.0020</b>	<b>0.000</b>	<b>0.00</b>	<b>23.46</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>Total</b>	<b>0.1019</b>	<b>0.38</b>	<b>0.03</b>	<b>4.99</b>	<b>40.73</b>	<b>4.19</b>	<b>0.66</b>	<b>0.66</b>

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
and  
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES**

Technical Support Document (TSD) for a Minor Source Operating Permit Renewal

**Source Background and Description**

<b>Source Name:</b>	Flutes, Inc.
<b>Source Location:</b>	8252 Zionsville Road, Building 98, Indianapolis, Indiana 46268
<b>County:</b>	Marion
<b>SIC Code:</b>	2679
<b>Operation Permit No.:</b>	M 097-12706-00347
<b>Operation Permit Issuance Date:</b>	August 27, 2001
<b>Permit Renewal No.:</b>	M 097-23152-00347
<b>Permit Reviewer:</b>	A. Nguyen

The Indiana Department of Environmental Management (IDEM) Office of Air Quality (OAQ) and Indianapolis Office of Environmental Services (OES) have reviewed an application from Flutes, Inc. relating to the operation of a stationary manufacturer of corrugate sheets.

**Permitted Emission Units and Pollution Control Equipment**

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

- (a) One Bobst/Air Equipment and Engineering MF250/MPC3 Asitrade Line/Scrap collector for the manufacturing of corrugated sheets (Emission Unit #2), with a maximum production rate of 15,000 lbs/hr and maximum corn starch glue throughput of 1,672 lbs/hr and cold set glue throughput of 384 lbs/hr, constructed in January 1999. This unit and Emission Unit #3 are controlled by a Cyclone (CE1) as primary control for particulate emissions and a Baghouse (CE2) as secondary control for particulate emissions. The baghouse discharges inside of the building.
- (b) One Bobst/Air Equipment and Engineering MF250/MPC3 Asitrade Line/Scrap collector for the manufacturing of corrugated sheets (Emission Unit #3), with a maximum production rate of 25,000 lbs/hr and maximum corn starch glue throughput of 3,345 lbs/hr and cold set glue throughput of 384 lbs/hr, constructed in May 2000 and modified in May 2001 with the addition of another single-facer and scrap collector. This unit and Emission Unit #2 are controlled by a Cyclone (CE1) as primary control for particulate emissions and a Baghouse (CE2) as secondary control for particulate emissions. The baghouse discharges inside of the building.
- (c) One natural gas fired Superior boiler (Emission Unit #1), constructed in April of 2002, with a maximum heat input capacity of 10.5 MMBtu/hr. This unit has no controls and is vented to stack 01.

- (d) Three (3) natural gas unit space heaters (Emission Units #4, #5, and #6), constructed in May 2005, with a maximum capacity of 0.3 MMBtu/hr.

### Unpermitted Emission Units and Pollution Control Equipment

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

### Existing Approvals

The source has been operating under the following approvals:

- (a) MSOP 097-12706-00347 issued on August 27, 2001; and
- (b) First Notice Only Change 097-22618-00347 issued on July 25, 2006.

All conditions from previous approvals were incorporated into this renewal operating permit except for the following:

- (a) Condition D.1.1 Particulate Matter (PM): Pursuant to 326 IAC 6.5-1-2 (a)(Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from The Asitrade Line/Scrap Collectors (Emission Unit #2 and Emission Unit #3) shall be limited to 0.03 grain per dry standard cubic foot of exhaust. At a maximum air flow rate of 12,453 actual cubic feet per minute, this is equivalent to 3.20 pounds of particulate matter (PM) emissions per hour.

Reason not incorporated: The uncontrolled potential PM emissions source-wide is 53.89 tons per year. The controlled emissions are 0.1 tons per year. Uncontrolled PM emissions are less than one hundred (100) tons per year and actual PM emissions would be less than ten (10) tons per year. Therefore 326 IAC 6.5-1-2(a) does not apply.

- (b) Condition D.1.3 Particulate Matter (PM): In order to comply with D.1.1 the baghouse shall be in operation and control emissions from the scrap collectors at all times that either scrap collector (EU-2 and EU3) is in operation.

Condition D.1.5 Visible Emissions Notations: Visible emission notations of the CE2 vent exhausts once per shift shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. 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. 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. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Condition D.1.6 Baghouse Parameter Monitoring: The Permittee shall record the total static pressure drop across the baghouse CE2 used in conjunction with emissions units EU2 and EU3 at least once shift when the process is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse CE2 shall be maintained within the range of 1.5 and 8 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. The gauge employed to measure the pressure drop

across the baghouse or any part of the facility shall have a scale such that the expected normal reading shall be no less than 20 percent of full scale and be accurate within  $\pm 2\%$  of full scale reading. The instrument shall be quality assured and maintained as specified by the vendor.

Condition D.1.7 Baghouse Inspections: An inspection shall be performed each calendar quarter of all bags controlling Emission Unit #2 and Emission Unit #3 when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

Condition D.1.8 Broken or Failed Bag Detection: In the event that bag failure has been observed: The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. 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). For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Reason not incorporated: Pursuant to 326 IAC 6-3-2, the allowable PM emission rate for Emission Unit #2 is 15.8 lb/hr and Emission Unit #3 is 22.3 lb/hr. Since the uncontrolled potential emission rate for Emission unit #2 (4.61 lb/hr) and Emission Unit #3 (7.68 lb/hr) is less than the allowable emission rate, both of these operations will be able to comply with the requirements of 326 IAC 6-3-2. There are no other state or federal rules requiring the use of a control device. Therefore, the requirement to have the baghouse on at all times, the visible emission, parametric monitoring, baghouse inspections, and broken bag detection requirements are not necessary. All record keeping activities required by these conditions have also been removed.

### **Enforcement Issue**

There are no enforcement actions pending.

### **Recommendation**

The staff recommends to the Administrator that the operation be approved. This recommendation is based on the following facts and conditions:

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

A complete application for the purposes of this review was received on May 30, 2006.

### **Potential to Emit of the Source Before Controls**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount

of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential to Emit (tons/yr)
PM	53.89
PM-10	54.17
SO <sub>2</sub>	0.03
VOC	17.27
CO	4.19
NO <sub>x</sub>	4.99

HAPs	Potential to Emit (tons/yr)
Formaldehyde	0.66
Combination	0.66

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM and PM-10 is greater than 25 tons per year and less than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. An MSOP will be issued.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all criteria pollutants is less than 100 tons per year. Therefore, the provisions of 326 IAC 2-7 do not apply. An MSOP will be issued.
- (c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7. An MSOP will be issued.

**County Attainment Status**

The source is located in Marion County.

Pollutant	Status
PM-2.5	non-attainment
PM-10	attainment
SO <sub>2</sub>	maintenance attainment
NO <sub>2</sub>	attainment
8-hour Ozone	basic nonattainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Marion County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. Until U.S. EPA adopts specific New Source Review rules for PM2.5

emissions, it has directed states to regulate PM-10 emissions as surrogate for PM2.5 emissions, pursuant to the Non-attainment New Source Review requirements. See the State Rule Applicability for the source section.

- (c) Marion County has been classified as attainment or unclassifiable in Indiana for PM-10, SO<sub>2</sub>, NO<sub>2</sub>, CO, and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (d) 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.
- (e) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.

### Source Status

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

Pollutant	Emissions (tons/yr)
PM	53.89
PM-10	54.17
SO <sub>2</sub>	0.03
VOC	17.27
CO	4.19
NO <sub>x</sub>	4.99
Single HAP	0.66
Combination HAPs	0.66

- (a) This existing source is **not** a major stationary source under PSD, Emission Offsets, or nonattainment NSR because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater, no nonattainment regulated pollutant is emitted at a rate of 100 tons per year or greater and it is not in one of the 28 listed source categories.
- (b) These emissions were based on the application submitted by the company.

### Part 70 Permit Determination

#### 326 IAC 2-7 (Part 70 Permit Program)

This existing source is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons per year.

This status is based on all the air approvals issued to the source. This status has been verified by the OES inspector assigned to the source.

### Federal Rule Applicability

(a) The boiler located at this source is subject to New Source Performance Standard (NSPS), 40 CFR 60.40c, Subpart Dc (Standards of Performance for Small-Commercial-Insititutional Steam Generating Units), which is incorporated by reference as 326 IAC 12. The specific facility subject to this rule include the following:

- (1) One natural gas fired Superior boiler (Emission Unit #1), constructed in April of 2002, with a maximum heat input capacity of 10.5 MMBtu/hr. This unit has no controls and is vented to stack 01.

On February 27, 2006, U. S. EPA amended 40 CFR 60.40c to eliminate the daily record keeping requirement for natural gas fuel consumption in affected emission units. However, the Indiana Air Pollution Control Board has not completed rule making to adopt these changes. Therefore, the boiler, identified as Emission Unit #1 is still subject to the version of 40 CFR Part 60, Subpart Dc in effect on July 1, 2005 and 326 IAC 12 (See State Rule Applicability - Entire Source Section).

Nonapplicable portions of the NSPS will not be included in the permit. The boiler is subject to the following portions of Subpart Dc.

- (1) 40 CFR 60.40c
- (2) 40 CFR 60.41c
- (3) 40 CFR 60.48c (a)
- (4) 40 CFR 60.48c (a)(1)
- (5) 40 CFR 60.48c (a)(3)
- (6) 40 CFR 60.48c (g)
- (7) 40 CFR 60.48c (i)
- (8) 40 CFR 60.48c (j)

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) 326 IAC 14, 20 and 40 CFR Part 63, included in this permit.

### State Rule Applicability – Entire Source

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

This existing source is not a major source. This source is not one (1) of the twenty-eight (28) listed source categories. The potential to emit each criteria pollutant from the entire source is less than 250 tons per year. There have been no modifications or revisions to this source that were major modifications pursuant to 326 IAC 2-2. Therefore, this source is a minor source and the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) are not applicable.

#### 326 IAC 2-3 (Emission Offset) and 326 IAC 2-1.1-5 (Nonattainment New Source Review)

Marion County has been designated as non-attainment for PM 2.5 in 70 FR 943 dated January 5, 2005. According to the April 5, 2005 EPA memo titled "Implementation of New Source Review Requirements in PM2.5 Nonattainment Areas" authored by Steve Page, Director of OAQPS, until EPA promulgates the PM 2.5 major NSR regulations, states should assume that a major stationary source's PM-10 emissions represent PM2.5 emissions. IDEM will use the PM-10 nonattainment major NSR program as a surrogate to address the requirements of nonattainment major NSR for the PM2.5 NAAQS. A major source in a nonattainment area is a source that emits or has the potential to emit 100 ton per year of any regulated pollutant. Flutes, Inc. has a potential to emit of PM-10 below 100 tons per year. Therefore, assuming that PM-10 emissions represent PM2.5 emissions, 326 IAC 2-1.1-5 does not apply.

Marion County has been designated as basic nonattainment for the 8-hour ozone standard. The potential to emit of NO<sub>x</sub> and VOC from this source is less than 100 tons per year for each pollutant. Therefore, the requirements of 326 IAC 2-3 do not apply.

There have been no modifications or revisions to this source that were major modifications pursuant to 326 IAC 2-3. Therefore, 326 IAC 2-3 does not apply.

#### 326 IAC 2-4.1 (Hazardous Air Pollutants)

This source has a potential to emit less than ten (10) tons per year of a single HAP and twenty-five (25) tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

#### 326 IAC 2-6 (Emission Reporting)

Pursuant to 326 IAC 2-6-1(a)(1), (2), and (3), this source is not subject to 326 IAC 2-6 (Emission Reporting) because, as an MSOP source, it is not required to have an operating permit under 326 IAC 2-7, it does not emit lead into the ambient air at levels equal to or greater than five (5) tons per year, and it is not located in Lake or Porter Counties.

#### 326 IAC 5-1 (Opacity Limitations)

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

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### 326 IAC 6.5-1-2 (Nonattainment Area Limitations: Particulate Emission Limitations)

The source has a potential to emit less than one hundred (100) tons per year PM and less than ten (10) tons per year actuals. Therefore, 326 IAC 6.5-1-2 does not apply.

### State Rule Applicability – Individual Facilities

#### 326 IAC 6-2-4 Particulate Emissions Limitations for Sources of Indirect Heating [326 IAC 6-2-4 ]

This source is subject to 326 IAC 6-2-4 because the boiler (Emission Unit #1) was constructed after September 21, 1983. Particulate emissions from Emission Unit #1 shall be limited by the following equation:

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

- Where: Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.  
Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

PM emissions from EU #1 (Q=10.5 MMBtu) shall be limited to 0.59 lb/MMBtu heat input. (Since the potential uncontrolled PM rate is 0.0019 lb/MMBtu, and less than the allowable emissions of 0.59 lb/MMBtu, this operation will be able to comply with the requirements of 326 IAC 6-2-4.



Indirect heating is defined as the combustion of fuel to produce usable heat that is to be transferred through a heat-conducting materials barrier or by a heat storage medium to a material to be heated so that the material being heated is not contacted by, and adds no substance to the products of combustion. The space heaters are not subject to 326 IAC 6-2-4 because they are not a source of indirect heating as defined above.

326 IAC 6-3-2 (Particulate emission limitations, work practices, and control devices)

Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the:

- (1) Bobst/Air Equipment and Engineering MF250/MPC3 Asitrade Line/Scrap collector (Emission Unit #2) shall not exceed 17.2 lb/hr when operating at a process weight rate of 17,056 lb/hr (8.5 tons/hr). (Since the potential uncontrolled particulate emissions of 4.61 lb/hr, is less than the allowable emissions of 17.2 lb/hr, this operation will be able to comply with the requirements of 326 IAC 6-3-2).
- (2) Bobst/Air Equipment and Engineering MF250/MPC3 Asitrade Line/Scrap collector (Emission ID#3) shall not exceed 24.5 lb/hr when operating at a process weight rate of 28,729 lb/hr (14.4 tons/hr). (Since the potential uncontrolled particulate emissions of 7.68 lb/hr, is less than the allowable emissions of 24.5 lb/hr, this operation will be able to comply with the requirements of 326 IAC 6-3-2).

The allowable particulate emission rates above were calculated with the following equation:

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

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

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

The Permittee has no individual facility with the potential to emit more than twenty-five (25) tons per year of VOCs. Therefore, 326 IAC 8-1-6 does not apply.

326 IAC 8-2-5 (Paper Coating Operations)

This source does not conduct web coating or saturation processes of paper, plastic, metal foil, and pressure sensitive tape. Therefore, 326 IAC 8-2-5 does not apply.

326 IAC 8-5-5 (Graphic Arts Operations)

This source does not conduct packaging rotogravure, publication rotogravure, or flexographic printing, and the potential emissions for VOC are less than 25 tons per year. Therefore, 326 IAC 8-5-5 does not apply.

326 IAC 12 (New Source Performance Standards)

On February 27, 2006, U. S. EPA amended 40 CFR 60.40c to eliminate the daily record keeping requirement for natural gas fuel consumption in affected emission units. However, the Indiana Air Pollution Control Board has not completed rule making to adopt these changes. Therefore, the boiler, identified as Emission Unit #1, is still subject to the July 1, 2005 version of 40 CFR Subpart Dc. The July 1, 2005 version as incorporated into 326 IAC 12 requires the following:

- (g) The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.

## Testing Requirements

In order to determine PM/PM10 emission factors, the Permittee shall perform testing no later than 180 days after issuance of this permit on the Asitrade Line/Scrap collector, identified as Emission Unit #3, using methods as approved by the Commissioner.

## **Conclusion**

The operation of this manufacturer of corrugated sheets shall be subject to the conditions of the Minor Source Operating Permit Renewal M097-23152-00347.

**Appendix A: Emission Calculations**  
**Natural Gas Combustion Only**  
**MM Btu/hr 0.3 - < 10**  
**Emission Units #1, #4, #5, & #6**

**Company Name: Flutes, LLC**  
**Address City IN Zip: 8252 Zionsville Road, Building 98, Indianapolis, IN 46268**  
**Permit Number: M097-23152-00347**  
**Plt ID: 097-00347**  
**Reviewer: A. Nguyen**  
**Date: 06/29/07**

Emission Unit	Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
#1	10.5	
#4	0.3	
#5	0.3	
#6	0.3	
	11.4	99.9

Emission Factor in lb/MMCF	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.3	84.0
Potential Emission in tons/yr	0.0949	0.38	0.0300	4.99	0.26	4.19

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

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

\*\*\* The emission factor for PM in lb/MMBtu = 0.0019

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

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

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

**Appendix A: Emission Calculations  
Aristrade Line Scrap Collector**

**Emission Unit 2**

**Company Name: Flutes, LLC**  
**Address City IN Zip: 8252 Zionsville Road, Building 98, Indianapolis, IN 46268**  
**Permit Number: M097-23152-00347**  
**Plt ID: 097-00347**  
**Reviewer: A. Nguyen**  
**Date: 06/29/07**

<b>Maximum Production Capacity</b>		
Paper	15000	lbs/hr
Corn Starch Glue	1672	lbs/hr
Cold Set Glue	384	lbs/hr
Total:	17056	lbs/hr
<b>PM Emissions:</b>		
Paper Throughput	15000	lbs/hr
*% Scrap	6.14%	
Scrap Throughput	921	lbs/hr
**% Scrap considered PM	0.50%	
Potential Emissions	4.61	lbs/hr
PTE in Tons Per Year	<b>20.1699</b>	tons/yr
Control Efficiency of Cyclone	85%	
Control Efficiency of Filter	99.97%	
Emissions After Control	0.000207	lbs/hr
Emissions After Control	0.000908	tons/yr
<b>VOC &amp; HAP Emissions:</b>		
Cold Set Glue Throughput	384	lbs/hr
VOC content of cold set glue	0.51%	by weight
Formaldehyde (HAP) content of cold set glue	0.02%	
Potential VOC emissions	1.939968	lbs/hr
Potential VOC emissions	<b>8.49706</b>	tons/yr
Potential HAP emissions	0.0768	lbs/hr
Potential HAP emissions	<b>0.336384</b>	tons/yr

\* This percentage was based on amount of product produced and scrap generated over the last 3 years. Taking the highest percentage of scrap produced in the 3 year period and multiplying it by a safety factor of 120%. See Appendix A page 5 for more detail.

\*\* Only 0.5% of the scrap is considered PM, the other 99.5% is considered to be too large.

**Appendix A: Emission Calculations  
Aristrade Line Scrap Collector  
Emission Unit 3**

**Company Name: Flutes, LLC**  
**Address City IN Zip: 8252 Zionsville Road, Building 98, Indianapolis, IN 46268**  
**Permit Number: M097-23152-00347**  
**Plt ID: 097-00347**  
**Reviewer: A. Nguyen**  
**Date: 06/29/07**

<b>Maximum Production Capacity</b>		
Paper	25000	lbs/hr
Corn Starch Glue	3345	lbs/hr
Cold Set Glue	384	lbs/hr
Total:	28729	lbs/hr
<b>PM Emissions:</b>		
Paper Throughput	25000	lbs/hr
*% Scrap	6.14%	
Scrap	1535	lbs/hr
**% Scrap considered PM	0.50%	
Potential Emissions	7.68	lbs/hr
PTE in Tons Per Year	<b>33.6165</b>	tons/year
Control Efficiency of Cyclone	85%	
Control Efficiency of Filter	99.97%	
Emissions After Control	0.000345	lbs/hr
Emissions After Control	0.001513	tons/year
<b>VOC &amp; HAP Emissions:</b>		
Cold Set Glue Throughput	384	lbs/hr
VOC content of cold set glue	0.51%	by weight
Formaldehyde (HAP) content of cold set glue	0.02%	
Potential VOC emissions	1.939968	lbs/hr
Potential VOC emissions	<b>8.49706</b>	tons/yr
Potential HAP emissions	0.0768	lbs/hr
Potential HAP emissions	<b>0.336384</b>	tons/yr

\* This percentage was based on amount of product produced and scrap generated over the last 3 years. Taking the highest percentage of scrap produced in the 3 year period and multiplying it by a safety factor of 120%. See Appendix A page 5 for more detail.

\*\* Only 0.5% of the scrap is considered PM, the other 99.5% is considered to be too large.

**Appendix A: Emission Calculations**  
**Summary of Emissions in Tons Per Year**

**Company Name:** Flutes, LLC  
**Address City IN Zip:** 8252 Zionsville Road, Building 98, Indianapolis, IN 46268  
**Permit Number:** M097-23152-00347  
**Plt ID:** 097-00347  
**Reviewer:** A. Nguyen  
**Date:** 06/29/07

<b>Potential to Emit</b>	PM	PM10	SO2	NOx	VOC	CO	Formaldehyde	Combination HAPs
EU1	0.09	0.35	0.03	4.60	0.24	3.86	0.00	0.00
EU2	20.17	20.17	0.00	0.00	8.50	0.00	0.33	0.33
EU3	33.62	33.62	0.00	0.00	8.50	0.00	0.33	0.33
EU4	0.0025	0.01	0.001	0.13	0.01	0.11	0.00	0.00
EU5	0.0025	0.01	0.001	0.13	0.01	0.11	0.00	0.00
EU6	0.0025	0.01	0.001	0.13	0.01	0.11	0.00	0.00
<b>Total</b>	<b>53.89</b>	<b>54.17</b>	<b>0.03</b>	<b>4.99</b>	<b>17.27</b>	<b>4.19</b>	<b>0.66</b>	<b>0.66</b>

<b>After Controls</b>	PM	PM10	SO2	NOx	VOC	CO	Formaldehyde	Combination HAPs
EU1	0.09	0.35	0.03	4.60	0.24	3.86	0.00	0.00
EU2	0.0009	0.0009	0.00	0.00	8.50	0.00	0.33	0.33
EU3	0.0015	0.0015	0.00	0.00	8.50	0.00	0.33	0.33
EU4	0.0025	0.01	0.001	0.13	0.01	0.11	0.00	0.00
EU5	0.0025	0.01	0.001	0.13	0.01	0.11	0.00	0.00
EU6	0.0025	0.01	0.001	0.13	0.01	0.11	0.00	0.00
<b>Total</b>	<b>0.0999</b>	<b>0.38</b>	<b>0.03</b>	<b>4.99</b>	<b>17.27</b>	<b>4.19</b>	<b>0.66</b>	<b>0.66</b>

**Company Name:** Flutes, LLC  
**Address City IN Zip:** 8252 Zionsville Road, Building 98, Indianapolis, IN 46268  
**Permit Number:** M097-23152-00347  
**Pit ID:** 097-00347  
**Reviewer:** A. Nguyen  
**Date:** 06/29/07

Tables shows the amount of product produced and scrap generated for the last 3 years.

	Production this month (tons)	Production 12 month total (tons)	Scrap this month (tons)	Scrap 12 month total (tons)	Scrap %
January-03	1662	21912	74	967	4.45%
February-03	1311	21637	50.86	945	3.88%
March-03	1315	21607	48	924	3.65%
April-03	1449	21250	59	903	4.07%
May-03	1464	20932	68.8	892	4.70%
June-03	1598	20760	64	878	4.01%
July-03	1287	20072	53	835	4.12%
August-03	2036	19678	70.6	798	3.47%
September-03	2047	19546	65.5	779	3.20%
October-03	2293	19469	67	755	2.92%
November-03	1811	19653	50	732	2.76%
December-03	1989	20262	65	736	3.27%
January-04	2070	20670	94	756	4.54%
February-04	1915	21274	98	803	5.12%
March-04	2783	22742	125	880	4.49%
April-04	2685	23978	124	945	4.62%
May-04	3059	25573	137	1013	4.48%
June-04	3350	27325	151	1100	4.51%
July-04	3277	29315	131	1178	4.00%
August-04	4200	31479	180	1288	4.29%
September-04	4835	34267	169	1391	3.50%
October-04	5088	37062	209	1533	4.11%
November-04	5226	40477	186	1669	3.56%
December-04	4525	43013	170	1774	3.76%
January-05	5767	46710	205	1885	3.55%
February-05	5405	50200	122	1909	2.26%
March-05	5393	52810	181	1965	3.36%
April-05	5100	55225	198	2039	3.88%
May-05	4485	56651	153	2055	3.41%
June-05	4892	58193	152	2056	3.11%
July-05	4698	59614	162	2087	3.45%
August-05	4922	60336	203	2110	4.12%
September-05	5571	61072	194	2135	3.48%
October-05	6083	62067	206	2132	3.39%
November-05	5025	61866	150	2096	2.99%
December-05	4709	62050	154	2080	3.27%

Average 3.77%  
 High Value 5.12%  
 Safety Factor 120%  
 Maximum Scrap **6.14%**