INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: January 4, 2013

RE: International Paper / 107-32600-00060

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision – Approval

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

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER-AM.dot12/3/07

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

Gary Huxhold
International Paper
801 N Englewood Dr
Crawfordsville, Indiana 47933

January 4, 2013

Re: 107-32600-00060
First Administrative Amendment
M107-27461-00060

Dear Mr. Huxhold:

International Paper was issued a Minor Source Operating Permit (MSOP) Renewal No. M107-27461-00060 on July 17, 2009 for a stationary corrugated and solid fiber box manufacturing source located at 801 N Englewood Dr, Crawfordsville, Indiana. On December 7, 2012, the Office of Air Quality (OAQ) received a letter from the source requesting to be updated to include:

(1) The source name has been changed

(2) Correct descriptive information

- Two (2) natural gas-fired boilers, identified as A-57 and A-58, Recycled Material System, CM-1, EG-87, two-color Ward die cutter in Section A.2.(a), (b), (d), (f), and (j). The diesel oil burners and associated equipment were removed from the boiler in 2012 and diesel fuel tanks were removed in 2012.

- Addition of an insignificant activities parts washers, Heritage Crystal Clean, identified as PW-02 in Section A.2

- Remove #2 fuel tank, identified as T-1

These changes to the permit qualify as an administrative permit amendment to 326 IAC 2-6.1-6(d)(2). The uncontrolled/unlimited potential to emit of the entire source will continue to be less than the threshold levels specified in 326 IAC 2-7. Pursuant to the provisions of 326 IAC 2-6.1-6, the permit is hereby revised as follows with the deleted language as ~~strikeouts~~ and new language **bolded**....

Change 1:
~~Temple-Inland Inc. dba~~ International Paper
801 N. Englewood Drive
Crawfordsville, Indiana 47933

Change 2:

A.2 Emission Units and Pollution Control Equipment Summary

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

(a) One (1) natural gas-fired boiler, ~~using #2 fuel oil as backup,~~ identified as A-57, with a maximum capacity of 14.645 million British thermal units per hour (MMBtu/hr) and 350 horsepower, constructed in 1971, and exhausting to stack S-01. **The diesel oil burners and associated equipment were removed from the boiler in 2012 and diesel fuel**

tanks were removed in 2012.

(b) One (1) natural gas-fired boiler, ~~using #2 fuel oil as backup,~~ identified as A-58, with a maximum capacity of 14.645 million British thermal units per hour (MMBtu/hr) and 350 horsepower, constructed in 1971, and exhausting to stack S-02. **The diesel oil burners and associated equipment were removed from the boiler in 2012 and diesel fuel tanks were removed in 2012.**

(c) One (1) starch silo, identified as Starch Silo, with a maximum capacity of 220,000 pounds of corn starch, using a bin vent as particulate control, approved for construction in 2011, and exhausting to stack S-04,

(d) One (1) trim ~~waste~~ **material** collection system, identified as Recycled Material System, with a maximum capacity of 6900 pounds of trim ~~waste~~ **material** per hour, using a transfer cyclone to move trim material to a baler through a cyclone identified as CY-01, constructed in 1971, and exhausting to stack S-05.

(e) One (1) 98 inch corrugator, identified as C-40, with a maximum capacity of 1000 feet per minute and 113,845 pounds of paper per hour, constructed in 1972. Cutting and trimming material exhaust to the Recycled Material System, and then exhaust to stack S-05. Slitter and stack vacuum dust exhaust to the dust collection system, and then exhaust to stack S-06.

(f) One (1) cornstarch ~~mixing tank~~ **kitchen**, identified as CM-1, with a maximum capacity of 3000 gallons of blended cornstarch adhesive, constructed in ~~1972~~ **2011**.

~~(g) One (1) standby #2 fuel tank, identified as T-1, with a maximum capacity of 12,000 gallons of fuel, constructed in 1998.~~

(~~h~~ **g**) One (1) four-color EVOL flexo folder gluer equipped with a flowcoater for glue application, identified as EVOL 1, with a maximum line speed of 992 feet per minute and a maximum plate size of 34 by 84 inches, constructed in 2007. Cutting and trimming waste exhaust to the Recycled Material System, and then exhaust to stack S-05. Particulate emissions from the board vacuum exhaust to a cyclone that is connected exclusively to this emission unit, and then exhaust indoors.

(~~i~~ **h**) One (1) four-color EVOL flexo folder gluer equipped with a flowcoater for glue application, identified as EVOL 2, with a maximum line speed of 992 feet per minute and a maximum plate size of 34 by 84 inches, constructed in 2007. Cutting and trimming waste exhaust to the Recycled Material System, and then exhaust to stack S-05. Particulate emissions from the board vacuum exhaust to a cyclone that is connected exclusively to this emission unit, and then exhaust indoors.

(~~j~~ **i**) One (1) ~~three-color~~ **two-color** flexo folder gluer equipped with a flowcoater for glue application, identified as EG-87, with a maximum line speed of 800 feet per minute and a maximum plate size of 24 by 66 inches, constructed in 2008. Cutting and trimming ~~waste~~ **material** exhaust to the Recycled Material System, and then exhaust to stack S-05. Particulate emissions from the board vacuum exhaust vent to a shared dust collection system located outside and then exhaust to ~~stack S-06~~ **indoors**.

(~~k~~ **j**) One (1) ~~two-color~~ **three-color** Ward die cutter ~~and gluer equipped with a flowcoater for glue application, identified as EO-98~~, with a maximum line speed of 879 feet per minute and a maximum plate size of 62 by 125 inches, constructed in 2008. Cutting and trimming ~~waste~~ **material** exhaust to the Recycled Material System, and then exhaust to stack S-05. Particulate emissions from the board vacuum exhaust vent to a shared dust

collection system located outside and then exhaust to ~~stack S-06~~ **indoors**.

(~~l~~ **k**) Trivial activities as defined in 326 IAC 2-7-1(40) relating to: ventilation, routine fabrication such as drilling, surface grinding as related to maintenance and repair, housekeeping, office related activities, sampling activities such as waste, storage equipment containing raw materials, emergency and standby equipment such as process safety valve relief devices, activities related to production such as air compressors & pneumatically operated equipment, cleaners and solvents with vapor pressure less than 2 kPa, activities associated with treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

(~~m~~ **l**) Activities associated with degreasing operations that do not exceed 145 gallons per twelve months, as follows:

(1) ~~One~~ **Two** (~~1~~ **2**) Heritage Crystal Clean small parts washer, identified as PW-01 **and PW-02**, with a maximum usage of less than 145 gallons per year, installed in 2001, and exhausting indoors.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Boilers

(a) One (1) natural gas-fired boiler, identified as A-57, ~~using #2 fuel oil as backup,~~ with a maximum capacity of 14.645 million British thermal units per hour (MMBtu/hr) and 350 horsepower, constructed in 1971, and exhausting to stack S-01. **The diesel oil burners and associated equipment were removed from the boiler in 2012 and diesel fuel**

(b) One (1) natural gas-fired boiler, identified as A-58, ~~using #2 fuel oil as backup,~~ with a maximum capacity of 14.645 million British thermal units per hour (MMBtu/hr) and 350 horsepower, constructed in 1971, and exhausting to stack S-02. **The diesel oil burners and associated equipment were removed from the boiler in 2012 and diesel fuel**

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

~~**Compliance Determination Requirements**~~

~~D.1.4 Sulfur Dioxide Emissions and Sulfur Content~~

~~Compliance with condition D.1.2 shall be determined utilizing one of the following options:~~

~~(a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that sulfur dioxide emissions from the two (2) boilers do not exceed five-tenths (0.5) pound per MMBtu when combusting #2 fuel oil by:~~

~~(1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification; or~~

~~(2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.~~

~~(A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and~~

~~(B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.~~

~~(b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the two (2) boilers, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.~~

~~A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.~~

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

D. ~~1.5~~ **1.4** Record Keeping Requirements

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Miscellaneous Operations

(c) ...

(d) One (1) trim ~~waste~~ **material** collection system, identified as Recycled Material System, with a maximum capacity of 6900 pounds of trim waste per hour, using a transfer cyclone to move trim material to a baler through a cyclone identified as CY-01, constructed in 1971, and exhausting to stack S-05.

(e) ...

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

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Parts Washer

(~~m~~ **l**) Activities associated with degreasing operations that do not exceed 145 gallons per twelve months, as follows:

(1) ~~One~~ **Two** (~~1~~ **2**) Heritage Crystal Clean small parts washer, identified as PW-01 **and PW-02**, with a maximum usage of less than 145 gallons per year, installed in 2001, and exhausting indoors.

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

All other conditions of the permit shall remain unchanged and in effect. Attached please find the entire revised permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act – IC 4-21.5-3-5. If you have any questions on this matter, please contact Anh Nguyen, OAQ, 100 North Senate Avenue, MC 61-53, Room 1003, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for Anh Nguyen or extension (3-5334), or dial (317) 233-5334.

Sincerely,

Tripurari Sinha

Tripurari P. Sinha, Ph. D., Section Chief
Permits Branch
Office of Air Quality

Attachments:
Updated Permit
PTE Calculations

AN

cc: File - Montgomery County
Montgomery County Health Department
U.S. EPA, Region V
Compliance and Enforcement Branch

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

Minor Source Operating Permit Renewal
OFFICE OF AIR QUALITY

International Paper
801 N. Englewood Drive
Crawfordsville, Indiana 47933

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

This permit is issued 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.

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 MSOP under 326 IAC 2-6.1.

Operation Permit No. M107-27461-00060	
Issued / original signed by: Alfred C. Dumaual, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: July 17, 2009 Expiration Date: July 17, 2019

First Notice-Only Change No. 107-30390-00060, issued on May 13, 2011
Second Notice-Only Change No. 107-31814-00060, issued on June 6, 2012

First Administrative Amendment No. 107-32600-00060	
Issued by: Tripurari Sinha Tripurari P. Sinha, Ph. D., Section Chief Permits Branch, Office of Air Quality	Issuance Date: January 4, 2013 Expiration Date: July 17, 2019

TABLE OF CONTENTS

A. SOURCE SUMMARY
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. GENERAL CONDITIONS
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 Annual Notification [326 IAC 2-6.1-5(a)(5)]
B.9 Preventive Maintenance Plan [326 IAC 1-6-3]
B.10 Prior Permits Superseded [326 IAC 2-1.1-9.5]
B.11 Termination of Right to Operate [326 IAC 2-6.1-7(a)]
B.12 Permit Renewal [326 IAC 2-6.1-7]
B.13 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]
B.14 Source Modification Requirement
B.15 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.16 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]
B.17 Annual Fee Payment [326 IAC 2-1.1-7]
B.18 Credible Evidence [326 IAC 1-1-6]

C. SOURCE OPERATION CONDITIONS

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]
C.2 Permit Revocation [326 IAC 2-1.1-9]
C.3 Opacity [326 IAC 5-1]
C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]
C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]
C.6 Fugitive Dust Emissions [326 IAC 6-4]
C.7 Stack Height [326 IAC 1-7]
C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

Testing Requirements [326 IAC 2-6.1-5(a)(2)]
C.9 Performance Testing [326 IAC 3-6]

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

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]
C.11 Compliance Monitoring [326 IAC 2-1.1-11]]
C.12 Instrument Specifications [326 IAC 2-1.1-11]

Corrective Actions and Response Steps
C.13 Response to Excursions or Exceedances
C.14 Actions Related to Noncompliance Demonstrated by a Stack Test

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

C.15 Malfunctions Report [326 IAC 1-6-2]
C.16 General Record Keeping Requirements [326 IAC 2-6.1-5]
C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

D.1. EMISSIONS UNIT OPERATION CONDITIONS

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

D.1.1 Particulate [326 IAC 6-2-3]
D.1.2 Sulfur Dioxide (SO2) [326 IAC 7-1.1-2][326 IAC 7-2-1]
D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

Compliance Determination Requirements

D.1.4 Sulfur Dioxide Emissions and Sulfur Content

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

D.1.5 Record Keeping Requirements

D.2. EMISSIONS UNIT OPERATION CONDITIONS

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

D.2.1 Particulate [326 IAC 6-3-2]
D.2.2 Particulate
D.2.3 Preventive Maintenance Plan [326 IAC 1-6-3]

D.3. EMISSIONS UNIT OPERATION CONDITIONS

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

D.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]
D.3.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

Annual Notification
Malfunction Report

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and 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 corrugated and solid fiber box manufacturing source.

Source Address:	801 N. Englewood Drive, Crawfordsville, Indiana 47933
General Source Phone Number:	(765) 362-4010
SIC Code:	2653 (Corrugated and Solid Fiber Box Manufacturing)
County Location:	Montgomery
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

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

(a) One (1) natural gas-fired boiler, identified as A-57, with a maximum capacity of 14.645 million British thermal units per hour (MMBtu/hr) and 350 horsepower, constructed in 1971, and exhausting to stack S-01. The diesel oil burners and associated equipment were removed from the boiler in 2012 and diesel fuel tanks were removed in 2012.

(b) One (1) natural gas-fired boiler, identified as A-58, with a maximum capacity of 14.645 million British thermal units per hour (MMBtu/hr) and 350 horsepower, constructed in 1971, and exhausting to stack S-02. The diesel oil burners and associated equipment were removed from the boiler in 2012 and diesel fuel tanks were removed in 2012.

(c) One (1) starch silo, identified as Starch Silo, with a maximum capacity of 220,000 pounds of corn starch, using a bin vent as particulate control, approved for construction in 2011, and exhausting to stack S-04,

(d) One (1) trim material collection system, identified as Recycled Material System, with a maximum capacity of 6900 pounds of trim material per hour, using a transfer cyclone to move trim material to a baler through a cyclone identified as CY-01, constructed in 1971, and exhausting to stack S-05.

(e) One (1) 98 inch corrugator, identified as C-40, with a maximum capacity of 1000 feet per minute and 113,845 pounds of paper per hour, constructed in 1972. Cutting and trimming material exhaust to the Recycled Material System, and then exhaust to stack S-05. Slitter and stack vacuum dust exhaust to the dust collection system, and then exhaust to stack S-06.

(f) One (1) cornstarch kitchen, identified as CM-1, with a maximum capacity of 3000 gallons of blended cornstarch adhesive, constructed in 2011.

(g) One (1) four-color EVOL flexo folder gluer equipped with a flowcoater for glue application, identified as EVOL 1, with a maximum line speed of 992 feet per minute and a maximum plate size of 34 by 84 inches, constructed in 2007. Cutting and trimming waste exhaust to the Recycled Material System, and then exhaust to stack S-05. Particulate emissions from the board vacuum exhaust to a cyclone that is connected exclusively to this emission unit, and then exhaust indoors.

(h) One (1) four-color EVOL flexo folder gluer equipped with a flowcoater for glue application, identified as EVOL 2, with a maximum line speed of 992 feet per minute and a maximum plate size of 34 by 84 inches, constructed in 2007. Cutting and trimming waste exhaust to the Recycled Material System, and then exhaust to stack S-05. Particulate emissions from the board vacuum exhaust to a cyclone that is connected exclusively to this emission unit, and then exhaust indoors.

(i) One (1) two-color flexo folder gluer equipped with a flowcoater for glue application, identified as EG-87, with a maximum line speed of 800 feet per minute and a maximum plate size of 24 by 66 inches, constructed in 2008. Cutting and trimming material exhaust to the Recycled Material System, and then exhaust to stack S-05. Particulate emissions from the board vacuum exhaust vent to a shared dust collection system located outside and then exhaust to indoors.

(j) One (1) three-color Ward die cutter, with a maximum line speed of 879 feet per minute and a maximum plate size of 62 by 125 inches, constructed in 2008. Cutting and trimming material exhaust to the Recycled Material System, and then exhaust to stack S-05. Particulate emissions from the board vacuum exhaust vent to a shared dust collection system located outside and then exhaust to indoors.

(k) Trivial activities as defined in 326 IAC 2-7-1(40) relating to: ventilation, routine fabrication such as drilling, surface grinding as related to maintenance and repair, housekeeping, office related activities, sampling activities such as waste, storage equipment containing raw materials, emergency and standby equipment such as process safety valve relief devices, activities related to production such as air compressors & pneumatically operated equipment, cleaners and solvents with vapor pressure less than 2 kPa, activities associated with treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

(l) Activities associated with degreasing operations that do not exceed 145 gallons per twelve months, as follows:

(1) Two (2) Heritage Crystal Clean small parts washer, identified as PW-01 and PW-02, with a maximum usage of less than 145 gallons per year, installed in 2001, and exhausting indoors.

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, M107-27461-00060, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

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

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

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

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability

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

B.5 Severability

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, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 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:

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

(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 on or before the date it is due.

B.9 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

(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.

The Permittee shall implement the PMPs.

(b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

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

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions.

(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.10 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to M107-27461-00060 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.11 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 one hundred twenty (120) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.12 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 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 an affirmation that the statements in the application are true and complete 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) A timely renewal application is one that is:

(1) Submitted at least one hundred twenty (120) 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 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 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, pursuant to 326 IAC 2-6.1-4(b), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.13 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]

(a) Permit amendments and revisions 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(c) The Permittee shall notify the OAQ no later than thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.14 Source Modification Requirement

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

B.15 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]

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

(a) Enter upon the Permittee's premises where a 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.16 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require an affirmation that the statements in the application are true and complete 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.17 Annual Fee Payment [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees due no later than thirty (30) calendar days of receipt of a bill from IDEM, OAQ,.

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

B.18 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, 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 5-1-1 (Applicability) and 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

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

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

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

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

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

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

C.7 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.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

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

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project.

(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 Licensed 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 Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

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

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

(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

no later than thirty-five (35) days prior to the intended test date.

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date.

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

C.11 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.12 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 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.13 Response to Excursions or Exceedances

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(a) The Permittee shall take reasonable response steps to 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 excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned or are returning 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 normal or usual manner of operation.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall record the reasonable response steps taken.

C.14 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 submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

C.15 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) or 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, 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.16 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 makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of

permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.17 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(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 on or before the date it is due.

(c) 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: Boilers

(a) One (1) natural gas-fired boiler, identified as A-57, with a maximum capacity of 14.645 million British thermal units per hour (MMBtu/hr) and 350 horsepower, constructed in 1971, and exhausting to stack S-01. The diesel oil burners and associated equipment were removed from the boiler in 2012 and diesel fuel

(b) One (1) natural gas-fired boiler, identified as A-58, with a maximum capacity of 14.645 million British thermal units per hour (MMBtu/hr) and 350 horsepower, constructed in 1971, and exhausting to stack S-02. The diesel oil burners and associated equipment were removed from the boiler in 2012 and diesel fuel

(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 [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3(d) (Particulate Emissions Limitations for Facilities Specified in 326 IAC 6-2-1(c)), particulate emissions from the two (2) boilers, identified as A-57 and A-58, shall not exceed 0.8 lb/mmBtu heat input.

D.1.2 Sulfur Dioxide (SO_2) [326 IAC 7-1.1-2][326 IAC 7-2-1]

Pursuant to 326 IAC 7-1.1-2 (Sulfur Dioxide Emissions Limitations), sulfur dioxide emissions from the two (2) boilers, identified as A-57 and A-58, shall not exceed five-tenths (0.5) pound per MMBtu when combusting #2 fuel oil. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a thirty (30) day rolling, weighted average.

D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

D.1.4 Record Keeping Requirements

(a) To document the compliance status with the condition D.1.2, the Permittee shall maintain records in accordance with (1) through (6) below.

(1) Calendar dates covered in the compliance determination period;

(2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;

(3) To certify compliance when burning natural gas only, the Permittee shall maintain records of fuel used.

If the fuel supplier certification is used to demonstrate compliance, when burning alternate fuels and not determining compliance pursuant to 326 IAC 3-7-4, the following, as a minimum, shall be maintained:

(4) Fuel supplier certifications;

(5) The name of the fuel supplier; and

(6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

(b) Section C - General Record Keeping Requirements~~,~~ of this permit contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Miscellaneous Operations

(c) One (1) starch silo, identified as Starch Silo, with a maximum capacity of 220,000 pounds of corn starch, using a bin vent as particulate control, approved for construction in 2011, and exhausting to stack S-04.

(d) One (1) trim material collection system, identified as Recycled Material System, with a maximum capacity of 6900 pounds of trim material per hour, using a transfer cyclone to move trim material to a baler through a cyclone identified as CY-01, constructed in 1971, and exhausting to stack S-05.

(e) One (1) 98 inch corrugator, identified as C-40, with a maximum capacity of 1000 feet per minute and 113,845 pounds of paper per hour, constructed in 1972. Cutting and trimming material exhaust to the Recycled Material System, and then exhaust to stack S-05. Slitter and stack vacuum dust exhaust to the dust collection system, and then exhaust to stack S-06.

(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 [326 IAC 6-3-2]

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

(a) The allowable particulate emission rate from the one (1) starch silo shall not exceed 3.18 pounds per hour when operating at a process weight rate of 1369.86 pounds per hour.

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

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

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

(b) The allowable particulate emission rate from the board vacuum attached to the one (1) 98 inch corrugator, identified as C-40, shall not exceed 45.79 pounds per hour when operating at a process weight rate of 113,840 pounds per hour.

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

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

$E = 55.0\ P^{0.11} - 40$ where: E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.2.2 Particulate

Because the cyclone (CY-01) is considered an integral part of the Recycled Material System, the cyclone (CY-01) shall be in operation and control emissions from the Recycled Material System at all times the Recycled Material System is in operation.

D.2.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Parts Washer

(l) Activities associated with degreasing operations that do not exceed 145 gallons per twelve months, as follows:

(1) Two (2) Heritage Crystal Clean small parts washer, identified as PW-01, and PW-02, with a maximum usage of less than 145 gallons per year, installed in 2001, and exhausting indoors.

(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.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operation), the owner or operator of a cold cleaning facility (the degreasing operations that do not exceed 145 gallons per 12 months) shall:

(a) equip the cleaner with a cover;

(b) equip the cleaner with a facility for draining cleaned parts;

(c) close the degreaser cover whenever parts are not being handled in the cleaner;

(d) drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) provide a permanent, conspicuous label summarizing the operation requirements;

(f) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.3.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

Pursuant to 326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control), the Permittee shall comply with the following requirements:

(a) The owner or operator of a cold cleaner degreaser facility shall ensure that the following control equipment requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) the solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));

(B) the solvent is agitated; or

(C) the solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) The owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

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).

Company Name:	International Paper
Address:	801 N. Englewood Drive
City:	Crawfordsville, Indiana 47933
Phone #:	(765) 362-4010
MSOP #:	M107-27461-00060

I hereby certify that International Paper is:

☐ still in operation.
☐ no longer in operation.

I hereby certify International Paper is:

☐ in compliance with the requirements of MSOP M107-27461-00060.
☐ not in compliance with the requirements of MSOP M107-27461-00060.

Authorized Individual (typed):
Title:
Signature:
Date:

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.

Noncompliance:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER: (317) 233-6865

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 ?_____, 100 TONS/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:

_____

_____

TSD Appendix A: Emissions Calculations
Emission Summary

Company Name: **International Paper**
Source Address: **801 N. Englewood Drive, Crawfordsville, IN 47933**
MSOP Renewal No.: **M107-27461-00060**
MSOP AA No.: **107-32600-00060**
Reviewer: **Anh Nguyen**
Date: **December 7, 2012**

Potential to Emit (tons/yr) (after integral controls)

Emission Unit	PM (ton/yr)	PM_{10} (ton/yr)	$PM_{2.5}$ (ton/yr)	SOx (ton/yr)	NOx (ton/yr)	VOC (ton/yr)	CO (ton/yr)	GHGs as CO2e (ton/yr)	Total HAPs (ton/yr)	Worst Case Single HAP (ton/yr)	
New Washers (PW-02)	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.00	0.01	0.005	Xylene, Toluene, EthylBenzene (each)
Exemption Level	< 5	< 5	< 5	<10	<10	<10	<25	<100,000	< 10	<25	
*PTE before Modification	**26.50**	**26.85**	**26.62**	**65.06**	**18.33**	**65.55**	**10.78**	**19,780**	**3.93**	**1.82**	**Glycol Ethers**
after new Washer added	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.00	0.01	0.005	Xylene, Toluene, EthylBenzene (each)
boilers A-57 & A-58; nat.gas only	0.24	0.98	0.98	0.08	12.83	0.71	10.78	15,489	0.24	0.23	
boilers A-57 & A-58; removed #2 fuel oil backup parts and tanks in 2012	-1.83	-2.18	-1.95	-65.06	-18.33	-0.71	-10.78	-19780	-0.24	-0.23	
Total PTE after issuance	**24.91**	**25.65**	**25.65**	**0.08**	**12.83**	**66.02**	**10.78**	**15488.51**	**3.95**	**1.83**	Glycol Ether

* Results of PTE before Modification came from MSOP No.107-31814-00060 Notice -Only-Change issued on June 6, 2012

TSD Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: **International Paper**
Source Address: **801 N. Englewood Drive, Crawfordsville, IN 47933**
MSOP Renewal No.: **M107-27461-00060**
MSOP AA No.: **107-32600-00060**
Reviewer: **Anh Nguyen**
Date: **December 7, 2012**

Heat Input Capacity MMBtu/hr	HHV mmBtu/mmscf	Potential Throughput MMCF/yr
29.290	1000	256.580

UNIT	MMBtu/hr
A-57	14.645
A-58	14.645
TOTAL	29.290

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.90	7.60	7.60	0.60	100 **see below	5.50	84.00
Potential Emission in tons/	0.24	0.98	0.98	0.08	12.83	0.71	10.78

*PM emission factor is filterable PM only. PM10/PM2.5 emission factors are filterable and condensable combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation =

The diesel oil burners and associated equipment were removed from the boiler in 2012 and diesel fuel tank were removed in 2012.

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	2.69E-04	1.54E-04	9.62E-03	0.23	4.36E-04

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	6.41E-05	1.41E-04	1.80E-04	4.88E-05	2.69E-04

TOTAL HAPs **0.24**

Methodology
The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.
All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
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
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	15,395	0.3	0.3
Summed Potential Emissions in tons/yr	15,395		
CO2e Total in tons/yr	15,489		

Methodology
The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emissions tons/yr x N2O

TSD Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr
#1 and #2 Fuel Oil

Company Name: International Paper
Source Address: 801 N. Englewood Drive, Crawfordsville, IN 47933
MSOP Renewal No.: M107-27461-00060
MSOP AA No.: 107-32600-00060
Reviewer: Anh Nguyen
Date: December 7, 2012

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur
29.290	1832.7	0.5

UNIT	MMBtu/hr
A-57	14.645
A-58	14.645
TOTAL	**29.290**

	Pollutant						
	PM*	PM10**	direct PM2.5***	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	2.0	2.38	2.13	71 *(142.0S)*	20.0	0.34	5.0
Potential Emission in tons/yr	1.83	2.18	1.95	65.06	18.33	0.31	4.58

Methodology
1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu
Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, 1.3-3, and 1.3-7 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see erata file
*PM emission factor is filterable PM only.
*PM10 emission factor is 1.08 lb/kgal (filterable) + 1.3 lb/kgal (condensable
*PM2.5 emission factor is 0.83 lb/kgal (filterable) + 1.3 lb/kgal (condensable
Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Bt
Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/tor

	HAPs - Metals				
	Arsenic	Beryllium	Cadmium	Chromium	Lead
Emission Factor in lb/mmBtu	4.0E-06	3.0E-06	3.0E-06	3.0E-06	9.0E-06
Potential Emission in tons/yr	5.13E-04	3.85E-04	3.85E-04	3.85E-04	1.15E-03

	HAPs - Metals (continued)			
	Mercury	Manganese	Nickel	Selenium
Emission Factor in lb/mmBtu	3.0E-06	6.0E-06	3.0E-06	1.5E-05
Potential Emission in tons/yr	3.85E-04	7.70E-04	3.85E-04	1.92E-03

TOTAL HAPs **6.29E-03**

Methodology
No data was available in AP-42 for organic HAPs.
Potential Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/tor

	Greenhouse Gases		
	CO2	CH4	N2O
Emission Factor in lb/kgal	21,500	0.216	0.26
Potential Emission in tons/yr	19,702	0.2	0.2
Summed Potential Emissions in tons/yr	19,702		
CO2e Total in tons/yr	19,780		

Methodology
The CO2 Emission Factor for #1 Fuel Oil is 21500. The CO2 Emission Factor for #2 Fuel Oil is 22300
Emission Factors are from AP 42, Tables 1.3-3, 1.3-8, and 1.3-12 (SCC 1-03-005-01/02/03) Supplement E 9/99 (see erata file
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/tor
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310)

TSD Appendix A: Emissions Calculations

Company Name: **International Paper**
Source Address: **801 N. Englewood Drive, Crawfordsville, IN 47933**
MSOP Renewal No.: **M107-27461-00060**
MSOP AA No.: **107-32600-00060**
Reviewer: **Anh Nguyen**
Date: **December 7, 2012**

Cornstarch Operations: Starch Silo & CM-1

Emission Unit	*Maximum Throughput (lbs/hr)*	*PM Emission Factor (lbs/ton)*	*PM Emissions (lbs/hr)*	*PM Emissions (tons/yr)*
Starch Silo	1369.86	3.14	2.15	9.42
CM-1 (cornstarch ~~mixing tank~~ **Kitchen**)*	-	-	negligible	negligible
Total				9.42

*Emissions from CM-1 are negligible because this is a wet process that takes place in a completely enclosed system.

Methodology
Maximum Throughput (lbs/hr) = Maximum Throughput (1,000,000 lbs/month) * (12 months/yr) * (1 yr/8760 hrs)
PM Emissions (lbs/hr) = Maximum Throughput (lbs/hr) * PM Emission Factor (lbs/ton) * (1 ton/2000 lbs)
PM Emissions (tons/yr) = Maximum Throughput (lbs/hr) * PM Emission Factor (lbs/ton) * (1 ton/2000 lbs) * (8760 hrs/yr) * (1 ton/2000 lbs)
Emission Factor is from US EPA's AP 42, Chapter 11.2, Table 11.12-2: Emission Factors for Concrete Batching, Cement supplement unloading to elevated storage silo (pneumatic) (3-05-011-17).

Recycled Material System Cyclone: CY-01

cyclone control efficiency = 95.0%

			Uncontrolled		Controlled*	
Emission Unit	*Maximum Throughput (lbs/hr)*	*PM Emission Factor (lbs/ton)*	*PM Emissions (lbs/hr)*	*PM Emissions (tons/yr)*	*PM Emissions (lbs/hr)*	*PM Emissions (tons/yr)*
CY-01 (cyclone)	6900.00	0.001	0.0035	0.015	1.73E-04	7.56E-04

Methodology
*The cyclone has been determined to be integral to the Recycled Material System; therefore the controlled potential to emit from this emission unit is considered for permit level determination.

Maximum Throughput (lbs of trim waste/hr) = Bale Input Capacity (6 bales/hr) * (1150 lbs/bale)

Uncontrolled PM Emissions (lbs/hr) = Maximum Throughput (lbs/hr) * PM Emission Factor (lbs/ton) * (1 ton/2000 lbs)
Uncontrolled PM Emissions (tons/yr) = Maximum Throughput (lbs/hr) * PM Emission Factor (lbs/ton) * (1 ton/2000 lbs) * (8760 hrs/yr) * (1 ton/2000 lbs)
Controlled PM Emissions (lbs/hr) = Maximum Throughput (lbs/hr) * PM Emission Factor (lbs/ton) * (1 ton/2000 lbs) * (1 - control efficiency)
Controlled PM Emissions (tons/yr) = Maximum Throughput (lbs/hr) * PM Emission Factor (lbs/ton) * (1 ton/2000 lbs) * (8760 hrs/yr) * (1 ton/2000 lbs) * (1 - control efficiency)

Emission Factor is based on industry standard for percent of trim material that is dust: 0.10% by weight.

TSD Appendix A: Emissions Calculations

Company Name: International Paper
Source Address: 801 N. Englewood Drive, Crawfordsville, IN 47933
MSOP Renewal No.: M107-27461-00060
MSOP AA No.: 107-32600-00060
Reviewer: Anh Nguyen
Date: December 7, 2012

Printing Operations: EVOL 1, EVOL 2, EG-87, & EO-98

Throughput

Press ID	*Maximum Line Speed (ft/min)*	*Maximum Print Width (in)*	*Throughput (MMin^2/yr)*
EVOL 1	992	84	525,566
EVOL 2	992	84	525,566
EG-87	800	66	333,020
EO-98	879	125	693,004

VOC Emissions

Press ID / *Printing Material*	*Maximum Coverage (lbs/MMin^2)*	*Weight % Volatiles*	*Flash Off (%)*	*Throughput (MMin^2/yr)*	*VOC Emissions (tons/yr)*
EVOL 1					
Inks	2.5	2.40%	100.0%	525,566	15.77
Glues	1.8	0.11%	100.0%	525,566	0.52
				Total	**16.29**
EVOL 2					
Inks	2.5	2.40%	100.0%	525,566	15.77
Glues	1.8	0.11%	100.0%	525,566	0.52
				Total	**16.29**
EG-87					
Inks	2.5	2.40%	100.0%	333,020	9.99
Glues	1.8	0.11%	100.0%	333,020	0.33
				Total	**10.32**
~~EO-98~~ **Ward Die Cutter**					
Inks	2.5	2.40%	100.0%	693,004	20.79
Glues	1.8	0.11%	100.0%	693,004	0.69
				Total	**21.48**

HAP Emissions

Press ID / *Printing Material*	*Maximum Coverage (lbs/MMin^2)*	*Flash Off (%)*	*Throughput (MMin^2/yr)*	*Weight % Glycol Ethers*	*Weight % Vinyl Acetate*	*Weight % Other HAPs*	*Glycol Ethers Emissions (tons/yr)*	*Vinyl Acetate Emissions (tons/yr)*	*Other HAP Emissions (tons/yr)*	*Total HAP Emissions (tons/yr)*
EVOL 1										
Inks	2.5	100.0%	525,566	0.07%	0.00%	0.05%	0.46	0.00	0.33	0.79
Glues (33-636A)	1.8	100.0%	525,566	0.00%	0.03%	0.00%	0.00	0.14	0.00	0.14
						Total	**0.46**	**0.14**	**0.33**	**0.93**
EVOL 2										
Inks	2.5	100.0%	525,566	0.07%	0.00%	0.05%	0.46	0.00	0.33	0.79
Glues (33-636A)	1.8	100.0%	525,566	0.00%	0.03%	0.00%	0.00	0.14	0.00	0.14
						Total	**0.46**	**0.14**	**0.33**	**0.93**
EG-87										
Inks	2.5	100.0%	333,020	0.07%	0.00%	0.05%	0.29	0.00	0.21	0.50
Glues (33-636A)	1.8	100.0%	333,020	0.00%	0.03%	0.00%	0.00	0.09	0.00	0.09
						Total	**0.29**	**0.09**	**0.21**	**0.59**
~~EO-98~~ **Ward Die Cutter**										
Inks	2.5	100.0%	693,004	0.07%	0.00%	0.05%	0.61	0.00	0.43	1.04
Glues (33-636A)	1.8	100.0%	693,004	0.00%	0.03%	0.00%	0.00	0.19	0.00	0.19
						Total	**0.61**	**0.19**	**0.43**	**1.23**

Methodology
Heat set offset printing has an assumed flash off of 80%. Other types of printers have a flash off of 100% (Source - OAQPS Draft Guidance, "Control of Volatile Organic Compound Emissions from Offset Lithographic Printing (9/93)).
Calculations are based on operation at rated capacity for 8760 hrs/year; maximum hourly usage based on 2007 operation data provided by the source; maximum weight VOC and HAPs determined based on weight % VOC of inks used in 2007; maximum plate coverage (lbs/MMin^2) based on industry-specific Fiber Box Association numbers; maximum line speed based on the max. number of plate rotations per minute and plate size.
Glycol ethers are included in the HAP calculations, even though US EPA no longer considers glycol ethers to be HAPs, because the manufacturer % content of the glycol ether group of compounds is proprietary and could not be obtained or verified by the source.

Throughput (MMin^2/yr) = Maximum Line Speed (ft/min) * Maximum Print Width (in) * (12 in/ft) * (60 min/hr) * (8760 hr/yr) * (1 MM/1,000,000)
VOC Emissions (tons/yr) = Maximum Coverage (lbs/MMin^2) * Weight % Volatiles (Weight % Water & Organics - Weight % Water) * Flash Off (%) * Throughput (MMin^2/yr) * (1
HAP emissions (tons/yr) = Maximum Coverage (lbs/MMin^2) * Flash Off (%) * Throughput (MMin^2/yr) * Weight % HAP * (1 ton/2000 lbs)

Company Name: **International Paper**
Source Address: **801 N. Englewood Drive, Crawfordsville, IN 47933**
MSOP Renewal No.: **M107-27461-00060**
MSOP AA No.: **107-32600-00060**
Reviewer: **Anh Nguyen**
Date: **December 7, 2012**

Board Vacuums: C-40, EVOL 1, EVOL 2, EG-87, & ~~EO-98~~ **Ward die cutter **

Emission Unit	*Maximum Throughput (sq ft/hr)*	*Unit Weight (lbs/sq ft)*	*Maximum Throughput (tons/hr)*	*PM Emission Factor (lbs/ton)**	*PM Emissions (lbs/hr)*	*PM Emissions (tons/yr)*
EVOL 1 (three-color EVOL flexo folder gluer)	414,227.10	0.0002	0.04	0.061	0.002	0.010
EVOL 2 (three-color EVOL flexo folder gluer)	414,227.10	0.0002	0.04	0.061	0.002	0.010
EG-87 (two-color flexo folder gluer)	264,000.00	0.0002	0.02	0.061	0.001	0.006
~~EO-98~~ **Ward die cutter**	584,562.00	0.0002	0.05	0.061	0.003	0.014
C-40 (corrugator)	-	-	56.92	0.061	3.47	15.21
Total					3.48	15.25

Methodology
Maximum Throughput (sq ft/hr) = Board Width (ft) * Board Length (ft) * Maximum Speed (boards/hr)

PM Emissions (lbs/hr) = Maximum Throughput (tons/hr) * PM Emission Factor (lbs/ton)
PM Emissions (tons/yr) = Maximum Throughput (tons/hr) * PM Emission Factor (lbs/ton) * (8760 hrs/yr) * (1 ton/2000 lbs)

*There is no published emission factor for this process (removal of dust and cardboard conveyance); therefore, the emission factor for headhouse and grain handling (SCC 3-02-005-30) from US EPA's AP 42, Chapter 9.9.1, Table 9.9.1-1 was used as an approximate estimate.

Company Name: International Paper
Source Address: 801 N. Englewood Drive, Crawfordsville, IN 47933
MSOP Renewal No.: M107-27461-00060
MSOP AA No.: 107-32600-00060
Reviewer: Anh Nguyen
Date: December 7, 2012

Trivial Activities: Parts Washer (PW-01 and PW-02), Maintenance Machining, & Maintenance Welding

Parts Washer: PW-01

VOC

Emission Unit - Material	*Size (gal)*	*Max. Potential Loss (gal/yr)*	*Density (lbs/gal)*	*Weight % VOC*	*VOC Emissions (lbs/hr)*	*VOC Emissions (tons/yr)*
Heritage Crystal Clean small parts washer - Crystal Clean 100+	30.0	145.0	6.54	100.0%	0.11	0.47
				for 2 units	0.22	0.95

HAPs

Emission Unit - Material	*Weight % Xylene*	*Weight % Toluene*	*Weight % Ethylbenzene*	*Xylene Emissions (tons/yr)*	*Toluene Emissions (tons/yr)*	*Ethylbenzene Emissions (tons/yr)*
Heritage Crystal Clean small parts washer - Crystal Clean 100+	1.0%	1.0%	1.0%	0.005	0.005	0.005
			for 2 units	0.009	0.009	0.009
					TOTAL HAPs	**0.028**

Methodology
VOC Emissions (lbs/hr) = Max. Potential Loss (gal/yr) * Density (lbs/gal) * Weight % VOC * (1 yr/8760 hrs)
VOC Emissions (tons/yr) = Max. Potential Loss (gal/yr) * Density (lbs/gal) * Weight % VOC * (1 ton/2000 lbs)
HAP Emissions (tons/yr) = Max. Potential Loss (gal/yr) * Density (lbs/gal) * Weight % HAP * (1 ton/2000 lbs)

Maintenance Machining

Activity	*Maximum Throughput (tons/yr)*	*Emission Factor (lb/ton)*	*PM Emissions (tons/yr)*
Maintenance Machining	8.0	0.1	4.00E-04

Methodology
PM Emissions (tons/yr) = Maximum Throughput (tons/yr) * Emission Factor (lb/ton) * (1 ton/2000 lbs)
Emission Factor is from US EPA's AP 42, Chapter 12.5, Table 12.5-1.

Maintenance Welding

Activity	*Maximum Throughput*	*Units*	*Emission Factor (lb/lb electrode)*	*Emission Factor (lb/1000 in cut)*	*PM Emissions (tons/yr)*
Maintenance Welding - Electric Arc	50.0	lb electrode/yr	0.036	-	0.0009
Maintenance Welding - Oxyacetylene	15.0	1000 in cut/yr	-	0.162	0.0012
total					2.12E-03

Methodology
Electric Arc PM Emissions (tons/yr) = Maximum Throughput (lb electrode/yr) * Emission Factor (lb/lb electrode) * (1 ton/2000 lbs)
Oxyacetylene PM Emissions (tons/yr) = Maximum Throughput (1000 in cut/yr) * Emission Factor (lb/1000 in cut) * (1 ton/2000 lbs)
Welding and other flame cutting emission factors are from an internal IDEM document, "Welding and Flame Cutting". Refer to US EPA's AP 42, Chapter 12.19 for additional emission factors for welding.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Gary Huxhold
International Paper
801 N. Englewood Dr
Crawfordsville, IN 47933

DATE: January 4, 2013

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
Administrative Amendment
107-32600-00060

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Ross Carolus (General Manager)
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07

Mail Code 61-53

IDEM Staff	MIDENNEY 1/4/2013 International Paper 107-32600-00060 (final)			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Gary Huxhold International Paper 801 N Englewood Dr Crawfordsville IN 47933 (Source CAATS) via confirm delivery									
2		Ross Carolus GM International Paper 801 N Englewood Dr Crawfordsville IN 47933 *(RO CAATS)*									
3		Crawfordsville City Council and Mayors Office 300 E. Pike St Crawfordsville IN 47933 *(Local Official)*									
4		Montgomery County Health Department 110 W. South Blvd Suite 100 Crawfordsville IN 47933-3351 *(Health Department)*									
5		Mr. Robert Ford RR 1, Box 233 New Ross IN 47968 *(Affected Party)*									
6		Ms. Magie Read P.O. Box 248 Battle Ground IN 47920 *(Affected Party)*									
7		Montgomery County Commissioner 110 West South Boulvard Crawfordsville IN 47933 *(Local Official)*									
8											
9											
10											
11											
12											
13											
14											
15											

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	
6			The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

FACSIMILIE OF PS Form 3877