



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: June 7, 2012

RE: Mossberg & Company, Inc / 141-31126-00063

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

Notice of Decision: Approval - Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER.dot12/03/07



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**Minor Source Operating Permit Renewal
OFFICE OF AIR QUALITY**

**Mossberg & Company, Inc.
301 East Sample Street
South Bend, Indiana 46601**

(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.: M141-31126-00063	
Issued by:  Nathan C. Bell, Section Chief Permits Branch Office of Air Quality	Issuance Date: June 7, 2012 Expiration Date: June 7, 2022

TABLE OF CONTENTS

A. SOURCE SUMMARY	4
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	7
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	12
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 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.8 Performance Testing [326 IAC 3-6]	
Compliance Requirements [326 IAC 2-1.1-11]	
C.9 Compliance Requirements [326 IAC 2-1.1-11]	
Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]	
C.10 Compliance Monitoring [326 IAC 2-1.1-11]	
C.11 Instrument Specifications [326 IAC 2-1.1-11]	
Corrective Actions and Response Steps	
C.12 Response to Excursions or Exceedances	
C.13 Actions Related to Noncompliance Demonstrated by a Stack Test	

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

- 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]

D.1. EMISSIONS UNIT OPERATION CONDITIONS..... 18

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

- D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-5-5]
- D.1.2 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-4]

Compliance Determination Requirements

- D.1.3 Volatile Organic Compounds (VOC)

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

- D.1.4 Record Keeping Requirements

D.2. EMISSIONS UNIT OPERATION CONDITIONS..... 20

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

- D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]
- D.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

Annual Notification 22

Malfunction Report 23

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 source that operates offset lithographic and flexographic printing presses.

Source Address:	301 East Sample Street, South Bend, Indiana 46601
General Source Phone Number:	574-289-9253
SIC Code:	2752 (Commercial Printing, Lithographic)
County Location:	St. Joseph
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) The printing operation:
- (1) Press C: a non-heatset 28" by 40" 8-color sheetfed offset lithographic press, installed September 1997, with a maximum capacity of 12,000 impressions per hour, exhausting to stack S003.
 - (2) Press D: a non-heatset 22.5" by 28.5" 2-color sheetfed offset lithographic press, installed December 1983, with a maximum line speed of 10,000 impressions per hour, exhausting inside the building.
 - (3) Press H: a heatset 7" wide, web flexographic letterpress, installed April 1985, with a maximum capacity of 150 feet per minute, press width of 7 inches, exhausting to stack S008.
 - (4) Press I: a heatset 10" ultraviolet flexographic press, installed December 1993, with a maximum line speed of 150 feet per minute, press width of 10 inches, exhausting to stack S011.
 - (5) Press J: a non-heatset 13" by 18" 2-color sheetfed offset lithographic press, installed September 1997, with a maximum line speed of 5,000 impressions per hour, exhausting inside the building.

- (6) Press K: a non-heatset 28" by 40" 6-color, sheetfed offset lithographic press, installed September 2001, with a maximum line speed of 15,000 impressions per hour, exhausting to stack S012.
 - (7) Press L: a non-heatset 28" by 40" 12-color sheetfed offset lithographic press, installed in February 2006, with a maximum line speed of 12,000 impressions per hour, and exhausting to stack S013.
 - (8) Press M: a non-heatset 16" web flexographic press, installed in February 2007, with a maximum capacity of 500 feet per minute, press width of 16 inches, exhausting to stack S014.
 - (9) One prepress department producing printing plates for all presses.
 - (10) One (1) solvent distillation unit, installed June 2005, permitted in 2012, operating two cycles per week with fifty (50) gallons of solvent and fifty (50) gallons of water, with vapors exhausting to the boiler room and all solvent reclaimed during the process.
- (b) Heaters:
- (1) Two (2) natural gas fired HVAC heaters, each with a maximum heat input capacity of 0.037 MMBtu per hour.
 - (2) Three (3) natural gas fired HVAC heaters, each with a maximum heat input capacity of 0.114 MMBtu per hour.
 - (3) One (1) natural gas fired HVAC heater with a maximum heat input capacity of 0.122 MMBtu per hour.
 - (4) Three (3) natural gas fired HVAC heaters, each with a maximum heat input capacity of 0.220 MMBtu per hour.
 - (5) One (1) natural gas fired HVAC heater with a maximum heat input capacity of 0.121 MMBtu per hour.
 - (6) Two (2) natural gas fired heaters, each with a maximum heat input capacity of 0.078 MMBtu per hour.
 - (7) One (1) natural gas fired HVAC heater with a maximum heat input capacity of 0.128 MMBtu per hour.
 - (8) Two (2) natural gas fired air make-up heaters, each with a maximum heat input capacity of 0.128 MMBtu per hour.
 - (9) One (1) natural gas fired HVAC heater with a maximum heat input capacity of 0.172 MMBtu per hour.
 - (10) One (1) natural gas fired air make-up heater with a maximum heat input capacity of 0.069 MMBtu per hour.
 - (11) One (1) natural gas fired HVAC heater with a maximum heat input capacity of 0.204 MMBtu per hour.

- (12) One (1) natural gas fired HVAC heater with a maximum heat input capacity of 0.119 MMBtu per hour.
- (13) One (1) water heater with a maximum heat input capacity of 0.725 MMBtu per hour.
- (c) Three (3) cutting stations using a guillotine-style blade.
- (d) One (1) baler for scrap paper collected from cutting stations and pneumatically conveyed through an enclosed system to the Waste Paper Area.
- (e) Folders and stitchers for binding located in the Bindery Area.
- (f) One (1) shrink wrapper, which contains a small electric heater coil in a small tunnel to melt the plastic wrap which protects the final product during shipment.
- (g) One (1) eighty-gallon agitating alkaline wash tank with lid in the Flexographic Department used for cleaning flexographic press equipment (i.e. rollers).
- (h) One (1) five-gallon parts washing tank with lid in the Maintenance Department used for degreasing processes.

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, M141-31126-00063, 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 M141-31126-00063 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 thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

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

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

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 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.8 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.9 Compliance Requirements [326 IAC 2-1.1-11]

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

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

C.10 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.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 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

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.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 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.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) 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.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 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.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 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:

- (a) The printing operation:
- (1) Press C: a non-heatset 28" by 40" 8-color sheetfed offset lithographic press, installed September 1997, with a maximum capacity of 12,000 impressions per hour, exhausting to stack S003.
 - (2) Press D: a non-heatset 22.5" by 28.5" 2-color sheetfed offset lithographic press, installed December 1983, with a maximum line speed of 10,000 impressions per hour, exhausting inside the building.
 - (3) Press H: a heatset 7" wide, web flexographic press, installed April 1985, with a maximum capacity of 150 feet per minute, press width of 7 inches, exhausting to stack S008.
 - (4) Press I: a heatset 10" ultraviolet flexographic press, installed December 1993, with a maximum line speed of 150 feet per minute, press width of 10 inches, exhausting to stack S011.
 - (5) Press J: a non-heatset 13" by 18" 2-color sheetfed offset lithographic press, installed September 1997, with a maximum line speed of 5,000 impressions per hour, exhausting inside the building.
 - (6) Press K: a non-heatset 28" by 40" 6-color, sheetfed offset lithographic press, installed September 2001, with a maximum line speed of 15,000 impressions per hour, exhausting to stack S012.
 - (7) Press L: a non-heatset 28" by 40" 12-color sheetfed offset lithographic press, installed in February 2006, with a maximum line speed of 12,000 impressions per hour, and exhausting to stack S013.
 - (8) Press M: a non-heatset 16" web flexographic press, installed in February 2007, with a maximum capacity of 500 feet per minute, press width of 16 inches, exhausting to stack S014.
- (b) Heaters:
- (13) One (1) water heater with a maximum heat input capacity of 0.725 MMBtu per hour.

(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 Volatile Organic Compounds (VOC) [326 IAC 8-5-5]

- (a) Pursuant to 326 IAC 8-5-5 (Graphic Art Operations), the ink, as applied to the substrate, that is used in Press H, Press I, and Press M shall not exceed a VOC content of 0.5 pounds of VOCs per pound of solids in the ink.
- (b) Pursuant to 326 IAC 8-5-5(f), work practices shall be used to minimize VOC emissions from cleaning operations. Work practices shall include, but not be limited to, the following:

- (1) When not in use, all cleaning materials shall be kept in closed containers.
- (2) Cleaning materials shall be conveyed from one (1) location to another in closed containers or pipes.

D.1.2 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4, the one (1) natural gas-fired hot water heater shall not emit particulate matter greater than 0.6 pounds per MMBtu heat input.

Compliance Determination Requirements

D.1.3 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.4 Record Keeping Requirements

- (a) To document the compliance status with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (2) below. Records maintained for (1) through (2) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC emission limits established in Condition D.1.1. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
 - (1) The VOC content of each coating material and solvent used.
 - (2) The amount of coating material and solvent less water used on monthly basis.
 - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
 - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
- (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:

- (h) One (1) five-gallon parts washing tank with lid in the Maintenance Department used for degreasing processes.

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

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operation), for the parts washing tank, the owner or operator 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.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator shall ensure that the following control equipment requirements are met for the parts washing tank:

- (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 326 IAC 8-3-5(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 is 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) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator shall ensure that the following operating requirements are met for the parts washing tank:
- (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:	Mossberg & Company, Inc.
Address:	301 East Sample Street
City:	South Bend, Indiana 46601
Phone #:	574-289-9253
MSOP #:	M141-31126-00063

I hereby certify that Mossberg & Company, Inc. is :

still in operation.

no longer in operation.

I hereby certify that Mossberg & Company, Inc. is :

in compliance with the requirements of MSOP M141-31126-00063.

not in compliance with the requirements of MSOP M141-31126-00063.

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
COMPLIANCE AND ENFORCEMENT BRANCH
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:

Indiana Department of Environmental Management
Office of Air Quality

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

Source Background and Description
--

Source Name:	Mossberg & Company, Inc.
Source Location:	301 East Sample Street, South Bend, IN 46601
County:	St. Joseph
SIC Code:	2752 (Commercial Printing, Lithographic)
Permit Renewal No.:	M141-31126-00063
Permit Reviewer:	Susann Brown

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Mossberg & Company, Inc., relating to the operation of a stationary source that operates offset lithographic and flexographic printing presses. On November 7, 2011, Mossberg & Company, Inc. submitted an application to the OAQ requesting to renew its operating permit. Mossberg & Company, Inc. was issued its first MSOP Renewal (M141-23299-00063) on March 2, 2007. This is the second renewal of the operating permit for Mossberg & Company, Inc.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

- (a) The printing operation:
- (1) Press C: a non-heatset 28" by 40" 8-color sheetfed offset lithographic press, installed September 1997, with a maximum capacity of 12,000 impressions per hour, exhausting to stack S003.
 - (2) Press D: a non-heatset 22.5" by 28.5" 2-color sheetfed offset lithographic press, installed December 1983, with a maximum line speed of 10,000 impressions per hour, exhausting inside the building.
 - (3) Press H: a heatset 7" wide, web flexographic letterpress, installed April 1985, with a maximum capacity of 150 feet per minute, press width of 7 inches, exhausting to stack S008.
 - (4) Press I: a heatset 10" ultraviolet flexographic press, installed December 1993, with a maximum line speed of 150 feet per minute, press width of 10 inches, exhausting to stack S011.
 - (5) Press J: a non-heatset 13" by 18" 2-color sheetfed offset lithographic press, installed September 1997, with a maximum line speed of 5,000 impressions per hour, exhausting inside the building.
 - (6) Press K: a non-heatset 28" by 40" 6-color, sheetfed offset lithographic press, installed September 2001, with a maximum line speed of 15,000 impressions per hour, exhausting to stack S012.
 - (7) Press L: a non-heatset 28" by 40" 12-color sheetfed offset lithographic press,

installed in February 2006, with a maximum line speed of 12,000 impressions per hour, and exhausting to stack S013.

- (8) Press M: a non-heatset 16" web flexographic press, installed in February 2007, with a maximum capacity of 500 feet per minute, press width of 16 inches, exhausting to stack S014.
- (9) One (1) prepress department producing printing plates for all presses.
- (10) One (1) solvent distillation unit, installed June 2005, permitted in 2012, operating two cycles per week with fifty (50) gallons of solvent and fifty (50) gallons of water, with vapors exhausting to the boiler room and all solvent reclaimed during the process.

(b) Heaters:

- (1) Two (2) natural gas fired HVAC heaters, each with a maximum heat input capacity of 0.037 MMBtu per hour.
- (2) Three (3) natural gas fired HVAC heaters, each with a maximum heat input capacity of 0.114 MMBtu per hour.
- (3) One (1) natural gas fired HVAC heater with a maximum heat input capacity of 0.122 MMBtu per hour.
- (4) Three (3) natural gas fired HVAC heaters, each with a maximum heat input capacity of 0.220 MMBtu per hour.
- (5) One (1) natural gas fired HVAC heater with a maximum heat input capacity of 0.121 MMBtu per hour.
- (6) Two (2) natural gas fired heaters, each with a maximum heat input capacity of 0.078 MMBtu per hour.
- (7) One (1) natural gas fired HVAC heater with a maximum heat input capacity of 0.128 MMBtu per hour.
- (8) Two (2) natural gas fired air make-up heaters, each with a maximum heat input capacity of 0.128 MMBtu per hour.
- (9) One (1) natural gas fired HVAC heater with a maximum heat input capacity of 0.172 MMBtu per hour.
- (10) One (1) natural gas fired air make-up heater with a maximum heat input capacity of 0.069 MMBtu per hour.
- (11) One (1) natural gas fired HVAC heater with a maximum heat input capacity of 0.204 MMBtu per hour.
- (12) One (1) natural gas fired HVAC heater with a maximum heat input capacity of 0.119 MMBtu per hour.
- (13) One (1) water heater with a maximum heat input capacity of 0.725 MMBtu per hour.

(c) Three (3) cutting stations using a guillotine-style blade.

- (d) One (1) baler for scrap paper collected from cutting stations and pneumatically conveyed through an enclosed system to the Waste Paper Area.
- (e) Folders and stitchers for binding located in the Bindery Area.
- (f) One (1) shrink wrapper, which contains a small electric heater coil in a small tunnel to melt the plastic wrap which protects the final product during shipment.
- (g) One (1) eighty-gallon agitating alkaline wash tank with lid in the Flexographic Department used for cleaning flexographic press equipment (i.e. rollers).
- (h) One (1) five-gallon parts washing tank with lid in the Maintenance Department used for degreasing processes.

Emission Units and Pollution Control Equipment Removed From the Source

The source has removed the following emission units:

- (a) Press B: a non-heatset 20" by 29" 6-color sheetfed offset lithographic press, installed September 1997, with a maximum capacity of 15,000 impressions per hour, exhausting to stack S002.

Existing Approvals

Since the issuance of the MSOP Renewal (M141-23299-00063) on March 2, 2007, the source has constructed or has been operating under the following additional approvals:

- (a) MSOP - Notice-Only Change No. (141-24138-00063) issued on December 7, 2007

All terms and conditions of previous permits issued pursuant to permitting programs approved into the State Implementation Plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in St. Joseph County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Attainment effective July 19, 2007, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.

¹ Attainment effective October 18, 2000, for the 1-hour ozone standard for the South Bend-Elkhart area, including St. Joseph County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X*. The 1-hour standard was revoked effective June 15, 2005.
 Unclassifiable or attainment effective April 5, 2005, for PM_{2.5}.

- (a) **Ozone Standards**
 Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) 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 NO_x emissions are considered when evaluating the rule applicability relating to ozone. St. Joseph County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (b) **PM_{2.5}**
 St. Joseph County has been classified as attainment for PM_{2.5}. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5} emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct PM_{2.5} significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct PM_{2.5} and SO₂ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

- (c) **Other Criteria Pollutants**
 St. Joseph County has been classified as attainment or unclassifiable in Indiana for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	Potential to Emit (tons/year)
PM	0.39
PM ₁₀ *	0.18
PM _{2.5}	0.12
SO ₂	0.01
NO _x	1.35
VOC	96.89
CO	1.14
GHGs as CO ₂ e	1632

* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

HAPs	Potential to Emit (tons/year)
Hexane	0.02
Ethylene Glycol	5.87
Total HAPs	5.89

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all regulated pollutants, excluding GHGs, is less than 100 tons per year. However, VOC is equal to or greater than twenty-five (25) tons per year. The source is not subject to the provisions of 326 IAC 2-7. Therefore, the source will be issued an MSOP Renewal.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of GHGs is less than one hundred thousand (100,000) tons of CO₂ equivalent emissions (CO₂e) per year.
- (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/or 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 will be issued an MSOP Renewal.

Federal Rule Applicability

New Source Performance Standards (NSPS)

- (a) The requirements of the New Source Performance Standard (NSPS) for the Graphic Arts Industry: Publication Rotogravure Printing, 40 CFR 60, Subpart QQ (326 IAC 12), are not included in the permit, since the printing presses at this source are not rotogravure printing presses.
- (b) The requirements of the New Source Performance Standards for Pressure Sensitive Tape and Label Surface Coating Operations, 40 CFR 60, Subpart RR (60.440 to 60.447) (326 IAC 12), are not included in this permit, because this source does not manufacture pressure sensitive tape and label materials.

- (c) The requirements of the New Source Performance Standards (NSPS) for Flexible Vinyl and Urethane Coating and Printing Source (40 CFR 60, Subpart FFF) (326 IAC 12) are not included in the permit, since this source does not have any rotogravure printing presses.
- (d) The requirements of the New Source Performance Standards for Polymeric Coating of Supporting Substrates Facilities, 40 CFR 60, Subpart VVV (60.740 to 60.748) (326 IAC 12), are not included in this permit, because the source does not perform polymeric coating of supporting substrates, defined as web coating process that apply elastomers, polymers, or prepolymers to a supporting web other than paper, plastic film, metallic foil, or metal coil (40 CFR 60.741).
- (e) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (f) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for National Emission Standards for Halogenated Solvent Cleaning, (40 CFR 63, Subpart T) (326 IAC 20-6), are not included in the permit because this source is not a major source of hazardous air pollutants (HAPs) and the solvent utilized is not halogenated.
- (g) The requirements for the National Emission Standards for Hazardous Air Pollutants for the Printing and Publishing Industry, 40 CFR 63, Subpart KK (63.820 to 63.839) (326 IAC 20-18), are not included in this permit, because this source is not a major source of HAPs.
- (h) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating, (40 CFR 63, Subpart JJJJ) (326 IAC 20-65), are not included in the permit for the flexographic presses (Presses H, I, and M), which are considered web coating lines as defined by 40 CFR 63.3310, because this source is not a major source of hazardous air pollutants (HAPs). The requirements of 40 CFR 63, Subpart JJJJ, are not included for the sheetfed offset lithographic printing presses (Presses C, D, J, K, and L), since this source is not a major source of HAPs and these presses are not considered web coating lines as defined by 40 CFR 63.3310.
- (i) The requirements of the National Emission Standards for Hazardous Air Pollutants: Printing, Coating, and Dyeing of Fabrics and Other Textiles (40 CFR Part 63, Subpart OOOO) (326 IAC 20-77) are not included in the permit because the source does not print, coat, or dye fabric or other textiles as defined in 40 CFR 63.4371 and is not a major source of HAPs.
- (j) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Industrial, Commercial, and Institutional Boilers and Process Heaters 40 CFR 63, Subpart DDDDD (63.7480 through 63.7575) (326 IAC 20-95), are not included in the permit, because the source is not a major source of HAPs.
- (k) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63, Subpart JJJJJJ (63.11193 through 63.11237), are not included for this proposed revision, because:
 - (1) each of the natural gas-fired HVAC heaters and air make-up heaters is not considered a boiler (as defined by 40 CFR 63.11237); and
 - (2) the natural gas-fired water heater is a gas-fired boiler, as defined by 40 CFR 63.11237, which is specifically exempted from this rule under 40 CFR 63.11195(e).
- (l) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

Compliance Assurance Monitoring (CAM)

- (m) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the potential to emit of the source is limited to less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability - Entire Source

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

This source is not a major stationary source, under PSD (326 IAC 2-2), because the potential to emit of all attainment regulated criteria pollutants are less than 250 tons per year, the potential to emit greenhouse gases (GHGs) is less than 100,000 tons of CO₂e per year, and this source is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1). Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

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

The operation of the entire source will emit less than 10 tons per year of a single HAP and less than 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting) because it is not required to have an operating permit pursuant to 326 IAC 2-7 (Part 70); it is not located in Lake, Porter, or LaPorte County, and its potential to emit lead is less than 5 tons per year. Therefore, this rule does not apply.

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 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.

326 IAC 6-4 (Fugitive Dust Emissions Limitations)

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

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

The source is not subject to the requirements of 326 IAC 6-5, because the source does not have potential fugitive particulate emissions greater than 25 tons per year. Therefore, 326 IAC 6-5 does not apply.

326 IAC 6.5 PM Limitations Except Lake County

This source is not subject to 326 IAC 6.5 because it does not have the potential to emit particulate matter equal to or greater than 10 tons per year.

326 IAC 6-8 PM Limitations for Lake County

This source is not subject to 326 IAC 6.8 because it is not located in Lake County and it does not have the potential to emit particulate matter equal to or greater than 10 tons per year.

326 IAC 8-6 (Organic Solvent Emission Limitations)

Pursuant to 326 IAC 8-6-1, this rule applies to sources commencing operation after October 7, 1974 and prior to January 1, 1980, located anywhere in the state, with potential VOC emissions of 100 tons per year or more, and not regulated by any other provision of Article 8. Pursuant to 326 IAC 8-6-1, this source is not subject to the requirements 326 IAC 8-6, because this source, which is located in St. Joseph County, did not commence operation after October 7, 1974 and prior to January 1, 1980, and does not have potential VOC emissions of 100 tons per year or more.

State Rule Applicability – Individual Facilities

Printing Presses

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

The eight (8) printing presses (C, D, H, I, J, K, L, and M) are not subject to 326 IAC 6-3-2, because the eight (8) printing presses (C, D, H, I, J, K, L, and M) are not sources of particulate emissions.

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

The eight (8) printing presses (C, D, H, I, J, K, L, and M) are not subject to 326 IAC 8-1-6, because the potential to emit (PTE) of VOCs from each press is less than 25 tons per year.

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

Pursuant to 326 IAC 8-2-1 (Applicability) and 326 IAC 8-2-5(a) (Paper Coating Operations), this rule applies to facilities existing after July 1, 1990, located in St. Joseph County, and with the potential to emit greater than fifteen (15) pounds of VOC per day before add-on controls and facilities constructed after July 1, 1990, located in any county, and with the potential to emit greater than fifteen (15) pounds of VOC per day before add-on controls, where each facility is considered a web coating process or saturation process of paper, plastic, metal foil, and/or pressure sensitive tapes and labels regardless of substrate and is not subject to the requirements of 326 IAC 8-5-5 (Graphic Arts Operations).

- (a) Presses H, I, and M are each not subject to the requirements of 326 IAC 8-2-5, since they each are subject to the requirements of 326 IAC 8-5-5 (Graphic Arts Operations);
- (b) Lithographic presses C, D, J, K, and L (constructed in 1997, 1983, 1997, 2001, and 2006) are not subject to the requirements of 326 IAC 8-2-5 (Paper Coating Operations), since they are not web coating process or saturation process presses.

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

Pursuant to 326 IAC 8-5-1 (Applicability) and 326 IAC 8-5-5(a) (Graphic Arts Operations), this rule applies to sources (that include packaging rotogravure, publishing rotogravure, or flexographic printing operations) existing as of November 1, 1980, whose source-wide potential VOC emissions are greater than 100 tons per year, located in St. Joseph County, and sources (that include packaging rotogravure, publishing rotogravure, or flexographic printing operations), construction of which commences after November 1, 1980, located anywhere in the state, whose source-wide potential VOC emissions are 25 tons per year or more.

- (a) Presses C, D, J, K, and L are each not subject to the requirements of 326 IAC 8-5-5, since they each are not packaging rotogravure, publishing rotogravure, or flexographic printing presses. Each of these presses is a sheetfed offset lithographic press.
- (b) Presses H, I, and M are each subject to this rule, since the source commenced construction after November 1, 1980, the source-wide potential VOC emissions are greater than 25 tons per year, and Presses H, I, and M are each flexographic printing presses.

Pursuant to 326 IAC 8-5-5 (Graphic Art Operations), no owner or operation of flexographic printing sources employing solvent-containing ink shall allow the operation of the facility unless:

- (1) the volatile fraction of ink as it is applied to the substrate in the flexographic printing operation contains twenty-five percent (25%) by volume or less of VOC and seventy-five percent (75%) by volume or more of water;
- (2) the ink as it is applied to the substrate, less water, contains sixty percent (60%) by volume or more nonvolatile material; or
- (3) the ink, as applied to the substrate, meets an emission limit of five-tenths (0.5) pound of VOC per pound of solids in the ink.

The Permittee has elected to comply with the requirement to limit the VOC content of ink used in Press H, Press I and Press M to 0.5 pounds of VOCs per pound of solids in the ink.

Pursuant to 326 IAC 8-5-5(f), work practices shall be used to minimize VOC emissions from cleaning operations. Work practices shall include, but not be limited to, the following:

- (1) When not in use, all cleaning materials shall be kept in closed containers.
- (2) Cleaning materials shall be conveyed from one (1) location to another in closed containers or pipes.

326 IAC 8-16 (Offset Lithographic Printing and Letterpress Printing)

This source is not subject to 326 IAC 8-16 (Offset Lithographic Printing and Letterpress Printing), because this source is not located in Lake or Porter County. This source is located in St. Joseph County.

Solvent Distillation

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)

The solvent distillation is not subject to the requirements of 326 IAC 8-1-6, since it has unlimited VOC potential emissions of less than twenty-five (25) tons per year.

Natural Gas Combustion

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)

- (a) The nineteen (19) natural gas-fired heaters are not subject to the requirements of 326 IAC 6-2, because none of these emission units are sources of indirect heating.
- (b) The one (1) natural gas-fired hot water heater with a maximum heat input of 0.725 MMBtu per hour is subject to the requirements of 326 IAC 6-2-4 because operation began after September 21, 1983. Pursuant to 326 IAC 6-2-4(a), particulate emissions from the following indirect heating facilities shall be limited to the following:

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

Where:

Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input; and

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 operation permit; in which case, the capacity specified in the operation permit shall be used.

For a total source maximum operating capacity rating (Q) less than 10 MMBtu/hr, particulate emissions (Pt) shall not exceed 0.6 pound per MMBtu of heat input.

For Q greater than or equal to 10,000 MMBtu/hr, Pt shall not exceed 0.1 pound per MMBtu of heat input.

Pursuant to 326 IAC 6-2-4, the one (1) natural gas-fired hot water heater shall not emit particulate matter greater than 0.6 pounds per MMBtu heat input.

The source is able to comply with this limit without the use of a control device.

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

Each of the natural gas-fired HVAC heaters, air make-up heaters, and the water heater is not subject to the requirements of 326 IAC 6-3, since they each are not a "manufacturing process" as defined by 326 IAC 6-3-1.5.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

Pursuant to 326 IAC 7-1.1-1, each of the natural gas-fired HVAC heaters, air make-up heaters, and the water heater is not subject to the requirements of 326 IAC 7-1, since each has unlimited sulfur dioxide (SO₂) emissions less than twenty-five (25) tons per year and ten (10) pounds per hour respectively.

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)

Each of the natural gas-fired HVAC heaters, air make-up heaters, and the water heater is not subject to the requirements of 326 IAC 8-1-6, since each has unlimited VOC potential emissions of less than twenty-five (25) tons per year.

Degreaser

326 IAC 8-3-2 (Cold Cleaner Operation)

The parts washing tank is subject to 326 IAC 8-3-2. This rule applies to new facilities after January 1, 1980, performing organic solvent degreasing operations located anywhere in the state. Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operation), for the parts washing tank, the owner or operator 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 operating 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.

326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)

Pursuant to 326 IAC 8-3-1(b), the parts washing tank is subject to the requirements of 326 IAC 8-3-5, since it was constructed after the July 1, 1990 applicability date and it does not have a remote solvent reservoir (i.e., it has an open solvent sump exposed to air). Pursuant 326 IAC 8-3-5(a), the owner or operator shall ensure that the following control equipment requirements are met for the parts washing tank:

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator shall ensure that the following control equipment requirements are met for the parts washing tank:
 - (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 326 IAC 8-3-5(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 is 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) Pursuant to 326 IAC 8-3 (Organic Solvent Degreasing Operations), the parts washing tank is subject to the requirements of 326 IAC 8-3-5, since it was constructed after the

July 1, 1990 applicability date and it does not have a remote solvent reservoir (i.e., it has an open solvent sump exposed to air). Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator shall ensure that the following operating requirements are met for the parts washing tank:

- (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.

326 IAC 8-6 (Organic Solvent Emission Limitations)

Pursuant to 326 IAC 8-6-1, this rule applies to sources commencing operation after October 7, 1974 and prior to January 1, 1980, located anywhere in the state, with potential VOC emissions of 100 tons per year or more, and not regulated by any other provision of Article 8. Pursuant to 326 IAC 8-6-1, this source is not subject to the requirements 326 IAC 8-6, because this source, which is located in St. Joseph County, did not commence operation after October 7, 1974 and prior to January 1, 1980, and does not have potential VOC emissions of 100 tons per year or more.

Compliance Determination and Monitoring Requirements

There are no compliance determination or compliance monitoring requirements applicable to this source.

Recommendation

The staff recommends to the Commissioner that the MSOP Renewal be approved.

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

An application for the purposes of this review was received on November 7, 2011.

Conclusion

The operation of these stationary offset and flexographic printing presses shall be subject to the conditions of the attached MSOP Renewal No. 141-31126-00063.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Susann Brown at the Indiana Department of Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5176 or toll free at 1-800-451-6027 extension 45176.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Appendix A: Emission Summary

Company Name: Mossberg & Company, Inc.
Source Address: 301 East Sample Street South Bend, IN 46601
Permit Number: M141-31126-00063
Reviewer: Susann Brown

Process Description	Uncontrolled Potential to Emit (PTE) (tons/year)										
	PM	PM10	PM2.5	SO2	NOx	VOC	CO	GHGs as CO ₂ e	Total HAPs	Worst Single HAP	
Natural Gas Combustion	0.03	0.10	0.10	0.01	1.35	0.07	1.14	1,632	0.03	0.02	Hexane
Solvent Distillation	-	-	-	-	-	0.04	-	-	3.56E-04	3.56E-04	Ethylene Glycol
Press C	-	-	-	-	-	13.33	-	-	1.17	1.17	Ethylene Glycol
Press D	-	-	-	-	-	12.46	-	-	1.17	1.17	Ethylene Glycol
Press H	-	-	-	-	-	10.14	-	-	-	-	-
Press I	-	-	-	-	-	10.14	-	-	-	-	-
Press J	-	-	-	-	-	11.82	-	-	1.17	1.17	Ethylene Glycol
Press K	-	-	-	-	-	13.74	-	-	1.17	1.17	Ethylene Glycol
Press L	-	-	-	-	-	14.99	-	-	1.17	1.17	Ethylene Glycol
Press M	-	-	-	-	-	10.15	-	-	-	-	-
Paved Roads	0.37	0.07	0.02	-	-	-	-	-	-	-	-
Total PTE	0.39	0.18	0.12	0.01	1.35	96.89	1.14	1632	5.89	5.87	Ethylene Glycol

**Appendix A: Emission Calculations
Natural Gas Combustion Only
Capacity <100 MMBtu/hr**

Company Name: Mossberg & Company, Inc.
Source Address: 301 East Sample Street South Bend, IN 46601
Permit Number: M141-31126-00063
Reviewer: Calculations submitted by Cornerstone and reviewed by Susann Brow

Unit Description	Number of Units	Maximum Heat Input Capacity (MMBtu/hr)	High Heat Value (MMBtu/MMscf)	Potential Throughput (MMcf/yr)
HVAC 579DE036080	2	0.037	1020	0.64
HVAC 580FEV060115ABGA	1	0.114	1020	0.98
HVAC 580FEV120224ABGA	2	0.114	1020	1.96
HVAC 38ARS009-601	1	0.122	1020	1.05
HVAC 481JF024-681BA	3	0.220	1020	5.67
HVAC 50FP0006509RC	1	0.121	1020	1.04
HVAC 579FEV240275ABGB	1	0.078	1020	0.67
HVAC 579DP18027	1	0.078	1020	0.67
HVAC 561CP048-C	1	0.128	1020	1.10
Air Make-Up Unit YCD240B4AJB	2	0.128	1020	2.20
HVAC 481FE008-511	1	0.172	1020	1.48
Air Make-Up Unit RM-025-3-0-ABC2-37E	1	0.069	1020	0.59
HVAC 481FE012-611	1	0.204	1020	1.75
HVAC 579DE120231	1	0.119	1020	1.02
Water Heater CNR199-100-DF9-2	1	0.725	1020	6.23
	20	2.43		27.04

Criteria Pollutants	Pollutant						
	PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMcf	1.9	7.6	7.6	0.6	100	5.5	84
Potential Emission in tons/yr	0.03	0.10	0.10	0.008	**see below	0.07	1.14

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined. PM2.5 assumed equal to PM1
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 3

Hazardous Air Pollutants	HAPs - Organics*					HAPs - Metals*				
	Benzene	DCB	Formaldehyde	Hexane	Toluene	Pb	Cd	Cr	Mn	Ni
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	2.84E-05	1.62E-05	1.01E-03	0.024	4.60E-05	6.76E-06	1.49E-05	1.89E-05	5.14E-06	2.84E-05

*The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.

Methodology

All emission factors are based on normal firing
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/1,020 MMB
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Potential Emission of Total HAPs (tons/yr)	0.026
---	--------------

Greenhouse Gases (GHGs)

	Greenhouse Gas (GHG)		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120000	2.3	2.2
Potential Emission in tons/yr	1,622	0.03	0.03
Summed Potential Emissions in tons/yr	1,622		
CO2e Total in tons/yr	1,632		

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.
Greenhouse 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 Emission ton/yr x N2O GWP (310)

Abbreviations

PM = Particulate Matter	DCB = Dichlorobenzene	CO2 = Carbon Dioxide
PM10 = Particulate Matter (<10 um)	Pb = Lead	CH4 = Methane
SO2 = Sulfur Dioxide	Cd = Cadmium	N2O = Nitrous Oxide
NOx = Nitrous Oxides	Cr = Chromium	CO2e = CO2 equivalent emissions
VOC = Volatile Organic Compounds	Mn = Manganese	
CO = Carbon Monoxide	Ni = Nickel	

**Appendix A: Emission Calculations
Solvent Distillation**

Company Name: Mossberg & Company, Inc.
Source Address: 301 East Sample Street South Bend, IN 46601
Permit Number: M141-31126-00063
Reviewer: Calculations submitted by Cornerstone
and reviewed by Susann Brown

Unit Description	Solvent Processed (lbs/hr)	Solvent Processed (tons/hr)	Solvent Emission Factor (lbs/ton)	Solvent Emissions (lbs/hr)
Waste Solvent Distillation	4.17	2.09E-03	4.24	0.009

Potential VOC and HAP Emissions:

Pollutant	Weight Percentage	Potential Emissions (lbs/hr)	Potential to Emit (tons/yr)
VOC	100%	0.009	0.04
Ethylene Glycol (HAP)	0.92%	8.1E-05	3.56E-04

Methodology

Emission Factor is from AP 42 Section 4.7 - Solvent Reclamation Table 4.7-1 Emission Factors for Solvent Reclaiming
(Storage Tank Vent Emission Factor + Condenser Vent Emission Factor + Fugitive Emissions Spillage and Loading Emission Factors)
Solvent Emissions (lbs/hr) = Solvent Processed (lbs/hr) / 2,000 lbs per ton x Solvent Emission Factor (lbs/ton)
Potential Emissions (lbs/hr) = Solvent Emissions (lbs/hr) x Weight Percentage
Potential to Emit (tons/yr) = Potential Emissions (lbs/hr) x 8,760 hours per year / 2,000 lbs per ton

**Appendix A: Emission Calculations
Press C**

Company Name: Mossberg & Company, Inc.
Source Address: 301 East Sample Street South Bend, IN 46601
Permit Number: M141-31126-00063
Reviewer: Calculations submitted by Cornerstone
and reviewed by Susann Brown

Throughput Press I.D.	Maximum Line Speed (feet/min)	Maximum Print Width (Inches)	Maximum PTE (MMin ² /year)
Non-Heatset Sheetfed Offset Lithographic Press	467	40	117818

VOC Emissions						
Product Name	Maximum Coverage (lbs/MMin ²)	VOC Content (wt%)	Flash Off %	Max. Throughput (MMin ² /year)	Potential to Emit (tons/yr)	Potential to Emit (pounds/day)
Eckart American Corp. Ink	3.25	17.31%	5.00%	117818	1.66	9.08
Total					1.66	9.08

VOC Emissions						
Product Name	Usage (gal/yr)	VOC Content (lbs/gal)	Flash Off %	Max. Throughput (MMin ² /year)	Potential to Emit (tons/yr)	Potential to Emit (pounds/day)
2351 Fountain Solution	2557.5	1.73	--	--	2.21	12.12
FUJIFILM 7563 Blanket/Roller Wash	2557.5	7.40	--	--	9.46	51.85
Total					11.67	63.97
Total Press C VOC Emissions					13.33	73.05

HAP Emissions					
Product Name	Usage (gal/yr)	HAP Constituent	HAP Content (lbs/gal)	Max. Throughput (MMin ² /year)	Potential to Emit (tons/yr)
2351 Fountain Solution	2557.5	Ethylene Glycol	0.92	--	1.17
Total					1.17
Total Press C HAP Emissions					1.17

Methodology

VOC and HAP contents as supplied by the MSDSs

Maximum Coverage (lbs/MMin²) for inks is the typical value for the number of color units

Maximum Throughput (MMin²/year) = Maximum Line Speed (feet/min) x 12 inches per foot x Maximum Print Width (inches) x 60 min. per hour x 8,760 hours per year / 1,000,000 inches per MMin²

[VOC/HAP] Potential to Emit (tpy) = Maximum Coverage (lbs/MMin²) or Usage (gal/yr) x [Pollutant] Content (wt%) x [Flash Off] x [Max. Throughput (MMin²/Year)] / 2,000 lbs per ton

(Source - OAQPS Draft Guidance, "Control of Volatile Organic Compound Emissions from Offset Lithographic Printing" (9/93))

**Appendix A: Emission Calculations
Press D**

Company Name: Mossberg & Company, Inc.
Source Address: 301 East Sample Street South Bend, IN 46601
Permit Number: M141-31126-00063
Reviewer: Calculations submitted by Cornerstone
and reviewed by Susann Brown

Throughput Press I.D.	Maximum Line Speed (feet/min)	Maximum Print Width (Inches)	Maximum PTE (MMin ² /year)
Non-Heatset Sheetfed Offset Lithographic Press	312	28.5	56084

VOC Emissions						
Product Name	Maximum Coverage (lbs/MMin ²)	VOC Content (wt%)	Flash Off %	Max. Throughput (MMin ² /year)	Potential to Emit (tons/yr)	Potential to Emit (pounds/day)
Eckart American Corp. Ink	3.25	17.31%	5.00%	56084	0.79	4.32
Total					0.79	4.32

VOC Emissions						
Product Name	Usage (gal/yr)	VOC Content (lbs/gal)	Flash Off %	Max. Throughput (MMin ² /year)	Potential to Emit (tons/yr)	Potential to Emit (pounds/day)
2351 Fountain Solution	2557.5	1.73	--	--	2.21	12.12
FUJIFILM 7563 Blanket/Roller Wash	2557.5	7.40	--	--	9.46	51.85
Total					11.67	63.97
Total Press D VOC Emissions					12.46	68.29

HAP Emissions					
Product Name	Usage (gal/yr)	HAP Constituent	HAP Content (lbs/gal)	Max. Throughput (MMin ² /year)	Potential to Emit (tpy)
2351 Fountain Solution	2557.5	Ethylene Glycol	0.92	--	1.17
Total					1.17
Total Press D HAP Emissions					1.17

Methodology

VOC and HAP contents as supplied by the MSDSs

Maximum Coverage (lbs/MMin²) for inks is the typical value for the number of color units

Maximum Throughput (MMin²/year) = Maximum Line Speed (feet/min) x 12 inches per foot x Maximum Print Width (inches) x 60 min. per hour x 8,760 hours per year / 1,000,000 inches per MMin²

[VOC/HAP] Potential to Emit (tpy) = Maximum Coverage (lbs/MMin²) or Usage (gal/yr) x [Pollutant] Content (wt%) x [Flash Off] x [Max. Throughput (MMin²/Year)] / 2,000 lbs per ton

Nonheatset Lithographic units have an assumed flash off of 5%. 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))

**Appendix A: Emission Calculations
Press H**

Company Name: Mossberg & Company, Inc.
Source Address: 301 East Sample Street South Bend, IN 46601
Permit Number: M141-31126-00063
Reviewer: Calculations submitted by Cornerstone
and reviewed by Susann Brown

Throughput Press I.D.	Maximum Line Speed (feet/min)	Maximum Print Width (Inches)	Maximum PTE (MMin ² /year)
Web Flexographic Letterpress	150	7	6623

VOC Emissions						
Product Name	Maximum Coverage (lbs/MMin ²)	VOC Content (wt%)	Flash Off %	Max. Throughput (MMin ² /year)	Potential to Emit (tons/yr)	Potential to Emit (pounds/day)
Sun Chemical Inks	0.325	0.20%	100%	6623	2.2E-03	0.01
Total					2.2E-03	0.01

VOC Emissions						
Product Name	Usage (gal/yr)	VOC Content (lbs/gal)	Flash Off %	Max. Throughput (MMin ² /year)	Potential to Emit (tons/yr)	Potential to Emit (pounds/day)
SPG Prints Cleaner	2557.5	7.93	--	--	10.14	55.55
Total					10.14	55.55
Total Press H VOC Emissions					10.14	55.56

Methodology

VOC and HAP contents as supplied by the MSDSs

Maximum Throughput (MMin²/year) = Maximum Line Speed (feet/min) x 12 inches per foot x Maximum Print Width (inches) x 60 min. per hour x 8,760 hours per year / 1,000,000 inches per MMin²

VOC Potential to Emit (tpy) = Maximum Coverage (lbs/MMin²) or Usage (gal/yr) x VOC Content (wt%) x [Flash Off] x [Max. Throughput (MMin²/Year)] / 2,000 lbs per ton

Nonheatset Lithographic units have an assumed flash off of 5%. 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))

**Appendix A: Emission Calculations
Press I**

Company Name: Mossberg & Company, Inc.
Source Address: 301 East Sample Street South Bend, IN 46601
Permit Number: M141-31126-00063
Reviewer: Calculations submitted by Cornerstone
and reviewed by Susann Brown

Throughput Press I.D.	Maximum Line Speed (feet/min)	Maximum Print Width (Inches)	Maximum PTE (MMin ² /year)
Ultraviolet Web Flexographic Press	150	10	9461

VOC Emissions						
Product Name	Maximum Coverage (lbs/MMin ²)	VOC Content (wt%)	Flash Off %	Max. Throughput (MMin ² /year)	Potential to Emit (tons/yr)	Potential to Emit (pounds/day)
Sun Chemical Inks	0.325	0.20%	100%	9461	3.1E-03	0.02
Total					3.1E-03	0.02

VOC Emissions						
Product Name	Usage (gal/yr)	VOC Content (lbs/gal)	Flash Off %	Max. Throughput (MMin ² /year)	Potential to Emit (tons/yr)	Potential to Emit (pounds/day)
SPG Prints Cleaner	2557.5	7.93	--	--	10.14	55.55
Total					10.14	55.55
Total Press I VOC Emissions					10.14	55.57

Methodology

VOC and HAP contents as supplied by the MSDSs

Maximum Throughput (MMin²/year) = Maximum Line Speed (feet/min) x 12 inches per foot x Maximum Print Width (inches) x 60 min. per hour x 8,760 hours per year / 1,000,000 inches per MMin²

VOC Potential to Emit (tpy) = Maximum Coverage (lbs/MMin²) or Usage (gal/yr) x VOC Content (wt%) x [Flash Off] x [Max. Throughput (MMin²/Year)] / 2,000 lbs per ton

Nonheatset Lithographic units have an assumed flash off of 5%. 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))

**Appendix A: Emission Calculations
Press J**

Company Name: Mossberg & Company, Inc.
Source Address: 301 East Sample Street South Bend, IN 46601
Permit Number: M141-31126-00063
Reviewer: Calculations submitted by Cornerstone
 and reviewed by Susann Brown

Throughput Press I.D.	Maximum Line Speed (feet/min)	Maximum Print Width (Inches)	Maximum PTE (MMin ² /year)
Non-Heatset Sheetfed Offset Lithographic Press	90	18	10218

VOC Emissions						
Product Name	Maximum Coverage (lbs/MMin ²)	VOC Content (wt%)	Flash Off %	Max. Throughput (MMin ² /year)	Potential to Emit (tons/yr)	Potential to Emit (pounds/day)
Eckart American Corp. Ink	3.25	17.31%	5.00%	10218	0.14	0.79
Total					0.14	0.79

VOC Emissions						
Product Name	Usage (gal/yr)	VOC Content (lbs/gal)	Flash Off %	Max. Throughput (MMin ² /year)	Potential to Emit (tons/yr)	Potential to Emit (pounds/day)
2351 Fountain Solution	2557.5	1.73	--	--	2.21	12.12
FUJIFILM 7563 Blanket/Roller Wash	2557.5	7.40	--	--	9.46	51.85
Total					11.67	63.97
Total Press J VOC Emissions					11.82	64.76

HAP Emissions					
Product Name	Usage (gal/yr)	HAP Constituent	HAP Content (lbs/gal)	Max. Throughput (MMin ² /year)	Potential to Emit (tons/yr)
2351 Fountain Solution	2557.5	Ethylene Glycol	0.92	--	1.17
Total					1.17
Total Press J HAP Emissions					1.17

Methodology

VOC and HAP contents as supplied by the MSDSs

Maximum Coverage (lbs/MMin²) for inks is the typical value for the number of color units

Maximum Throughput (MMin²/year) = Maximum Line Speed (feet/min) x 12 inches per foot x Maximum Print Width (inches) x 60 min. per hour x 8,760 hours per year / 1,000,000 inches per MMin²

[VOC/HAP] Potential to Emit (tpy) = Maximum Coverage (lbs/MMin²) or Usage (gal/yr) x [Pollutant] Content (wt%) x [Flash Off] x [Max. Throughput (MMin²/Year)] / 2,000 lbs per ton

Nonheatset Lithographic units have an assumed flash off of 5%. 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))

**Appendix A: Emission Calculations
Press K**

Company Name: Mossberg & Company, Inc.
Source Address: 301 East Sample Street South Bend, IN 46601
Permit Number: M141-31126-00063
Reviewer: Calculations submitted by Cornerstone
and reviewed by Susann Brown

Throughput Press I.D.	Maximum Line Speed (feet/min)	Maximum Print Width (Inches)	Maximum PTE (MMin ² /year)
Non-Heatset Sheetfed Offset Lithographic Press	583	40	147084

VOC Emissions						
Product Name	Maximum Coverage (lbs/MMin ²)	VOC Content (wt%)	Flash Off %	Max. Throughput (MMin ² /year)	Potential to Emit (tons/yr)	Potential to Emit (pounds/day)
Eckart American Corp. Ink	3.25	17.31%	5.00%	147084	2.07	11.34
Total					2.07	11.34

VOC Emissions						
Product Name	Usage (gal/yr)	VOC Content (lbs/gal)	Flash Off %	Max. Throughput (MMin ² /year)	Potential to Emit (tons/yr)	Potential to Emit (pounds/day)
2351 Fountain Solution	2557.5	1.73	--	--	2.21	12.12
FUJIFILM 7563 Blanket/Roller Wash	2557.5	7.40	--	--	9.46	51.85
Total					11.67	63.97
Total Press K VOC Emissions					13.74	75.31

HAP Emissions					
Product Name	Usage (gal/yr)	HAP Constituent	HAP Content (lbs/gal)	Max. Throughput (MMin ² /year)	Potential to Emit (tons/yr)
2351 Fountain Solution	2557.5	Ethylene Glycol	0.92	--	1.17
Total					1.17
Total Press K HAP Emissions					1.17

Methodology

VOC and HAP contents as supplied by the MSDSs

Maximum Coverage (lbs/MMin²) for inks is the typical value for the number of color units

Maximum Throughput (MMin²/year) = Maximum Line Speed (feet/min) x 12 inches per foot x Maximum Print Width (inches) x 60 min. per hour x 8,760 hours per year / 1,000,000 inches per MMin²

[VOC/HAP] Potential to Emit (tpy) = Maximum Coverage (lbs/MMin²) or Usage (gal/yr) x [Pollutant] Content (wt%) x [Flash Off] x [Max. Throughput (MMin²/Year)] / 2,000 lbs per ton

Nonheatset Lithographic units have an assumed flash off of 5%. 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))

Appendix A: Emission Calculations
Press L

Company Name: Mossberg & Company, Inc.
Source Address: 301 East Sample Street South Bend, IN 46601
Permit Number: M141-31126-00063
Reviewer: Calculations submitted by Cornerstone
 and reviewed by Susann Brown

Throughput Press I.D.	Maximum Line Speed (feet/min)	Maximum Print Width (Inches)	Maximum PTE (MMin ² /year)
Non-Heatset Sheetfed Offset Lithographic Press	467	40	117818

VOC Emissions						
Product Name	Usage (gal/yr)	VOC Content (wt%)	Flash Off %	Max. Throughput (MMin ² /year)	Potential to Emit (tons/yr)	Potential to Emit (pounds/day)
Eckart American Corp. Ink	3.25	17.31%	5.00%	117818	1.66	9.08
Total					1.66	9.08

VOC Emissions						
Product Name	Maximum Coverage (lbs/MMin ²)	VOC Content (wt%)	Flash Off %	Max. Throughput (MMin ² /year)	Potential to Emit (tons/yr)	Potential to Emit (pounds/day)
Eckart American Corp. Ink	3.25	17.31%	5.00%	117818	1.66	9.08
Total					1.66	9.08

VOC Emissions						
Product Name	Usage (gal/yr)	VOC Content (lbs/gal)	Flash Off %	Max. Throughput (MMin ² /year)	Potential to Emit (tons/yr)	Potential to Emit (pounds/day)
2351 Fountain Solution	2557.5	1.73	--	--	2.21	12.12
FUJIFILM 7563 Blanket/Roller Wash	2557.5	7.40	--	--	9.46	51.85
Total					11.67	63.97
Total Press L VOC Emissions					14.99	82.13

HAP Emissions					
Product Name	Usage (gal/yr)	HAP Constituent	HAP Content (lbs/gal)	Max. Throughput (MMin ² /year)	Potential to Emit (tons/yr)
2351 Fountain Solution	2557.5	Ethylene Glycol	0.92	--	1.17
Total					1.17
Total Press L HAP Emissions					1.17

Methodology

VOC and HAP contents as supplied by the MSDSs

Maximum Coverage (lbs/MMin²) for inks is the typical value for the number of color units

Maximum Throughput (MMin²/year) = Maximum Line Speed (feet/min) x 12 inches per foot x Maximum Print Width (inches) x 60 min. per hour x 8,760 hours per year / 1,000,000 inches per MMin²

[VOC/HAP] Potential to Emit (tpy) = Maximum Coverage (lbs/MMin²) or Usage (gal/yr) x [Pollutant] Content (wt%) x [Flash Off] x [Max. Throughput (MMin²/Year)] / 2,000 lbs per ton

Nonheatset Lithographic units have an assumed flash off of 5%. 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))

**Appendix A: Emission Calculations
Press M**

Company Name: Mossberg & Company, Inc.
Source Address: 301 East Sample Street South Bend, IN 46601
Permit Number: M141-31126-00063
Reviewer: Calculations submitted by Cornerstone
and reviewed by Susann Brown

Throughput Press I.D.	Maximum Line Speed (feet/min)	Maximum Print Width (inches)	Maximum PTE (MMin ² /yr)
Non-Heatset Web Flexographic Press	500	16	50458

VOC Emissions						
Product Name	Maximum Coverage (lbs/MMin ²)	VOC Content (wt%)	Flash Off %	Max. Throughput (MMin ² /yr)	Potential to Emit (tons/yr)	Potential to Emit (pounds/day)
Sun Chemical Inks	0.325	0.20%	100%	50458	0.02	0.09
Total					0.02	0.09

VOC Emissions						
Product Name	Usage (gal/yr)	VOC Content (lbs/gal)	Flash Off %	Max. Throughput (MMin ² /yr)	Potential to Emit (tons/yr)	Potential to Emit (pounds/day)
SPG Prints Cleaner	2557.5	7.93	--	--	10.14	55.55
Total					10.14	55.55

Total Press M VOC Emissions 10.15 55.64

Methodology

VOC and HAP contents as supplied by the MSDSs

Maximum Throughput (MMin²/yr) = Maximum Line Speed (feet/min) x 12 inches per foot x Maximum Print Width (inches) x 60 min per hour x 8,760 hours per year / 1,000,000 inches per MMin²

VOC Potential to Emit (tons/yr) = Maximum Coverage (lbs/MMin²) or Usage (gal/yr) x VOC Content (wt%) x [Flash Off] x [Max. Throughput (MMin²/yr)] / 2,000 lbs per ton

Nonheatset Lithographic units have an assumed flash off of 5%. 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))

TSD Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads

Company Name: Mossberg & Company, Inc.
Source Address: 301 East Sample Street South Bend, IN 46601
Permit Number: M141-31126-00063
Reviewer: Calculations submitted by Cornerstone and reviewed by Susann Brown

Paved Roads at Industrial Site

The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Information (provided by source)

Type of Traffic	Vehicle Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight of Loaded Vehicle (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Vehicle Type 2 (entering plant) (one-way trip)	Utility Truck	11.0	1.0	11.0	15.0	165.0	300	0.057	0.6	228.1
Vehicle Type 2 (leaving plant) (one-way trip)	Utility Truck	11.0	1.0	11.0	15.0	165.0	300	0.057	0.6	228.1
Vehicle Type 3 (entering plant) (one-way trip)	Delivery Truck	1.0	3.0	3.0	15.0	45.0	300	0.057	0.2	62.2
Vehicle Type 3 (leaving plant) (one-way trip)	Delivery Truck	1.0	3.0	3.0	15.0	45.0	300	0.057	0.2	62.2
		Total		28.0		420.0			1.6	580.7

Average Vehicle Weight Per Trip = $\frac{15.0}{0.06}$ tons/trip
Average Miles Per Trip = $\frac{15.0}{0.06}$ miles/trip

Unmitigated Emission Factor, $E_f = [k * (sL)^{0.91} * (W)^{1.02}]$ (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	15.0	15.0	15.0	tons = average vehicle weight (provided by source)
sL =	9.7	9.7	9.7	g/m ² = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, $E_{ext} = E * [1 - (p/4N)]$ (Equation 2 from AP-42 13.2.1)

Mitigated Emission Factor, $E_{ext} = E_f * [1 - (p/4N)]$
where p = $\frac{125}{365}$ days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
N = 365 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, $E_f =$	1.377	0.275	0.0676	lb/mile
Mitigated Emission Factor, $E_{ext} =$	1.259	0.252	0.0618	lb/mile

Type of Traffic	Vehicle Type	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)
Vehicle Type 2 (entering plant) (one-way trip)	Utility Truck	0.16	0.03	0.01	0.14	0.03	0.01
Vehicle Type 2 (leaving plant) (one-way trip)	Utility Truck	0.16	0.03	0.01	0.14	0.03	0.01
Vehicle Type 3 (entering plant) (one-way trip)	Delivery Truck	0.04	0.01	0.00	0.04	0.01	0.00
Vehicle Type 3 (leaving plant) (one-way trip)	Delivery Truck	0.04	0.01	0.00	0.04	0.01	0.00
		0.40	0.08	0.02	0.37	0.07	0.02

Methodology

Total Weight driven per day (ton/day) = [Maximum Weight of Loaded Vehicle (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip)] / [5280 ft/mile]
Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations

PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate Matter (<2.5 um)
PTE = Potential to Emit



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: David Kelsey
Mossberg & Company, Inc
301 E. Sample St
South Bend, IN 46601

DATE: June 7, 2012

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

SUBJECT: Final Decision
MSOP - Renewal
141-31126-00063

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:
Adam Estes (Cornerstone Environmental)
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



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June 7, 2012

TO: St. Joseph County Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: Mossberg & Company, Inc
Permit Number: 141-31126-00063

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 11/30/07

Mail Code 61-53

IDEM Staff	MIDENNEY 6/7/2012 Mossberg & Company, Inc. 141-31126-00063 (final)		Type of Mail: CERTIFICATE OF MAILING ONLY	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		

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		David Kelsey Mossberg & Company, Inc. 301 E Sample St South Bend IN 46601-3547 (Source CAATS) via confirm delivery										
2		Mr. Wayne Falda South Bend Tribune 255 W Colfax Ave South Bend IN 46626 (Affected Party)										
3		South Bend City Council / Mayors Office 227 W. Jefferson Blvd. South Bend IN 46601 (Local Official)										
4		St. Joseph County Board of Commissioners 227 West Jefferson Blvd, South Bend IN 46601 (Local Official)										
5		St. Joseph County Health Department 227 W Jefferson Blvd, Room 825 South Bend IN 46601-1870 (Health Department)										
6		Adam Estes Cornerstone Environmental 880 Lennox Court Zionsville IN 46077 (Consultant)										
7		St. Joseph County Public Library 304 South Main Street South Bend IN 46601 (Library)										
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