



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

TO: Interested Parties / Applicant
DATE: September 30, 2013
RE: Mossberg Industries, Inc./033-33632-00101
FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision – Approval

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

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

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

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

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

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

Enclosures
FNPER-AM.dot 6/13/2013



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Michael R. Pence
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James S. Khorshid
Mossberg Industries, Inc.
204 North Second Street
Garrett, Indiana 46738

September 30, 2013

Re: 033-33632-00101
Administrative Amendment to
R033-24529-00101

Dear Mr. Khorshid:

Mossberg Industries, Inc. was issued a Registration No. R033-24529-00101 on June 4, 2007 for a stationary plastic injection molding and extrusion facility located at 204 North Second Street, Garret, IN 46738. On September 10, 2013, the Office of Air Quality (OAQ) received an application from the source requesting to make the following changes:

- (a) The maximum throughput rate for Press 1 has decreased from 216 to 185 pounds of resin per hour;
- (b) The maximum throughput rate for Press 3 has increased from 185 to 198 pounds of resin per hour;
- (c) The maximum throughput rate for Press 4 has decreased from 183 to 150 pounds of resin per hour;
- (d) Construct a new injection molding machine (Press 8) at a maximum throughput of 95 pounds of resin per hour;
- (e) Construct a new injection molding machine (Press 10) at a maximum throughput of 150 pounds of resin per hour;
- (f) Press 11, with a maximum throughput of 95 pounds of resin per hour, has been removed from the facility;
- (g) The maximum throughput rate for Press 13 has decreased from 162 to 150 pounds of resin per hour;
- (h) The maximum throughput for Press 14 has decreased from 160 to 140 pounds of resin per hour;
- (i) Construct a new injection molding machine (Press 15) at a maximum throughput rate of 150 pounds of resin per hour;
- (j) Press 16, with a maximum throughput of 95 pounds of resin per hour, has been removed from the facility;
- (k) The maximum throughput rate for Press 17 has decreased from 158 to 95 pounds of resin per hour;

- (l) Press 18, with a maximum throughput of 95 pounds of resin per hour, has been removed from the facility. A new press rated at 198 pounds of resin per hour has been constructed and will be identified with the same press ID #;
 - (m) Press 19, with a maximum throughput of 291 pounds of resin per hour, has been removed from the facility. A new press rated at 405 pounds of resin per hour has been constructed and will be identified with the same press ID #;
 - (n) Maximum material throughput for the plastic grinding/shredding unit is now based on a maximum 3% by weight scrap rate of the total plastic throughput for the plastic injection molding and extrusion units to reflect actual operating conditions;
 - (o) Three existing (3) storage silos, which are all located outside of the back (North) side of the building, is now included in the description of the plastic pellet handling operation. Potential emissions of this operation are included in the source-wide potential to emit;
 - (p) Only one (1) MEK Solvent Blend (65-48-3) is now used for the solvent welding operation. Solvent Blend 65-48-5 ABS is no longer used at the facility;
 - (q) The Boss 140+ cleaning solution used in the cold cleaner degreaser has been replaced with Safety-Kleen 105 Solvent Recycled. Throughput of the cold cleaner degreaser has changed from 0.0092 gallons per hour to 145 gallons per year;
 - (r) VOC and HAP emissions from mold cleaning operations using MC-16 Mold Cleaner have been added;
 - (s) Welding emission calculations have been included;
 - (t) Natural-gas combustion unit G5 with a maximum heat input capacity of 0.165 MMBtu/hr is no longer at the facility;
 - (t) Carrier heater #2 with a maximum heat input capacity of 0.08 MMBtu/hr has been replaced with Lennox heater with a maximum heat input capacity of 0.20 MMBtu/hr; and
 - (u) Two (2) Powermatic air rotation units each with a maximum heat input capacity of 0.84 MMBtu/hr have been included in the registration.
1. Pursuant to 326 IAC 2-5.5-6(d)(2)(B), this change to the registration is considered an administrative amendment because the registration is amended to indicate changes in descriptive information concerning the source or emission units.

The uncontrolled/unlimited potential to emit of the entire source after the removal of these emission units and change in throughput values will continue to be within the threshold levels specified in 326 IAC 2-5.5-1(b)(1) (Registration). See Appendix A for the revised PTE of the source these changes.

2. Pursuant to 326 IAC 2-5.5-6(d)(10), this change to the registration is considered administrative amendment because the registration is amended to incorporate a modification that adds an emissions unit of the same type that is already permitted or replaces an existing unit and that will comply with the same applicable requirements and permit terms and conditions as the existing emission unit, and the modification does not result in a potential to emit greater than the thresholds in 326 IAC 2-2 (PSD) or 326 IAC 2-3 (Emission Offset), or does not result in a potential to emit of the source equal to or greater than the thresholds in 326 IAC 2-5.1-3(a) (Permits).

The modification consists of the addition of the following emissions units:

- (a) One (1) injection molding machine, constructed in 2013, identified as Press 8, with a maximum throughput rate of 95 pounds of resin per hour.
- (b) One (1) injection molding machine, constructed in 2013, identified as Press 10, with a maximum throughput rate of 150 pounds of resin per hour.
- (c) One (1) injection molding machine, constructed in 2013, identified as Press 15, with a maximum throughput rate of 150 pounds of resin per hour.
- (d) One (1) injection molding machine, constructed in 2013, identified as Press 18, with a maximum throughput rate of 198 pounds of resin per hour.
- (e) One (1) injection molding machine, constructed in 2013, identified as Press 19, with a maximum throughput rate of 405 pounds of resin per hour.

The PTE of the modification is as follows:

Process/ Emission Unit	PTE of Proposed Modification (tons/year)									
	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e	Total HAPs	Worst Single HAP
Press 8	0.03	0.03	0.03	-	-	0.01	0.01	-	-	-
Press 10	0.04	0.04	0.04	-	-	0.02	0.01	-	-	-
Press 15	0.04	0.04	0.04	-	-	0.02	0.01	-	-	-
Press 18	0.06	0.06	0.06	-	-	0.03	0.02	-	-	-
Press 19	0.12	0.12	0.12	-	-	0.05	0.04	-	-	-
Total PTE of Proposed Modification	0.28	0.28	0.28	-	-	0.13	0.09	-	-	-

- (a) The uncontrolled/unlimited potential to emit of the entire source after the addition of these emission units will continue to be within the threshold levels specified in 326 IAC 2-5.5-1(b)(1) (Registration). (See Appendix A for the calculations).
- (b) No new state rules are applicable to this source due to the addition of the emission unit.
- (c) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) or National Emission standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 20 and 40 CFR Part 61, 63) included in this administrative amendment.

PTE of the Entire Source After Issuance of the Registration Administrative Amendment

The table below summarizes the potential to emit of the entire source after the issuance of this administrative amendment, reflecting all limits, of the emission units, using **bold** and ~~strikeouts~~ to show the changes:

Process/ Emission Unit	Potential To Emit of the Entire Source with the Revision (tons/year)									
	PM	PM ₁₀ *	PM _{2.5}	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e**	Total HAPs	Worst Single HAP
Injection molding and extrusion	0.86 0.90	0.86 0.90	0.90	-	-	0.45	0.28	-	-	-
Grinding	7.07 4.43	7.07 4.43	4.43							
Solvent welding	-	-	-	-	-	10.9 11.13	-	-	2.28 3.45	2.28 3.45 - Toluene
Cold cleaner degreaser						0.27 0.49			0.0006	0.0001 - Toluene
Mold cleaner	-	-	-	-	-	0.01	-	-	0.108	0.097 - Tetra- chloro- ethylene
Storage and Handling	0.74	0.37	0.37	-	-	-	-	-	-	-
Welding	0.002	0.002	0.002							
Natural gas combustion	0.02 0.033	0.08 0.131	0.131	0.010	1.01 1.722	0.06 0.095	0.85 1.446	2,079	0.02 0.03	0.02 0.03 - Hexane
Total PTE of Entire Source	7.95 6.10	8.04 5.83	5.83	0.01	1.01 1.72	11.65 12.19	1.13 1.74	2,079	2.30 3.59	2.28 3.45 - Toluene
Exemptions Levels	>5	>5	>5	>10	>10	>10	>25	<100,000	<25	<10
Registration Levels	<25	<25	<25	<25	<25	<25	<100	<100,000	<25	<10
<p>*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".</p> <p>**The 100,000 CO₂e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.</p>										

The table below summarizes the potential to emit of the entire source after issuance of this administrative amendment, reflecting all limits, of the emission units. (Note: the table below was generated from the above table, with bold text un-bolded and strikethrough text deleted).

Process/ Emission Unit	Potential To Emit of the Entire Source with the Revision (tons/year)									
	PM	PM ₁₀ *	PM _{2.5}	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e**	Total HAPs	Worst Single HAP
Injection molding and extrusion	0.90	0.90	0.90	-	-	0.45	0.28	-	-	-
Grinding	4.43	4.43	4.43							
Solvent welding	-	-	-	-	-	11.13	-	-	3.45	3.45 - Toluene
Cold cleaner degreaser						0.49			0.0006	0.0001 - Toluene
Mold cleaner	-	-	-	-	-	0.01	-	-	0.108	0.097 - Tetra-chloro-ethylene
Storage and Handling	0.74	0.37	0.37	-	-	-	-	-	-	-
Welding	0.002	0.002	0.002							
Natural gas combustion	0.033	0.131	0.131	0.010	1.722	0.095	1.446	2,079	0.03	0.03 - Hexane
Total PTE of Entire Source	6.10	5.83	5.83	0.01	1.72	12.19	1.74	2,079	3.59	3.45 - Toluene
Exemptions Levels	>5	>5	>5	>10	>10	>10	>25	<100,000	<25	<10
Registration Levels	<25	<25	<25	<25	<25	<25	<100	<100,000	<25	<10
<p>*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".</p> <p>**The 100,000 CO₂e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.</p>										

Pursuant to 326 IAC 2-5.5-6, the registration is hereby amended as follows, with deleted language as ~~strikeouts~~ and new language **bolded**:

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) One (1) plastic molding and extrusion operation, ~~constructed before 1980~~, with a total maximum throughput rate of ~~3,229~~**3,369** pounds of resin per hour, **using no control, exhausting indoors, and** consisting of the following:
 - (1) One (1) injection molding machine, **constructed before 1980**, identified as Press 1, with a maximum throughput rate of ~~246~~**185** pounds of resin per hour.
 - (2) One (1) injection molding machine, **constructed before 1980**, identified as Press 2, with a maximum throughput rate of 198 pounds of resin per hour.
 - (3) One (1) injection molding machine, **constructed before 1980**, identified as Press 3, with a maximum throughput rate of ~~485~~**198** pounds of resin per hour.
 - (4) One (1) injection molding machine, **constructed before 1980**, identified as Press 4, with a maximum throughput rate of ~~483~~**150** pounds of resin per hour.

- (5) **One (1) injection molding machine, constructed in 2013, identified as Press 8, with a maximum throughput rate of 95 pounds of resin per hour.**
- (56) One (1) injection molding machine, **constructed before 1980**, identified as Press 9, with a maximum throughput rate of 405 pounds of resin per hour.
- (7) **One (1) injection molding machine, constructed in 2013, identified as Press 10, with a maximum throughput rate of 150 pounds of resin per hour.**
- ~~(6) One (1) injection molding machine, identified as Press 11, with a maximum throughput rate of 175 pounds of resin per hour.~~
- (78) One (1) injection molding machine, **constructed before 1980**, identified as Press 13, with a maximum throughput rate of ~~162~~**150** pounds of resin per hour.
- (89) One (1) injection molding machine, **constructed before 1980**, identified as Press 14, with a maximum throughput rate of ~~160~~**140** pounds of resin per hour.
- (10) **One (1) injection molding machine, constructed in 2013, identified as Press 15, with a maximum throughput rate of 150 pounds of resin per hour.**
- ~~(9) One (1) injection molding machine, identified as Press 16, with a maximum throughput rate of 151 pounds of resin per hour.~~
- ~~(1011)~~ One (1) injection molding machine, **constructed before 1980**, identified as Press 17, with a maximum throughput rate of ~~158~~**95** pounds of resin per hour.
- ~~(11) One (1) injection molding machine, identified as Press 18, with a maximum throughput rate of 95 pounds of resin per hour.~~
- (12) **One (1) injection molding machine, constructed in 2013, identified as Press 18, with a maximum throughput rate of 198 pounds of resin per hour.**
- ~~(12) One (1) injection molding machine, identified as Press 19, with a maximum throughput rate of 291 pounds of resin per hour.~~
- (13) **One (1) injection molding machine, constructed in 2013, identified as Press 19, with a maximum throughput rate of 405 pounds of resin per hour.**
- ~~(1314)~~ Two (2) extruders, constructed before 1980, identified as Extruder 6 and Extruder 7, with a maximum throughput rate of 350 and 500 pounds of resin per hour, respectively.
- (eb) One (1) plastic grinding/**shredding unit** operation, constructed before 1980, with a maximum throughput rate of ~~161.5~~ **101.1** pounds of plastic scrap per hour, controlled by a dust collector.
- (bc) One (1) solvent welding operation, constructed before 1980, with a maximum solvent usage of 0.37 gallons per hour.
- (d) One (1) **cold cleaner** degreasing operation, constructed before 1980, with a maximum solvent usage of ~~0.0092~~**145** gallons per ~~hour~~**year**.
- (e) **One (1) mold cleaner operation, constructed before 1980, with a maximum solvent usage of 216 pounds per year.**

- (ef) One (1) plastic pellet handling operation, constructed before 1980, **including three (3) storage silos**, with a maximum throughput rate of ~~4,645~~ **1,685** pounds per hour, with particulate emissions less than 0.551 pounds per hour.
- (fg) ~~Twelve~~**Thirteen (13)** natural gas-fired air make-up units and heaters, constructed before 1980, including the following:
 - (1) ~~Seven~~**Six (6)** natural gas-fired combustion units, identified as G2, **G3, G4, G6, G7 and through G8**, each with a maximum heat input capacity of 0.165 million Btu per hour (MMBtu/hr).
 - (2) One (1) air rotation unit, with a maximum heat input capacity of 0.8 MMBtu/hr.
 - (3) Two (2) split units, identified as ~~Splits~~ **S1 and S2**, each with a maximum heat input capacity of 0.1 MMBtu/hr.
 - (4) Two (2) heaters, identified as ~~Carriers 1 and 2~~ **and Lennox**, with a maximum heat input capacities of 0.12 and ~~0.08~~ **0.20** MMBtu/hr, respectively.
 - (5) **Two (2) Powermatic air rotation units, indented as #1 and #2, each with a maximum heat input capacity of 0.84 MMBtu/hr.**
- (h) **One (1) stick welding station with a maximum capacity of 0.10 pound per day.**
- (gi) Paved and unpaved roads and parking lots with public access.

...

D.1.1 Particulate Matter Emissions [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from the plastic grinding/**shredding unit operation** shall be limited to ~~0.7655~~ **101.1** lbs/hr when the process weight rate is ~~464.5~~ **101.1** lbs/hr.

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

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

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

Compliance Determination Requirements

D.1.2 Particulate Control

In order to comply with Condition D.1.1, the dust collector shall be in operation and control emissions at all times the grinding/shredding unit is in operation.

Additional Changes

Upon further review, IDEM, OAQ has decided to make additional amendments to the registration as described below. The registration has been amended as follows with deleted language as ~~strikeouts~~ and new language **bolded**:

1. The registration has been updated from the letter style format to the permit style format, as is now standard IDEM procedure. In addition, IDEM has begun implementing a new procedure and will no longer list the name or title of the Authorized Individual (AI) in registrations.

2. Several of IDEM's branches and sections have been renamed. Therefore, IDEM has updated the addresses listed in the registration. References to "Compliance Data Section" and "Compliance Branch" have been changed to "Compliance and Enforcement Branch". The registration has been revised as follows:

~~Compliance Data Section~~ **Compliance and Enforcement Branch**
~~Compliance Branch~~ **Compliance and Enforcement Branch**

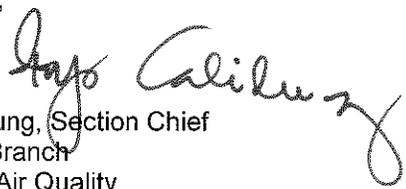
Greenhouse Gases

Pursuant to 326 IAC 2-7-1(39), starting July 1, 2011, greenhouse gases (GHGs) emissions are subject to regulation at a source with a potential to emit (PTE) 100,000 tons per year or more of CO₂ equivalent emissions (CO₂e). Therefore, CO₂e emissions have been calculated for this source. Based on the calculations, the unlimited PTE GHGs from the entire source is less than 100,000 tons of CO₂e per year (see Appendix A for the calculations). This did not require any changes to the registration.

The source shall continue to operate according to 326 IAC 2-5.5 (Registrations). Please find enclosed the amended registration and Appendix A. A copy of the registration is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>. 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

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Ryan Graunke, at (800) 451-6027, press 0 and ask for Ryan Graunke or extension 4-5374 or dial (317) 234-5374.

Sincerely,


Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

IC/REG

Attachment: Revised Registration

cc: File - DeKalb County
DeKalb County Health Department
Compliance and Enforcement Branch



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Michael R. Pence
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Commissioner

REGISTRATION OFFICE OF AIR QUALITY

**Mossberg Industries, Inc.
204 North Second Street
Garret, IN 46738**

Pursuant to 326 IAC 2-5.1 (Construction of New Sources: Registrations) and 326 IAC 2-5.5 (Registrations), (herein known as the Registrant) is hereby authorized to construct and operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this registration.

Registration No. 033-24529-00101	
Issued by: <i>Original Signed By:</i> Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: June 4, 2007

Administrative Amendment No. 033-33632-00101	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: September 30, 2013

SECTION A

SOURCE SUMMARY

This registration 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 Registrant 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 Registrant to obtain additional permits pursuant to 326 IAC 2.

A.1 General Information

The Registrant owns and operates a stationary plastic injection molding and extrusion facility.

Source Address:	204 North Second Street, Garret, IN 46738
General Source Phone Number:	(260) 357-5141
SIC Code:	3089 (Plastic Products, Not Elsewhere Classified)
County Location:	DeKalb County
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Registration

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) One (1) plastic molding and extrusion operation, with a total maximum throughput rate of 3,369 pounds of resin per hour, using no control, exhausting indoors, and consisting of the following:
- (1) One (1) injection molding machine, constructed before 1980, identified as Press 1, with a maximum throughput rate of 185 pounds of resin per hour.
 - (2) One (1) injection molding machine, constructed before 1980, identified as Press 2, with a maximum throughput rate of 198 pounds of resin per hour.
 - (3) One (1) injection molding machine, constructed before 1980, identified as Press 3, with a maximum throughput rate of 198 pounds of resin per hour.
 - (4) One (1) injection molding machine, constructed before 1980, identified as Press 4, with a maximum throughput rate of 150 pounds of resin per hour.
 - (5) One (1) injection molding machine, constructed in 2013, identified as Press 8, with a maximum throughput rate of 95 pounds of resin per hour.
 - (6) One (1) injection molding machine, constructed before 1980, identified as Press 9, with a maximum throughput rate of 405 pounds of resin per hour.
 - (7) One (1) injection molding machine, constructed in 2013, identified as Press 10, with a maximum throughput rate of 150 pounds of resin per hour.
 - (8) One (1) injection molding machine, constructed before 1980, identified as Press 13, with a maximum throughput rate of 150 pounds of resin per hour.
 - (9) One (1) injection molding machine, constructed before 1980, identified as Press 14, with a maximum throughput rate of 140 pounds of resin per hour.
 - (10) One (1) injection molding machine, constructed in 2013, identified as Press 15, with a maximum throughput rate of 150 pounds of resin per hour.

- (11) One (1) injection molding machine, constructed before 1980, identified as Press 17, with a maximum throughput rate of 95 pounds of resin per hour.
- (12) One (1) injection molding machine, constructed in 2013, identified as Press 18, with a maximum throughput rate of 198 pounds of resin per hour.
- (13) One (1) injection molding machine, constructed in 2013, identified as Press 19, with a maximum throughput rate of 405 pounds of resin per hour.
- (14) Two (2) extruders, constructed before 1980, identified as Extruder 6 and Extruder 7, with a maximum throughput rate of 350 and 500 pounds of resin per hour, respectively.
- (b) One (1) plastic grinding/shredding unit, constructed before 1980, with a maximum throughput rate of 101.1 pounds of plastic scrap per hour, controlled by a dust collector.
- (c) One (1) solvent welding operation, constructed before 1980, with a maximum solvent usage of 0.37 gallons per hour.
- (d) One (1) cold cleaner degreasing operation, constructed before 1980, with a maximum solvent usage of 145 gallons per year.
- (e) One (1) mold cleaner operation, constructed before 1980, with a maximum solvent usage of 216 pounds per year.
- (f) One (1) plastic pellet handling operation, constructed before 1980, including three (3) storage silos, with a maximum throughput rate of 1,685 pounds per hour, with particulate emissions less than 0.551 pounds per hour.
- (g) Thirteen (13) natural gas-fired air make-up units and heaters, constructed before 1980, including the following:
 - (1) Six (6) natural gas-fired combustion units, identified as G2, G3, G4, G6, G7 and G8, each with a maximum heat input capacity of 0.165 million Btu per hour (MMBtu/hr).
 - (2) One (1) air rotation unit, with a maximum heat input capacity of 0.8 MMBtu/hr.
 - (3) Two (2) split units, identified as S1 and S2, each with a maximum heat input capacity of 0.1 MMBtu/hr.
 - (4) Two (2) heaters, identified as Carrier 1 and Lennox, with a maximum heat input capacities of 0.12 and 0.20 MMBtu/hr, respectively.
 - (5) Two (2) Powermatic air rotation units, identified as #1 and #2, each with a maximum heat input capacity of 0.84 MMBtu/hr.
- (h) One (1) stick welding station with a maximum capacity of 0.10 pound per day.
- (i) Paved and unpaved roads and parking lots with public access.

SECTION B

GENERAL CONDITIONS

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

Terms in this registration 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 Effective Date of Registration [IC 13-15-5-3]

Pursuant to IC 13-15-5-3, this registration 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.

B.3 Registration Revocation [326 IAC 2-1.1-9]

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

- (a) Violation of any conditions of this registration.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this registration.
- (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 registration shall not require revocation of this registration.
- (d) For any cause which establishes in the judgment of IDEM the fact that continuance of this registration is not consistent with purposes of this article.

B.4 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to Registration No. 033-33632-00101 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 registration.

B.5 Annual Notification [326 IAC 2-5.1-2(f)(3)] [326 IAC 2-5.5-4(a)(3)]

Pursuant to 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3):

- (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 registration.
- (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, IN 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.6 Source Modification Requirement [326 IAC 2-5.5-6(a)]

Pursuant to 326 IAC 2-5.5-6(a), an application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

B.7 Registrations [326 IAC 2-5.1-2(i)]

Pursuant to 326 IAC 2-5.1-2(i), this registration does not limit the source's potential to emit.

B.8 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this registration, the Registrant shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this registration 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 Registrant's control, the PMPs cannot be prepared and maintained within the above time frame, the Registrant may extend the date an additional ninety (90) days provided the Registrant 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 Registrant shall implement the PMPs.

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Registrant to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions.
- (c) To the extent the Registrant is required by 40 CFR Part 60 or 40 CFR Part 63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such OMM Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-5.1-2(g)] [326 IAC 2-5.5-4(b)]

C.1 Opacity [326 IAC 5-1]

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

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

C.2 Fugitive Dust Emissions [326 IAC 6-4]

The Registrant 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).

SECTION D.1

OPERATION CONDITIONS

Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:

- (b) One (1) plastic grinding/shredding unit, constructed before 1980, with a maximum throughput rate of 101.1 pounds of plastic scrap per hour, controlled by a dust collector.

(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 2-5.1-2(f)(1)] [326 IAC 2-5.5-4(a)(1)]

D.1.1 Particulate Matter Emissions [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from the plastic grinding/shredding unit shall be limited to 0.55 lbs/hr when the process weight rate is 101.1 lbs/hr.

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

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

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

Compliance Determination Requirements

D.1.2 Particulate Control

In order to comply with Condition D.1.1, the dust collector shall be in operation and control emissions at all times the grinding/shredding unit is in operation.

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

**REGISTRATION
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3).

Company Name:	Mossberg Industries, Inc.
Address:	204 North Second Street
City:	Garret, IN 46738
Phone Number:	(260) 357-5141
Registration No.:	033-24529-00101

I hereby certify that Mossberg Industries, Inc. is :

still in operation.

I hereby certify that Mossberg Industries, Inc. is :

no longer in operation.

in compliance with the requirements of Registration No. 033-24529-00101.

not in compliance with the requirements of Registration No. 033-24529-00101.

Authorized Individual (typed):
Title:
Signature:
Phone Number:
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:

**Appendix A: Emissions Calculations
Source Summary**

Company Name: Mossberg Industries, Inc.
Address City IN Zip: 204 North Second Street, Garret, IN 46738
Registration Number: 033-24529-00101
Administrative Amendment Number: 033-33632-00101
Reviewer: Ryan Graunke

Unlimited potential to emit (tons/yr)

Process	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	GHGs (as CO ₂ e)	Total HAPs	Worst single HAP	
Injection molding and extrusion	0.90	0.90	0.90	-	-	0.47	0.30	-	-	-	-
Grinding/shredding unit	4.43	4.43	4.43	-	-	-	-	-	-	-	-
Solvent welding	-	-	-	-	-	11.13	-	-	3.45	3.45	Toluene
Cold cleaner degreaser	-	-	-	-	-	0.49	-	-	0.0006	0.0001	Toluene
Mold cleaner	-	-	-	-	-	0.01	-	-	0.108	0.097	Tetrachloroethylene
Storage and handling	0.74	0.37	0.37	-	-	-	-	-	-	-	-
Welding	0.002	0.002	0.002	-	-	-	-	-	0.0002	0.0002	Mn
Natural gas combustion	0.033	0.131	0.131	0.010	1.722	0.095	1.446	2,079	0.032	0.031	Hexane
Total	6.10	5.83	5.83	0.01	1.72	12.19	1.74	2,079	3.59	3.46	Toluene

**Appendix A: Emissions Calculations
Injection molding and extrusion**

Company Name: Mossberg Industries, Inc.
Address City IN Zip: 204 North Second Street, Garret, IN 46738
Registration Number: 033-24529-00101
Administrative Amendment Number: 033-33632-00101
Reviewer: Ryan Graunke

Emission Unit	Max throughput rate (lbs/hr)	VOC		CO		PM		
		Emission Factor (lbs/ton)	PTE (tons/yr)	Emission Factor (lbs/ton)	PTE (tons/yr)	Emission Factor (lbs/ton)	PTE (lbs/hr)	PTE (tons/yr)
Press 1	185	0.0614	0.02	0.04	0.02	0.1302	0.01	0.05
Press 2	198	0.0614	0.03	0.04	0.02	0.1302	0.01	0.06
Press 3	198	0.0614	0.03	0.04	0.02	0.1302	0.01	0.06
Press 4	150	0.0614	0.02	0.04	0.01	0.1302	0.01	0.04
Press 8*	95	0.0614	0.01	0.04	0.01	0.1302	0.01	0.03
Press 9	405	0.0614	0.05	0.04	0.04	0.1302	0.03	0.12
Press 10*	150	0.0614	0.02	0.04	0.01	0.1302	0.01	0.04
Press 13	150	0.0614	0.02	0.04	0.01	0.1302	0.01	0.04
Press 14	140	0.0614	0.02	0.04	0.01	0.1302	0.01	0.04
Press 15*	150	0.0614	0.02	0.04	0.01	0.1302	0.01	0.04
Press 17	95	0.0614	0.01	0.04	0.01	0.1302	0.01	0.03
Press 18*	198	0.0614	0.03	0.04	0.02	0.1302	0.01	0.06
Press 19*	405	0.0614	0.05	0.04	0.04	0.1302	0.03	0.12
Extruder 6	350	0.0706	0.05	0.04	0.03	0.0958	0.02	0.07
Extruder 7	500	0.0706	0.08	0.04	0.04	0.0958	0.02	0.10
Totals:	3,369		0.47		0.30		0.20	0.90

Notes:

*These are new units added in 2013 under Administrative Amendment #033-33632-00101
 Maximum throughput values are provided by the facility and are based upon the current specifications for each existing injection molding and extrusion machine.
 VOC and PM emission factors are from Fact Sheet #9847 (revised 11/05) from the Michigan Department of Environmental Quality.
 There are no emission factors for these types of processes in AP-42 or U.S. EPA WebFIRE.
 CO emission factor is based on Patel, S.H and Xanthos, M. (1995) "Volatile Emissions During Thermoplastics Processing - A Review", *Advances in Polymer Technology*, Vol. 14, pp. 67-77
 All machines vent inside the facility.
 Assume PM = PM₁₀ = PM_{2.5}

Methodology:

PTE (lbs/hr) = Max throughput rate (lbs/hr) * Emission Factor (lbs/ton) * 1 ton/2000 lbs
 PTE (tons/yr) = Max throughput rate (lbs/hr) * Emission Factor (lbs/ton) * 1 ton/2000 lbs * 8760 hrs/yr * 1 ton/2000 lbs

**Appendix A: Emissions Calculations
Grinding/shredding unit**

Company Name: Mossberg Industries, Inc.
Address City IN Zip: 204 North Second Street, Garret, IN 46738
Registration Number: 033-24529-00101
Administrative Amendment Number: 033-33632-00101
Reviewer: Ryan Graunke

Emission Unit	Max plastic throughput rate (lb/hr)*	Weight % Scrap	Max grinder throughput rate (lb/hr)	PM Emission Factor (lb/lb scrap)	PTE of PM (lbs/hr)	PTE of PM (tons/yr)
Grinding/shredding unit	3,369	3%	101.1	0.01	1.01	4.43

Notes:

*Maximum plastic throughput is the maximum throughput for all plastic injection molding and extruding machines.

Weight % scrap values are based upon estimates of the maximum amount of scrap plastic reprocessed on each machine provided by the facility.

No emission factor exists for plastic grinding are in AP-42 or U.S. EPA FIRE version 6.25.

The PM emission factor being used is estimated by the source based upon the amount of dust collected.

Assume PM = PM₁₀ = PM_{2.5}

Methodology:

Max grinder throughput rate (lb/hr) = Max plastic throughput rate (lb/hr) * Weight % scrap

PTE of PM (lbs/hr) = Max throughput (lb/hr) * 1 ton/2,000 lbs * Weight % Scrap * Emission Factor (lb/ton)

PTE of PM (tons/yr) = PTE of PM (lb/hr) * 8,760 hrs/yr * 1 ton /2,000 lbs

326 IAC 6-3-2 Compliance

Maximum throughput (lb/hr)	Process weight rate (ton/hr)	Allowable emissions (lb/hr)	Control efficiency needed
101.1	0.05	0.55	45.1%

Methodology:

Process weight rate (ton/hr) = Maximum throughput (lb/hr) * 1 ton/2000 lbs

Allowable emission (lb/hr) = 4.10 * Process weight rate (ton/hr)^{0.67}, pursuant to 326 IAC 6-3-2(e)

Control efficiency needed = 1 - (Allowable emissions (lb/hr) / Uncontrolled PTE (lb/hr))

**Appendix A: Emissions Calculations
Solvent Welding**

Company Name: Mossberg Industries, Inc.
Address City IN Zip: 204 North Second Street, Garret, IN 46738
Registration Number: 033-24529-00101
Administrative Amendment Number: 033-33632-00101
Reviewer: Ryan Graunke

Material	Max usage (gals/hr)	Density (lbs/gal)	Weight % VOC	PTE of VOC (lbs/hr)	PTE of VOC (lbs/day)	PTE of VOC (tons/yr)	HAPs	
							Weight % Toluene	PTE of Toluene (tons/yr)
MEK Blend 65-48-3	0.37	6.87	100%	2.54	60.99	11.13	31%	3.45

Notes:

MEK Solvent Blend 65-48-3 is the only solvent used for welding, which is a process where solvent is used to join cores and flanges. The MEK solvent attacks the plastic to dissolve the polymer chains. When two plastic parts are placed together, they join together in a tight bond after the MEK solvent flashes off. Maximum hourly usage throughput value is based upon conservative worst-case scenario of annual purchase quantities. MSDS for the solvent was provided by the source in the application received by IDEM on September 10, 2013

Methodology:

PTE of VOC (lbs/hr) = Max usage (gal/hr) * Density (lbs/gal) * Weight % VOC

PTE of VOC (lbs/day) = PTE of VOC (lbs/hr) * 24 hrs/day

PTE of VOC (tons/yr) = PTE of VOC (lbs/hr) * 8760 hrs/yr * 1 ton/2000 lbs

PTE of HAPs (tons/yr) = Max usage (gal/hr) * Density (lbs/gal) * Weight % VOC * 8760 hrs/yr * 1 ton/2000 lbs

**Appendix A: Emissions Calculations
Cleaners**

Company Name: Mossberg Industries, Inc.
Address City IN Zip: 204 North Second Street, Garret, IN 46738
Registration Number: 033-24529-00101
Administrative Amendment Number: 033-33632-00101
Reviewer: Ryan Graunke

Process	Material	Density (lb/gal)	Max usage (gal/yr)	Max usage (lb/yr)	Weight % VOC	PTE of VOC (tons/yr)	Weight % Toluene	PTE of Toluene (tons/yr)	Weight % Tetrachloroethylene	PTE of Tetrachloroethylene (tons/yr)
Cold Cleaner Degreaser	Safety-Kleen 105 Solvent Recycled	6.70	145	971.5	100.00%	0.49	0.10%	0.0005	0.02%	0.0001
Mold Cleaner	MC-16 Mold Cleaner	12.09	N/A	216	9.70%	0.01	10.0%	0.011	90.0%	0.097

Notes:

Safety-Kleen 105 Solvent Recycled is an organic solvent used in a small parts washer in the part cleaning area serviced regularly by Safety-Kleen. Spent solvent is recycled off-site.

MC-16 Mold Cleaner is the only material used for mold cleaning. This material is used in 16 ounce aerosol spray cans.

Maximum usage of cold cleaner is based on conservative worst-case scenario.

Maximum usage of mold cleaner is based on conservative worst-case scenario of annual purchase quantities multiplied by a 1.5 safety factor.

MSDSs for the cleaners were provided by the source in the application received by IDEM on September 10, 2013

Cold cleaner is 100% hydrotreated light distillates (CAS # 64742-47-8), which is 0.1% toluene by weight.

Methodology:

Density (lb/gal) = Specific gravity * Density of water (lb/gal), or provided in MSDS

Max usage (lb/yr) (Cold cleaner) = Max usage (gal/hr) * Density (lb/gal)

PTE (tons/yr) = Max usage (lb/hr) * Weight % VOC or HAPs * 8760 hrs/yr * 1 ton/2000 lbs

**Appendix A: Emissions Calculations
Storage and handling**

Company Name: Mossberg Industries, Inc.
Address City IN Zip: 204 North Second Street, Garret, IN 46738
Registration Number: 033-24529-00101
Administrative Amendment Number: 033-33632-00101
Reviewer: Ryan Graunke

Emission unit	Maximum throughput (lb/hr)	PM Emission factor (lb/ton material)	PM ₁₀ Emission factor (lb/ton material)	PTE of PM (lb/hr)	PTE of PM (ton/yr)	PTE of PM ₁₀ (lb/hr)	PTE of PM ₁₀ (ton/yr)
Silos 1- 3 / Header Tube Load In	1,685	0.2	0.1	0.17	0.74	0.08	0.37

Notes:

Maximum throughput is the maximum throughput for all plastic injection molding and extruding machines, divided by half.
 Only half of the plastic pellets are pneumatically transferred to and stored in the silos.
 The facility utilizes 3 silos for the storage of plastic raw material ingredients.
 Emission factors are from the U.S. EPA WebFIRE database (SCC 3-01-018-11).
 Pursuant to 326 IAC 6-3-1(a)(14), this operation is exempt from 326 IAC 6-3-2 because the PTE of PM is less than 0.551 lb/hr.

Methodology:

PTE (lb/hr) = Maximum throughput (lb/hr) * 1 ton/2,000 lbs * Emission Factor (lb/ton)

PTE (ton/yr) = PTE of PM (lb/hr) * 8,760 hrs/yr * 1 ton /2,000 lbs

**Appendix A: Emissions Calculations
Welding**

Company Name: Mossberg Industries, Inc.
Address City IN Zip: 204 North Second Street, Garret, IN 46738
Registration Number: 033-24529-00101
Administrative Amendment Number: 033-33632-00101
Reviewer: Ryan Graunke

Welding

Process	Number of stations	Max electrode usage per station (lb/day)	Emission Factors (lb pollutant/lb electrode)		PTE (lb/hr)		PTE (ton/yr)	
			PM	Mn	PM	Mn	PM	Mn
Stick welder	1.0	0.10	0.0055	0.0005	0.001	0.00005	0.002	0.00022

Notes:

Emission factors for stick welding are default values for carbon steel.

Assume, PM = PM₁₀ = PM_{2.5}

Pursuant to 326 IAC 6-3-1(a)(14), the welding operation is exempt from 326 IAC 6-3-2 because the PTE of PM is less than 0.551 lb/hr.

Methodology:

PTE (lb/hr) = Number of stations * Max electrode usage (lb/hr) * Emission factor (lb pollutant/lb electrode)

PTE (ton/yr) = PTE (lb/hr) * 8760 hr/yr * 1 ton/2000 lbs

**Appendix A: Emissions Calculations
Natural Gas Combustion**

Company Name: Mossberg Industries, Inc.
Address City IN Zip: 204 North Second Street, Garret, IN 46738
Registration Number: 033-24529-00101
Administrative Amendment Number: 033-33632-00101
Reviewer: Ryan Graunke

Emission unit	Number of Units	Heat Input Capacity Each (MMBtu/hr)	Total Potential Throughput (MMCF/yr)
Combustion units	6	0.165	8.5
Air rotation unit	1	0.800	6.9
Split units	2	0.100	1.7
Carrier heater	1	0.140	1.2
Lennox heater	1	0.200	1.7
Powermatic air rotation units	2	0.840	14.4
Totals:	4.010		34.4

	Pollutant						
	PM*	PM ₁₀ *	Direct PM _{2.5} *	SO ₂	NO _x	VOC	CO
Emission Factor (lb/MMCF)	1.9	7.6	7.6	0.6	100.0	5.5	84.0
Potential Emission (tons/yr)	0.03	0.13	0.13	0.01	1.72	0.09	1.45

*PM emission factor is filterable PM only. PM₁₀ emission factor is filterable and condensable PM₁₀ combined. PM_{2.5} emission factor is filterable and condensable PM_{2.5} combined.

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor (lb/MMCF)	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission (tons/yr)	3.616E-05	2.066E-05	1.291E-03	3.099E-02	5.855E-05

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor (lb/MMCF)	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission (tons/yr)	8.610E-06	1.894E-05	2.411E-05	6.543E-06	3.616E-05
Total HAPs:				3.250E-02	

	Greenhouse Gas		
	CO ₂	CH ₄	N ₂ O
Emission Factor (lb/MMCF)	120,000	2.3	2.2
Potential Emission (tons/yr)	2,066	0.0	0.0
Summed Potential Emissions (tons/yr)		2,066	
CO ₂ e Total (tons/yr)		2,079	

Notes:

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

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

Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Methodology:

Total Heat Input Capacity (MMBtu/hr) = \sum (Heat Input Capacity Each (MMBtu/hr/unit) * Number of Units)

Total Potential Throughput (MMCF/yr) = Heat Input Capacity Each (MMBtu/hr) * Number of Units * 8,760 hrs/yr * High Heat Value (1 MMCF/1,020 MMBtu)

Potential Emission (tons/yr) = Total Potential Throughput (MMCF/yr) * Emission Factor (lb/MMCF) * 1 ton/2000 lbs

CO₂e (tons/yr) = CO₂ Potential Emission (tons/yr) * CO₂ GWP (1) + CH₄ Potential Emission (tons/yr) * CH₄ GWP (21) + N₂O Potential Emission (tons/yr) * N₂O GWP (310).



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

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

TO: James S. Khorshid
Mossberg Industries, Inc.
204 North Second Street
Garrett, Indiana 46738

DATE: September 30, 2013

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

SUBJECT: Final Decision
Administrative Amendment to Registration
033-33632-00101

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:
JosephVanCamp, 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 6/13/2013

Mail Code 61-53

IDEM Staff	PWAY 9/30/2013 Mossberg Industries, Inc 033-33632-00101 (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		James Khorshid Mossberg Industries, Inc 204 N Second St Garrett IN 46738 (Source CAATS)										
2		Mr. Steve Christman NISWMD 2320 W 800 S, P.O. Box 370 Ashley IN 46705 (Affected Party)										
3		DeKalb County Commissioners 100 South Main Street Auburn IN 46706 (Local Official)										
4		Ms. Diane Leroy 303 N. Jackson St. Auburn IN 46706 (Affected Party)										
5		Mr. Barry Fordanish R#3 1480 CR 66 Auburn IN 46706 (Affected Party)										
6		DeKalb County Health Department 220 E 7th St #110 Auburn IN 46706 (Health Department)										
7		Daniel & Sandy Trimmer 15021 Yellow River Road Columbia City IN 46725 (Affected Party)										
8		Brown & Sons Fuel Co. P.O. Box 665 Kendallville IN 46755 (Affected Party)										
9		Mr. Joseph VanCamp Cornerstone Environmental 312 E Diamond St. Kendallville IN 46755 (Consultant)										
10		Mr. Marty K. McCurdy 2550 County Road 27 Waterloo IN 46793 (Affected Party)										
11		Garrett City Council and Mayors Office P.O. Box 332, 130 S Randolph Garrett IN 46738 (Local Official)										
12												
13												
14												
15												

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