



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: March 10, 2014
RE: Jarden Home Brands / 035-34110-00001
FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision: Approval - Registration

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 4-21.5-3-4(d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

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 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
FN-REGIS.dot 6/13/2013



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RE-REGISTRATION OFFICE OF AIR QUALITY

**Jarden Home Brands
1501 E. Ninth Street
Muncie, Indiana 47302**

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.

Re-Registration No. 035-26677-00001

Issued by: *Original signed by:*
Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

Issuance Date: July 24, 2008

Registration Revision No. 035-34110-00001

Issued by: 
Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

Issuance Date: March 10, 2014

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 metal stamping operating facility.

Source Address:	1501 E. Ninth Street, Muncie, IN 47302
General Source Phone Number:	(765) 557-3222
SIC Code:	3466 (Crowns and Closures)
County Location:	Delaware 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) Four (4) Plastisol curing ovens, identified as L1, L2, L4 and L5, constructed in 1975, with a maximum heating capacity of 1.2 MMBtu/hr each, processing 87.25 pounds per hour of Plastisol (a non-VOC compound) each line, and 510 pounds per hour of metal each line, and exhausting through vents L1, L2, L4 and L5 respectively.
- (b) Two (2) Plastisol curing ovens, identified as 9E and 9W, constructed in 1975, with a maximum capacity of 2.4 MMBtu/hr each, processing 95 pounds per hour of Plastisol (a non-VOC compound) each line, and 510 pounds per hour of metal each line, and exhausting through vents 9E and 9W.
- (c) Three (3) cold degreaser parts washers, one constructed prior to 1980, one constructed in 2005 and one constructed in 2007, with a solvent usage rate of 0.5 gallons per hour total (182 gallons per year), using no control.

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 Re-Registration No. 035-26677-00001 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 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)]:

- (a) Four (4) Plastisol curing ovens, identified as L1, L2, L4 and L5, constructed in 1975, with a maximum heating capacity of 1.2 MMBtu/hr each, processing 87.25 pounds per hour of Plastisol (a non-VOC compound) each line, and 510 pounds per hour of metal each line, and exhausting through vents L1, L2, L4 and L5 respectively.
- (b) Two (2) Plastisol curing ovens, identified as 9E and 9W, constructed in 1975, with a maximum capacity of 2.4 MMBtu/hr each, processing 95 pounds per hour of Plastisol (a non-VOC compound) each line, and 510 pounds per hour of metal each line, and exhausting through vents 9E and 9W.
- (c) Three (3) cold degreaser parts washers, one constructed prior to 1980, one constructed in 2005 and one constructed in 2007, with a solvent usage rate of 0.5 gallons per hour total (182 gallons per year), using no control.

(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.1.1 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

- (a) Pursuant to 326 IAC 6-3-2(e), the particulate from the four (4) Plastisol curing ovens, identified as L1, L2, L4, and L5 combined shall not exceed 4.63 pounds per hour, when operating at a combined process weight rate of 1.2 tons per hour of metal and Plastisol total.
- (b) Pursuant to 326 IAC 6-3-2(e), the particulate from the two (2) Plastisol curing ovens, identified as 9E, and 9W combined shall not exceed 2.94 pounds per hour, when operating at a combined process weight rate of 0.605 tons per hour of metal and Plastisol total.

The pound per hour limitation for (a) and (b) 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:

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

D.1.2 326 IAC 8-3-2 (Cold Cleaner Degreaser Operating Requirements)

Pursuant to 326 IAC 8-3-2, the following shall apply to the cold degreaser parts washers constructed in 2005 and 2007:

- (a) The Permittee shall ensure the following control equipment and operating requirements are met:
 - (1) Equip the degreaser with a cover.
 - (2) Equip the degreaser with a device for draining cleaned parts.

- (3) Close the degreaser cover whenever parts are not being handled in the degreaser.
 - (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases.
 - (5) Provide a permanent, conspicuous label that lists the operating requirements in subdivisions (3), (4), (6), and (7).
 - (6) Store waste solvent only in closed containers.
 - (7) Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.
- (b) The Permittee shall ensure the following additional control equipment and operating requirements are met:
- (1) Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent used is insoluble in, and heavier than, water.
 - (C) A refrigerated chiller.
 - (D) Carbon adsorption.
 - (E) An alternative system of demonstrated equivalent or better control as those outlined in clauses (A) through (D) that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.
 - (2) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.
 - (3) If used, solvent spray:
 - (A) must be a solid, fluid stream; and
 - (B) shall be applied at a pressure that does not cause excessive splashing.

D.1.3 Material Requirements for Cold Cleaner Degreasers [326 IAC 8-3-8]

Pursuant to 326 IAC 8-3-8 (Material Requirements for Cold Cleaner Degreasers), on and after January 15, 2015, the Permittee shall not operate a cold cleaner degreaser with a solvent that has a VOC composite partial vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

Recordkeeping and Reporting [326 IAC 2-5.1-2(g)][326 IAC 2-5.5-4(b)]

D.1.4 Record Keeping Requirements [326 IAC 8-3-8]

- (a) On and after January 15, 2015, in order to document the compliance status with Condition D.1.3, the Permittee shall maintain each of the following records for each purchase:
- (1) The name and address of the solvent supplier.
 - (2) The date of purchase (or invoice/bill date of contract servicer indicating service date).
 - (3) The type of solvent purchased.
 - (4) The total volume of the solvent purchased
 - (5) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).
- (b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE 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:	Jarden Home Brands
Address:	1501 E. Ninth Street
City:	Muncie, Indiana 47302
Phone Number:	(765) 557-3189
Registration No.:	R035-26677-00001

I hereby certify that Jarden Home Brands is:

still in operation.

I hereby certify that Jarden Home Brands is:

no longer in operation.

in compliance with the requirements of Registration No.:035-26677-00001

not in compliance with the requirements of Registration No. 35-26677-00001.

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:

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

Technical Support Document (TSD) for a Registration Revision

Source Description and Location
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Source Name:	Jarden Home Brands
Source Location:	1501 E. Ninth Street, Muncie, IN 47302-3600
County:	Delaware
SIC Code:	3466 (Crowns and Closures)
Registration No.:	035-26677-00001
Registration Issuance Date:	July 24, 2008
Registration Revision No.:	035-34110-00001
Permit Reviewer:	Deborah Cole

On January 24, 2014, the Office of Air Quality (OAQ) received an application from Jarden Home Brands Corporation requesting a modification to their existing Registration.

Existing Approvals

The source was issued Re-Registration No. 035-26677-00001 on July 24, 2008.

County Attainment Status

The source is located in Delaware County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard. ¹
PM _{2.5}	Unclassifiable or attainment effective April 5, 2005, for the annual PM _{2.5} standard.
PM _{2.5}	Unclassifiable or attainment effective December 13, 2009, for the 24-hour PM _{2.5} standard.
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Nonattainment effective December 31, 2010, for a portion of the city of Muncie, Indiana bounded to the north by West Street/Hines Road, to the east by Cowan Road, to the south by West Fuson Road, and to the west by a line running south from the eastern edge of Victory Temple's driveway to South Hoyt Avenue and then along South Hoyt Avenue. Unclassifiable or attainment effective December 31, 2011, for the remainder of the county.

¹Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.

- (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. Delaware 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} Standards**
Delaware 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}, SO₂, and NOx 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) **Lead**
The source is not located in the portion of Delaware County classified as nonattainment for Pb.
- (d) **Other Criteria Pollutants**
Delaware County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

The fugitive emissions of criteria pollutants, hazardous air pollutants, and greenhouse gases are counted toward the determination of 326 IAC 2-5.1-2 (Registrations) applicability.

Status of the Existing Source

The table below summarizes the potential to emit of the entire source, prior to the proposed revision, after consideration of all enforceable limits established in the effective permits:

Process/Emission Unit	Potential To Emit of the Entire Source (tons/year)							
	PM	PM10*	SO ₂	NOx	VOC	CO	Total HAPs	Worst Single HAP
Natural gas-fired combustion-Plastisol ovens 1, 2, 4, 5, 9E and 9W	0.08	0.32	.025	4.20	0.23	3.5	0.079	0.076 (Hexane)
Plastisol processing 1, 2, 4, 5, 9E and 9W	9.21	9.21	-	-	-	-	-	-
Total PTE of Entire Source	9.29	9.53	.025	4.20	0.23	3.5	0.079	0.076 (Hexane)
Registration Levels	25	25	25	25	25	100	-	-

* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.
This table was taken from Re-Registration No.: 035-26677-00001, issued on July 24, 2008.

Description of Proposed Revision

The Office of Air Quality (OAQ) has reviewed an application, submitted by Jarden Home Brands on January 24, 2014, relating to the inclusion of three (3) cold degreaser parts washers which are located at the source but were not included in the application submitted for the Re-Registration issued on July 24, 2008. This omission was discovered during a compliance inspection by IDEM inspector Nandi Tissing on November 27, 2012.

The following lists the new emission units:

- (a) **Three (3) cold degreaser parts washers, one constructed prior to 1980, one constructed in 2005 and one constructed in 2007, with a solvent usage rate of 0.5 gallons per hour total (182 gallons per year), using no control.**

Enforcement Issues

There are no pending enforcement actions related to this revision.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – Registration Revision

The following table is used to determine the appropriate revision level under 326 IAC 2-5.5-6. This table reflects the PTE before controls of the proposed revision.

Process/ Emission Unit	PTE of Proposed Revision (tons/year)									
	PM	PM10	PM2.5	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e	Total HAPs	Worst Single HAP
Three (3) cold degreaser parts washers	0	0	0	0	0	0.61	0	0	0	0
Total PTE of Proposed Revision	0	0	0	0	0	0.61	0	0	0	0

This Registration is being revised through a Registration Revision pursuant to 326 IAC 2-5.5-6(g), because the revision involves the addition of existing emission units to the source which are not described in 326 IAC 2-5.5-6(d) (Registration Administrative Amendments).

PTE of the Entire Source After Issuance of the Registration Revision

The table below summarizes the potential to emit of the entire source after issuance of this revision, reflecting all limits, of the emission units.

Process/ Emission Unit	Potential To Emit of the Entire Source with the Revision (tons/year)									
	PM	PM10*	PM2.5*	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e**	Total HAPs	Worst Single HAP
Plastisol processing	9.21	9.21	9.21	0	0	0	0	0	0	0
Natural gas-fired combustion	0.08	0.32 0.31	0.31	0.025 0.02	4.20 4.12	0.23	3.46	4,976.93	0.08	0.07 (Hexane)
Three (3) parts washers (cold degreaser)	0	0	0	0	0	0.61	0	0	0	0
Total PTE of Entire Source	9.29	9.52	9.52	0.025 0.02	4.20 4.12	0.23 0.84	3.46	4,976.63	0.08	
Registration Levels	25	25	25	25	25	25	100	100,000	25	10

*Under the Part 70 Permit program (40 CFR 70), PM10 and PM2.5, not particulate matter (PM), are each considered as a "regulated air pollutant".

**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.

PM2.5 and GHG emissions have been added. It was also assumed that PM2.5 = PM10. Changes shown in strikeouts are corrections due to typographical errors.

The table below summarizes the potential to emit of the entire source after issuance of this revision, 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	NOx	VOC	CO	GHGs as CO ₂ e**	Total HAPs	Worst Single HAP
Plastisol processing	9.21	9.21	9.21	0	0	0	0	0	0	0
Natural gas-fired combustion	0.08	0.31	0.31	0.02	4.12	0.23	3.46	4,976.93	0.08	0.07 (Hexane)
Three (3) parts washers (cold degreaser)	0	0	0	0	0	0.61	0	0	0	0
Total PTE of Entire Source	9.29	9.52	9.52	0.02	4.12	0.84	3.46	4,976.63	0.08	
Registration Levels	25	25	25	25	25	25	100	100,000	25	10
<p>*Under the Part 70 Permit program (40 CFR 70), PM10 and PM2.5, not particulate matter (PM), are each 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>										

- (a) This revision will not change the registration status of the source because the uncontrolled/unlimited potential to emit of PM, PM₁₀, and PM_{2.5} from the entire source will still be within the ranges listed in 326 IAC 2-5.5-1(b)(1) and the PTE of all other regulated criteria pollutants will still be less than the ranges listed in 326 IAC 2-5.5-1(b)(1). Therefore, the source will still be subject to the provisions of 326 IAC 2-5.5 (Registrations).
- (b) This revision will not change the minor status of the source because the uncontrolled/unlimited potential to emit of any single HAP will still be less than ten (10) tons per year and the PTE of a combination of HAPs will still be less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7.
- (c) This revision will not change the minor status of the source, because the uncontrolled/unlimited potential to emit greenhouse gases (GHGs) will still be less than the Title V subject to regulation threshold of one hundred thousand (100,000) tons of CO₂ equivalent emissions (CO₂e) per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included for this proposed revision.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included for this proposed revision.

Compliance Assurance Monitoring (CAM)

- (g) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the registration, 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 Determination - Entire Source

The state rules applicable to the existing emission units at this source will not change as a result of this revision.

The cold degreaser parts cleaner which was constructed prior to 1980 is not subject to 326 IAC 8-3-1 because even though it was an existing facility as of January 1, 1980 and was performing organic solvent degreasing it was not located in one of the listed counties and the source did not have potential VOC emissions of 100 tons per year. There are no other 326 8 rules which apply to this cold degreaser parts cleaner.

The cold degreaser parts cleaners which were constructed after 1980 are subject to state rule 326 IAC 8-3-2 (Cold Cleaner Degreaser Control Equipment and Operating Requirements). These are new requirements for the source as a result of the inclusion of these two (2) cold degreaser parts washers and have been included in Section D.1.2 of the permit.

- (a) 326 IAC 2-5.5 (Registrations)
Registration applicability is discussed under the Permit Level Determination – Registration section above.
- (b) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The proposed revision is not subject to the requirements of 326 IAC 2-4.1, since the unlimited potential to emit of HAPs from the new units is less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs.
- (c) 326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.
- (d) 326 IAC 5-1 (Opacity Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this registration:
 - (1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- (e) 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.

Plastisol Curing

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

- (f) Pursuant to 326 IAC 6-3-2(e), the particulate from the four (4) Plastisol curing ovens, identified as L1, L2, L4, and L5 combined shall not exceed 4.63 pounds per hour when operating at a combined process weight rate of 1.2 tons per hour of metal and Plastisol total
- (g) Pursuant to 326 IAC 6-3-2(e), the particulate from the two (2) Plastisol curing ovens, identified as 9E and 9W combined shall not exceed 2.94 pounds per hour when operating at a combined

process weight rate of 0.61 tons per hour of metal and Plastisol total

The pound per hour limitation for (g) and (h) 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:

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

Since the potential to emit PM/PM₁₀ from the Plastisol curing operations are less than the allowable, the plastisol operations will comply with this rule. (See Attachment A for emission calculations)

Natural Gas Combustion Ovens-L1, L 2, L4, L5, 9E and 9W

- (h) 326 IAC 6-2 (Particulate Emissions from Indirect Heating Units)
The natural gas-fired ovens, and heaters are not subject to 326 IAC 6-2 as they are not sources of indirect heating.
- (i) 326 IAC 6-3 (Particulate Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-1(b)(14), the natural gas-fired ovens, are each exempt from the requirement of 326 IAC 6-3, because they each have a potential particulate emissions less than five hundred forty-one thousandths (0.551) pound per hour.

Parts Washers (cold degreasers)

- (j) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The proposed revision is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each new unit is less than twenty-five (25) tons per year.
 - (a) Pursuant to 326 IAC 8-3-2(a), the Permittee shall ensure the following control equipment and operating requirements are met for the three (3) parts washers:
 - (1) Equip the degreaser with a cover.
 - (2) Equip the degreaser with a device for draining cleaned parts.
 - (3) Close the degreaser cover whenever parts are not being handled in the degreaser.
 - (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases.
 - (5) Provide a permanent, conspicuous label that lists the operating requirements in subdivisions (3), (4), (6), and (7).
 - (6) Store waste solvent only in closed containers.
 - (7) Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.
 - (b) Pursuant to 326 IAC 8-3-2(b), the Permittee shall ensure the following additional control equipment and operating requirements are met the three (3) parts washers:

- (1) Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent used is insoluble in, and heavier than, water.
 - (C) A refrigerated chiller.
 - (D) Carbon adsorption.
 - (E) An alternative system of demonstrated equivalent or better control as those outlined in clauses (A) through (D) that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.
 - (2) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.
 - (3) If used, solvent spray:
 - (A) must be a solid, fluid stream; and
 - (B) shall be applied at a pressure that does not cause excessive splashing.
- (l) 326 IAC 8-3-8 (Material Requirements for Cold Cleaner Degreasers)
The Parts Washer would be subject to the requirements of 326 IAC 8-3-8 because it is a cold cleaner degreaser as defined in the rule. However, pursuant to 326 IAC 8-3-8(a)(2), the effective date of the rule for this source, located in Delaware County, is January 1, 2015. Therefore, at this time, the Parts Washer is not subject to these requirements.
- (m) There are no other 326 IAC 8 Rules are applicable to the source

Proposed Changes

*The following changes listed below are due to the proposed revision. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text:*

SECTION A SOURCE SUMMARY

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) Four (4) Plastisol curing ovens, identified as L1, L2, L4 and L5, constructed in 1975, with a maximum heating capacity of 1.2 MMBtu/hr each, processing 87.25 pounds per hour of plastisol (a non-VOC compound) each line, and 510 pounds per hour of metal each line, and exhausting through vents L1, L2, L4 and L5 respectively.
- (b) Two (2) Plastisol curing ovens, identified as 9E and 9W, constructed in 1975, with a maximum capacity of 2.4 MMBtu/hr each, processing 95 pounds per hour of plastisol (a non-VOC compound) each line, and 510 pounds per hour of metal each line, and exhausting through vents 9E and 9W.

- (c) **Three (3) cold degreaser parts washers, one constructed prior to 1980, one constructed in 2005 and one constructed in 2007, with a solvent usage rate of 0.5 gallons per hour total (182 gallons per year), using no control.**

...

SECTION D.1

OPERATION CONDITIONS

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

- (a) Four (4) Plastisol curing ovens, identified as L1, L2, L4 and L5, constructed in 1975, with a maximum heating capacity of 1.2 MMBtu/hr each, processing 87.25 pounds per hour of Plastisol (a non-VOC compound) each line, and 510 pounds per hour of metal each line, and exhausting through vents L1, L2, L4 and L5 respectively.
- (b) Two (2) Plastisol curing ovens, identified as 9E and 9W, constructed in 1975, with a maximum capacity of 2.4 MMBtu/hr each, processing 95 pounds per hour of plastisol (a non-VOC compound) each line, and 510 pounds per hour of metal each line, and exhausting through vents 9E and 9W.
- (c) **Three (3) cold degreaser parts washers, one constructed prior to 1980, one constructed in 2005 and one constructed in 2007, with a solvent usage rate of 0.5 gallons per hour total (182 gallons per year), using no control.**

(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.1.2 326 IAC 8-3-2 (Cold Cleaner Degreaser Operating Requirements)

Pursuant to 326 IAC 8-3-2, the following shall apply to the cold degreaser parts washers constructed in 2005 and 2007:

- (a) **The Permittee shall ensure the following control equipment and operating requirements are met:**
- (1) **Equip the degreaser with a cover.**
 - (2) **Equip the degreaser with a device for draining cleaned parts.**
 - (3) **Close the degreaser cover whenever parts are not being handled in the degreaser.**
 - (4) **Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases.**
 - (5) **Provide a permanent, conspicuous label that lists the operating requirements in subdivisions (3), (4), (6), and (7).**
 - (6) **Store waste solvent only in closed containers.**
 - (7) **Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.**

- (b) The Permittee shall ensure the following additional control equipment and operating requirements are met:**
- (1) Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):**
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.**
 - (B) A water cover when solvent used is insoluble in, and heavier than, water.**
 - (C) A refrigerated chiller.**
 - (D) Carbon adsorption.**
 - (E) An alternative system of demonstrated equivalent or better control as those outlined in clauses (A) through (D) that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.**
 - (2) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.**
 - (3) If used, solvent spray:**
 - (A) must be a solid, fluid stream; and**
 - (B) shall be applied at a pressure that does not cause excessive splashing.**

D.1.3 Material Requirements for Cold Cleaner Degreasers [326 IAC 8-3-8]

Pursuant to 326 IAC 8-3-8 (Material Requirements for Cold Cleaner Degreasers), on and after January 15, 2015, the Permittee shall not operate a cold cleaner degreaser with a solvent that has a VOC composite partial vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

Recordkeeping and Reporting [326 IAC 2-5.1-2(g)][326 IAC 2-5.5-4(b)]

D.1.4 Record Keeping Requirements [326 IAC 8-3-8]

- (a) On and after January 15, 2015, in order to document the compliance status with Condition D.1.3, the Permittee shall maintain each of the following records for each purchase:**
- (1) The name and address of the solvent supplier.**
 - (2) The date of purchase (or invoice/bill date of contract servicer indicating service date).**
 - (3) The type of solvent purchased.**
 - (4) The total volume of the solvent purchased**
 - (5) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).**

(b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.

...

IDEM, OAQ has decided to make the following changes to the registration. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text:

Section A.1 of the permit has been revised to remove the reference to the source mailing address. IDEM, OAQ will continue to maintain records of the mailing address.

The Standard Industrial Code (SIC) has also been corrected.

SECTION A SOURCE SUMMARY

A.1 General Information

The Registrant owns and operates a stationary metal stamping operating facility.

Source Address:	1501 E. Ninth Street, Muncie, IN 47302
Mailing Address:	1501 E. Ninth Street, Muncie, IN 47302
General Source Phone Number:	(765) 557-3222
SIC Code:	3714 3466 (Crowns and Closures)
County Location:	Delaware County
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Registration

...

Section B - General Conditions has been updated to reflect the requirement to prepare and maintain a Preventive Maintenance Plan if required by specific condition(s) in Section D of this registration.

SECTION B GENERAL CONDITIONS

...

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.**

...

Conclusion and Recommendation

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 January 24, 2014.

The construction and operation of this proposed revision shall be subject to the conditions of the attached proposed Registration Revision No. 035-34110-00001. The staff recommends to the Commissioner that this Registration Revision be approved.

IDEM Contact

- (a) Questions regarding this proposed registration can be directed to Deborah Cole at the Indiana Department 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) 234-5377 or toll free at 1-800-451-6027, ext. 4-5377.
- (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.in.gov/idem

**Appendix A: Emissions Calculations
Emissions Summary**

**Company Name: Jarden Home Brands
Source Address: 1501 E. Ninth Street, Muncie, IN 47302-3600
Registration Number: R035-26677-00001
Registration Revision: R035-34110-00001
Reviewer: Deborah Cole**

Potential Emissions Summary in tons per year

Process/Emission Units	PM	PM10	PM2.5	SO₂	NO_x	VOC	CO	GHG	Combined HAPs	Worst Single HAP	
Plastisol Processing	9.21	9.21	9.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Natural Gas Combustion	0.08	0.31	0.31	0.02	4.12	0.23	3.46	4,976.22	0.08	0.07	Hexane
Parts Washers	0.00	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.00	
TOTALS	9.29	9.52	9.52	0.02	4.12	0.84	3.46	4,976.22	0.08		

Assume PM10 = PM2.5

Calculations based on 8,760 hours of operation per year.

**Appendix A: Emissions Calculations
Plastisol Application**

**Company Name: Jarden Home Brands
Source Address: 1501 E. Ninth Street, Muncie, IN 47302-3600
Registration Number: R035-26677-00001
Registration Revision: R035-34110-00001
Reviewer: Deborah Cole**

Unit ID	Maximum Plastisol throughput		*Emission Factor	PTE of PM/PM10	**PTE of PM/PM10	PTE of PM/PM10	Allowable PM/PM10
	lbs/hr	tons/yr	EF	tons/yr	tons/yr	lbs/hr	lbs/hr
Plastisol processing- 1, 2, 4, 5	349	1,528.62	0.003	4.59	5.96	1.36	4.61
Plastisol processing- 9E and 9W	190	832.20	0.003	2.50	3.25	0.74	2.94
Total				7.08	9.21		

Plastisol process does not release VOCs to the atmosphere, because the solvent used in the plastisol compound does not contain volatile organic compounds. There are no HAPs based on MSDS data.

*The 3% of plastisol is volatilized in the drying oven of which 10% is emitted as particulates, and the rest is considered water and CO2.

*This number is based on the Registration Permit # 18-06-88-0229 issued May 18, 1989.

**To be conservative the PTE of PM and PM10 have been increased by 30%

Methodology:

Maximum Plastisol Throughput (tons/yr) = [Maximum Plastisol throughput (lbs/hr)] * [8760 (hrs /yr)] * [tons/2000lbs]

*Emission Factor PM/PM10 (EF) = [process evaporation rate 3%] * [particulate emissions 10%] = 0.003

PTE of PM/PM10 (tons/yr) = [Maximum Plastisol throughput (tons/yr)] * EF

PTE of PM/PM10 (lbs/hr) = [PTE of PM/PM10 (tons/yr)] * [2000 lbs/ton] * [yr/hrs 8760]

Compliance with 326 IAC 6-3-2:

Allowable Emissions, $E = 4.10 * P^{0.67}$ (for weight rates up to 60,000 lb/hr)
 where E = emissions in lbs/hr
 P = process weight in tons/hr
 Process weight rate for L1, L2, L4, and L5 (lbs/hr) = $[87.25 * 4 \text{ (plastisol)} + 510 * 4 \text{ (metal)}]$ lbs/hr = 2,389 pounds per hour
 Process weight rate for 9E and 9W (lbs/hr) = $[95 * 2 \text{ (plastisol)} + 510 * 2 \text{ (metal)}]$ lbs/hr = 1,210 pounds per hour

PM = Particulate Matter

PM10 = Particulate Matter (<10 um)

PTE = Potential to Emit

Appendix A: Emissions Calculations

Natural Gas Combustion Only
MM BTU/HR <100
Company Name: Jarden Home Brands
Source Address: 1501 E. Ninth Street, Muncie, IN 47302-3600
Registration Number: R035-26677-00001
Registration Revision: R035-34110-00001
Reviewer: Deborah Cole

Heat Input Capacity MMBtu/hr	HHV mmBtu	Potential Throughput MMCF/yr
	mmscf	
9.6	1020	82.4

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.08	0.31	0.31	0.02	4.12	0.23	3.46

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
 PM2.5 emission factor is filterable and condensable PM2.5 combined.
 **Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
 MMBtu = 1,000,000 Btu
 MMCF = 1,000,000 Cubic Feet of Gas
 Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
 Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
 Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

HAPS Calculations

Emission Factor in lb/MMcf	HAPs - Organics					Total - Organics
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	8.657E-05	4.947E-05	3.092E-03	7.420E-02	1.402E-04	7.757E-02

Emission Factor in lb/MMcf	HAPs - Metals					Total - Metals
	Lead	Cadmium	Chromium	Manganese	Nickel	
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	2.061E-05	4.535E-05	5.771E-05	1.566E-05	8.657E-05	2.259E-04
						Total HAPs
						7.780E-02
						Worst HAP
						7.420E-02

Methodology is the same as above.

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

Greenhouse Gas Calculations

Emission Factor in lb/MMcf	Greenhouse Gas		
	CO2	CH4	N2O
	120,000	2.3	2.2
Potential Emission in tons/yr	4,946.82	0.09	0.09
Summed Potential Emissions in tons/yr	4,947.01		
CO2e Total in tons/yr based on 11/29/2013 federal GWPs	4,976.22		
CO2e Total in tons/yr based on 10/30/2009 federal GWPs	4,976.93		

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
 Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
 Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
 Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
 CO2e (tons/yr) based on 11/29/2013 federal GWPs= CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).
 CO2e (tons/yr) based on 10/30/2009 federal GWPs = 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).

Appendix A: Emission Calculations
VOC and HAP Emissions from Enclosed Tank Washers

Company Name: Jarden Home Brands
Source Address: 1501 E. Ninth Street, Muncie, IN 47302-3600
Registration Number: R035-26677-00001
Registration Revision: R035-34110-00001
Reviewer: Deborah Cole

Three (3) Cold Degreaser Parts Washers

Material	Density (lbs/gal)	Maximum Usage (gal/yr)	Weight % VOC	PTE VOC (tons/yr)
Crystal Clean 142 ⁺ Mineral Spirits	6.70	182.50	100%	0.61

Note:

The solvent used is a petroleum distillate CAS No.: 64742-47-8. There are no HAPs associated with this solvent.

Methodology

PTE VOC (tons/yr) = Density (lbs/gal) x Maximum Usage (gal/yr) x Weight % VOC x 1 ton/2,000 lbs



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

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

TO: Robert Retz
Jarden Home Brands
1501 E 9th Street
Muncie, IN 47302

DATE: March 10, 2014

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

SUBJECT: Final Decision
Registration
035-34110-00001

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:
Ryan Robertson – Plant Manager
OAQ Permits Branch Interested Parties List

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

Final Applicant Cover letter.dot 6/13/2013

Mail Code 61-53

IDEM Staff	GHOTOPP 3/10/2014 Jarden Home Brands 035-34110-00001 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		Robert Retz Jarden Home Brands 1501 E 9th St Muncie IN 47302 (Source CAATS) via confirmed delivery										
2		Ryan Robertson Plant Mgr Jarden Home Brands 1501 E 9th St Muncie IN 47302 (RO CAATS)										
3		Delaware County Health Department 200 W Main St, County Bldg Room 207-309 Muncie IN 47305-2874 (Health Department)										
4		Delaware County Commissioners 100 West Main Street Muncie IN 47305 (Local Official)										
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