



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: January 18, 2011

RE: North American Packaging Corp. / 127 - 29723 - 00120

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

Notice of Decision – Approval

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

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

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

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

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

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

Enclosures
FNPER-AM.dot12/3/07



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Cheri Jabaay, Purchasing Manager
North American Packaging Corporation
4002 Montdale Drive
Valparaiso, IN 46383

January 18, 2011

Re: Exempt Construction and Operation Status,
127-29723-00120

Dear Ms Jabaay:

The application from North American Packaging Corporation, received on September 24, 2010, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following stationary manufacturer of high density polyethylene (HDPE) bottles of various sizes, shapes and types and HDPE open head pails, located at 4002 Montdale Drive, Valparaiso, Indiana is classified as exempt from air pollution permit requirements:

- (a) One (1) injection molding machine, identified as EU1, constructed in 2006, with a maximum capacity of 456 pounds of HDPE resin per hour exhausting to the indoors.
- (b) One (1) injection molding machine, identified as EU2, constructed in 2006, with a maximum capacity of 456 pounds of HDPE resin per hour exhausting to the indoors.
- (c) One (1) injection molding machine, identified as EU3, constructed in 2000, with a maximum capacity of 153 pounds of HDPE resin per hour exhausting to the indoors.
- (d) One (1) injection molding machine, identified as EU4, constructed in 2006, with a maximum capacity of 253 pounds of HDPE resin per hour exhausting to the indoors.
- (e) One (1) injection molding machine, identified as EU5, constructed in 2008, with a maximum capacity of 250 pounds of HDPE resin per hour exhausting to the indoors.
- (f) One (1) injection molding machine, identified as EU6, constructed in 2010, with a maximum capacity of 240 pounds of HDPE resin per hour exhausting to the indoors.
- (g) One (1) injection molding machine, identified as EU7, constructed in 2005, with a maximum capacity of 368 pounds of HDPE resin per hour exhausting to the indoors.
- (h) One (1) injection molding machine, identified as EU8, constructed in 2006, with a maximum capacity of 317 pounds of HDPE resin per hour exhausting to the indoors.
- (i) One (1) injection molding machine, identified as EU9, constructed in 2000, with a maximum capacity of 386 pounds of HDPE resin per hour exhausting to the indoors.
- (j) One (1) injection molding machine, identified as EU10, constructed in 2005, with a maximum capacity of 407 pounds of HDPE resin per hour exhausting to the indoors.
- (k) One (1) injection molding machine, identified as EU11, constructed in 2006, with a maximum capacity of 381 pounds of HDPE resin per hour exhausting to the indoors.

- (l) One (1) injection molding machine, identified as EU12, constructed in 2002, with a maximum capacity of 350 pounds of HDPE resin per hour exhausting to the indoors.
- (m) One (1) injection molding machine, identified as EU13, constructed in 2002, with a maximum capacity of 377 pounds of HDPE resin per hour exhausting to the indoors.
- (n) One (1) injection molding machine, identified as EU14, constructed in 2004, with a maximum capacity of 387 pounds of HDPE resin per hour exhausting to the indoors.
- (o) One (1) injection molding machine, identified as EU15, constructed in 2005, with a maximum capacity of 389 pounds of HDPE resin per hour exhausting to the indoors.
- (p) One (1) injection molding machine, identified as EU16, constructed in 2008, with a maximum capacity of 386 pounds of HDPE resin per hour exhausting to the indoors.
- (q) One (1) injection molding machine, identified as EU17, constructed in 2005, with a maximum capacity of 385 pounds of HDPE resin per hour exhausting to the indoors.
- (r) One (1) injection molding machine, identified as EU18, constructed in 2005, with a maximum capacity of 396 pounds of HDPE resin per hour exhausting to the indoors.
- (s) One (1) injection molding machine, identified as EU19, constructed in 2002, with a maximum capacity of 386 pounds of HDPE resin per hour exhausting to the indoors.
- (t) One (1) injection molding machine, identified as EU20, constructed in 2002, with a maximum capacity of 386 pounds of HDPE resin per hour exhausting to the indoors.
- (u) One (1) injection molding machine, identified as EU21, constructed in 2002, with a maximum capacity of 387 pounds of HDPE resin per hour exhausting to the indoors.
- (v) One (1) injection molding machine, identified as EU22, constructed in 1999, with a maximum capacity of 400 pounds of HDPE resin per hour exhausting to the indoors.
- (w) Three (3) scrap regrinders, identified as EU23, and constructed in 1994 with a maximum capacity of 237 pounds of scrap HDPE resin per hour combined, controlled by an integral cyclone, and exhausting to the indoors. This cyclone is primarily used to recover plastic pellets from the regrinders.
- (x) Two, (2) dry offset printers, identified as EU24 and EU25, constructed in 1994, with a maximum throughput of one (1) pound of VOC based ink per hour.
- (y) Seventeen (17) process heaters, identified as EU26 - EU43, constructed in 1994 with a combined maximum heat input capacity of 0.901 MMBtu per hour.

The following conditions shall be applicable:

- (1) 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:
 - (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.

- (2) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), 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 325 IAC 6-4 (Fugitive Dust Emissions).
- (3) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
The injection molding operation at this source, identified as EU1 through EU22, is not subject to the requirements of 326 IAC 6-3-2 pursuant to 326 IAC 6-3-1(b)(14) because each injection molding machine has a potential to emit of less than five hundred fifty-one thousandths (0.551) pounds per hour.
- (4) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the three (3) scrap regrinders (EU23) shall not exceed 0.98 pounds per hour when operating at a process weight rate of 0.12 tons per hour. The pound 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:

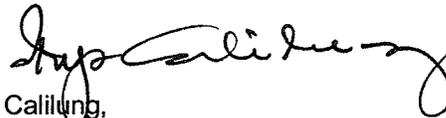
$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The integral cyclone shall be in operation at all times the regrinding machines are in operation in order to comply with this limit.

This exemption is the first air approval issued to this source. A copy of the Exemption 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

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. If you have any questions on this matter, please contact Deborah Cole, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251, at 317-234-5377 or at 1-800-451-6027 (ext 4-5377).

Sincerely,



Iryn Calilung,
Section Chief
Permits Branch
Office of Air Quality

IC/dac

cc: File - Porter County
Porter County Health Department
Compliance and Enforcement Branch
Billing, Licensing and Training Section

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for an Exemption

Source Description and Location

Source Name: North American Packaging Corporation
Source Location: 4002 Montdale Drive, Valparaiso, IN 46383
County: Porter
SIC Code: 3089
Exemption No.: 127-29723-00120
Permit Reviewer: Deborah Cole

On September 24, 2010, the Office of Air Quality (OAQ) received an application from North American Packaging Corporation related to the operation of an existing stationary source manufacturing high density polyethylene (HDPE) bottles of various sizes and high density polyethylene (HDPE) open-head pails.

Existing Approvals

There have been no previous approvals issued to this source.

County Attainment Status

The source is located in Porter County.

Pollutant	Designation
SO ₂	Cannot be classified for the area bounded on the north by Lake Michigan; on the west by the Lake County and Porter County line; on the south by I-80 and I-90; and on the east by the LaPorte County and Porter County line. The remainder of Porter County is better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Attainment effective June 4, 2010. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.

¹The U. S. EPA has acknowledged in both the proposed and final rulemaking for this redesignation that the anti-backsliding provisions for the 1-hour ozone standard no longer apply as a result of the redesignation under the 8-hour ozone standard. Therefore, permits in Porter County are no longer subject to review pursuant to Emission Offset, 326 IAC 2-3.

Basic nonattainment designation effective federally April 5, 2005, for PM_{2.5}.

- (a) **Ozone Standards**
 Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Porter 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}**
 U.S. EPA, in the Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Porter County as nonattainment for PM_{2.5}. On March 7, 2005 the Indiana Attorney General's Office, on behalf of IDEM, filed a lawsuit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment areas without sufficient data.

However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's New Source Review Rule for PM_{2.5} promulgated on May 8, 2008. These rules became effective on July 15, 2008. Therefore, direct PM_{2.5} and SO₂ emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.

- (c) Other Criteria Pollutants
Porter County has been classified as attainment or unclassifiable in Indiana for all other criteria. 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 and hazardous air pollutants are counted toward the determination of 326 IAC 2-1.1-3 (Exemptions) applicability.

Background and Description of Emission Units and Pollution Control Equipment

The Office of Air Quality (OAQ) has reviewed an application, submitted by North American Packaging Corporation on September 24, 2010, relating to a stationary source manufacturing HDPE bottles of various sizes and HDPE open head pails. After a review of their process and calculations, IDEM determined that the potential to emit met the applicability threshold for an Exemption.

The source consists of the following existing emission unit(s):

- (a) One (1) injection molding machine, identified as EU1, constructed in 2006, with a maximum capacity of 456 pounds of HDPE resin per hour exhausting to the indoors.
- (b) One (1) injection molding machine, identified as EU2, constructed in 2006, with a maximum capacity of 456 pounds of HDPE resin per hour exhausting to the indoors.
- (c) One (1) injection molding machine, identified as EU3, constructed in 2000, with a maximum capacity of 153 pounds of HDPE resin per hour exhausting to the indoors.
- (d) One (1) injection molding machine, identified as EU4, constructed in 2006, with a maximum capacity of 253 pounds of HDPE resin per hour exhausting to the indoors.
- (e) One (1) injection molding machine, identified as EU5, constructed in 2008, with a maximum capacity of 250 pounds of HDPE resin per hour exhausting to the indoors.
- (f) One (1) injection molding machine, identified as EU6, constructed in 2010, with a maximum capacity of 240 pounds of HDPE resin per hour exhausting to the indoors.
- (g) One (1) injection molding machine, identified as EU7, constructed in 2005, with a maximum capacity of 368 pounds of HDPE resin per hour exhausting to the indoors.
- (h) One (1) injection molding machine, identified as EU8, constructed in 2006, with a maximum capacity of 317 pounds of HDPE resin per hour exhausting to the indoors.
- (i) One (1) injection molding machine, identified as EU9, constructed in 2000, with a maximum capacity of 386 pounds of HDPE resin per hour exhausting to the indoors.
- (j) One (1) injection molding machine, identified as EU10, constructed in 2005, with a maximum capacity of 407 pounds of HDPE resin per hour exhausting to the indoors.
- (k) One (1) injection molding machine, identified as EU11, constructed in 2006, with a maximum

- capacity of 381 pounds of HDPE resin per hour exhausting to the indoors.
- (l) One (1) injection molding machine, identified as EU12, constructed in 2002, with a maximum capacity of 350 pounds of HDPE resin per hour exhausting to the indoors.
 - (m) One (1) injection molding machine, identified as EU13, constructed in 2002, with a maximum capacity of 377 pounds of HDPE resin per hour exhausting to the indoors.
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 - (o) One (1) injection molding machine, identified as EU15, constructed in 2005, with a maximum capacity of 389 pounds of HDPE resin per hour exhausting to the indoors.
 - (p) One (1) injection molding machine, identified as EU16, constructed in 2008, with a maximum capacity of 386 pounds of HDPE resin per hour exhausting to the indoors.
 - (q) One (1) injection molding machine, identified as EU17, constructed in 2005, with a maximum capacity of 385 pounds of HDPE resin per hour exhausting to the indoors.
 - (r) One (1) injection molding machine, identified as EU18, constructed in 2005, with a maximum capacity of 396 pounds of HDPE resin per hour exhausting to the indoors.
 - (s) One (1) injection molding machine, identified as EU19, constructed in 2002, with a maximum capacity of 386 pounds of HDPE resin per hour exhausting to the indoors.
 - (t) One (1) injection molding machine, identified as EU20, constructed in 2002, with a maximum capacity of 386 pounds of HDPE resin per hour exhausting to the indoors.
 - (u) One (1) injection molding machine, identified as EU21, constructed in 2002, with a maximum capacity of 387 pounds of HDPE resin per hour exhausting to the indoors.
 - (v) One (1) injection molding machine, identified as EU22, constructed in 1999, with a maximum capacity of 400 pounds of HDPE resin per hour exhausting to the indoors.
 - (w) Three (3) scrap regrinders, identified as EU23, and constructed in 1994 with a maximum capacity of 237 pounds of scrap HDPE resin per hour combined, controlled by an integral cyclone, and exhausting to the indoors. This cyclone is primarily used to recover plastic pellets from the regrinders.
 - (x) Two, (2) dry offset printers, identified as EU24 and EU 25, constructed in 1994, with a maximum throughput of one (1) pound of VOC-based ink per hour.
 - (y) Seventeen (17) process heaters, identified as EU26 - EU43, constructed in 1994 with a combined maximum heat input capacity of 0.901 MMBtu per hour.

"Integral Part of the Process" Determination

With this application, the Permittee has submitted the following information to justify why the cyclone for the recovery of plastic pellets from the regrind operation, consisting of three (3) grinders, controlled by an integral cyclone, should be considered an integral part of the injection molding process.

- (1) The control equipment serves a primary purpose other than pollution control.
The primary purpose of the cyclone is the recovery of plastic pellets from the regrind operation. The three (3) scrap regrinding machines serve all twenty-two (22) of the injection molding machines and are treated as one process because they

do not have different throughput rates and while different injection molding machines may be operating at different times with different throughput rates, the grinders are always in operation during facility operating hours. Any off-spec material is sent to the scrap regrinders so that it can be reused in the molding process.

- (2) The control equipment has an overwhelming positive net economic effect.
 It is estimated that approximately 865,000 pounds of material is recovered for reuse. The economic benefit of this is as follows:

Equipment Cost

Three (3) grinders, originally purchased in 1994, with a purchase price of \$15,000 each	\$45,000.00
Assuming no annualized cost of the grinders	\$0.00
Current annualized costs of \$150 for operation and maintenance of each grinder	\$450.00
Total annualized costs for operation of grinders	\$450.00

Scrap Recovery

Actual Plastic Usage for 2008 (lbs)	28,900,000
Facility Wide Scrap (%)	0.03
Total scrap from regrind process (lbs)	867,000
Scrap recovered from the regrind process (%)	0.9979
Amount of plastic recovered (lbs)	865,179

Product Savings

Amount of plastic recovered (lbs)	865,179
Cost of virgin polypropylene (dollars per lb)	0.577
Savings from use of recovered material (dollars)	\$499,208.46
Annual operation and maintenance costs for grinders	\$450.00
Total Cost Savings from Recovered Material	\$498,758.46

IDEM, OAQ has evaluated the information submitted and agrees that the three (3) scrap regrinders controlled with an integral cyclone should be considered an integral part of the entire the injection molding operation. This determination is based on the fact that the cyclone is in operation at all times any of the injection molding machines are operating and the plastic scrap that is collected by this system is sent back through to the injection molding operation where it is mixed with the virgin polypropylene and reused, resulting in an overwhelmingly positive net economic benefit of nearly \$500,000 per year. Therefore, the permitting level will be determined using the potential to emit after the three (3) regrinders, controlled by the integral cyclone. Operating conditions in the proposed permit will specify that this cyclone shall operate at all times when the scrap regrinders are in operation.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted emission units at this source.

Enforcement Issues

There are no pending enforcement actions related to this source.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

There are no emission factors available in U.S. EPA's AP- 42 Emission Factor Guide or FIRE for the grinding of plastic; therefore, the emission factors for PM, VOC and HAPs were taken from from an article entitled *Development of Emission Factors for Polyethylene Processing* which

appeared in the Journal of Air and Waste Management Association, July 1996, Volume 46, pp. 569-580.

IDEM had previously accepted use of these emission factors in Permit Registration #097-19528-00445, issued on January 29, 2003, for the injection molding process located at the Indianapolis facility of North American Packaging Corporation. For this permit application, IDEM's Compliance Data Section reviewed the alternative emission factors and calculation methodology and confirmed that these emission factors were acceptable for the injection molding process.

Permit Level Determination – Exemption

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/ Emission Unit	Potential To Emit of the Entire Source (tons/year)								
	PM	PM10 *	PM2.5	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
Injection Molding Machines	0.90	0.90	0.90	-	-	1.28	-	0.006	0.002 (Formaldehyde and Acetaldehyde)
Regrinders**	0.01	0.01	0.01	-	-	-	-	-	
Dry Offset Printing Machines	-	-	-	-	-	0.002	-	-	
Natural Gas Combustion	0.01	0.03	0.02	0.00	0.39	0.02	0.33	0.007	0.007 (Hexane)
Cleanup	-	-	-	-	-	4.32	-	-	
Total PTE of Entire Source	0.91	0.94	0.93	0.00	0.39	5.63	0.33	0.013	
Exemptions Levels	5	5	5	10	10	5 or 10	25	25	10
negl. = negligible * 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". ** The PTE for the regrinders was determined after control since the cyclone is integral to the process as plastic pellets recovery system.									

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of all regulated criteria pollutants are less than the levels listed in 326 IAC 2-1.1-3(e)(1). Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3 (Exemptions).
- (b) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is 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.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

- (a) The requirements of the New Source Performance Standards for Flexible Vinyl and Urethane Coating and Printing (NSPS), (40 CFR Part 60.580 - 60.585, Subpart FFF) are not included in the permit since the source does not perform rotogravure printing on flexible vinyl or urethane products.
- (b) There are no other New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (a) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP): Printing and Publishing Industry, 40 CFR 63, Subpart KK (326 IAC 20-25), are not included in the permit, since this source is not a major source of HAPs and does not perform publication rotogravure, packaging rotogravure or flexographic printing.
- (b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs): Reinforced Plastic Composites Production, 40 CFR 63, Subpart WWWW (4W)(326 IAC 20-25), are not included in the permit, since this source is not a major source of HAPs and does not produce reinforced plastic composites, as defined in §63.5935.
- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Chemical Manufacturing Area Sources, 40 CFR 63, Subpart VVVVVV (6V) (326 IAC 20), are not included in the permit, since pursuant to 40 CFR 63.11494(c)(2)(iii), fabricating operations that convert an already produced solid polymer into a different shape by melting or mixing the polymer and then forcing it or pulling it through an orifice to create an extruded product are exempt from the rule.
- (d) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

Compliance Assurance Monitoring (CAM)

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is 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

The following state rules are applicable to the source:

- (a) 326 IAC 2-1.1-3 (Exemptions)
Exemption applicability is discussed under the Permit Level Determination – Exemption section above.
- (b) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is 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 2-4.1.

- (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 located in Porter County, it has actual emissions of NOx and VOC of less than twenty-five (25) tons per year, 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 permit:
- (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.
- (f) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source is not subject to the requirements of 326 IAC 6-5, because the source does not have potential fugitive particulate emissions greater than 25 tons per year. Therefore, 326 IAC 6-5 does not apply.

Injection Molding Operation

- (a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
The injection molding operation at this source, identified as EU1 through EU22, is not subject to the requirements of 326 IAC 6-3-2 pursuant to 326 IAC 6-3-1(b)(14) because each injection molding machine has a potential to emit of less than five hundred fifty-one thousandths (0.551) pounds per hour. (See Appendix A - page 3 for calculations)
- (b) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The injection molding operation at this source, identified as EU1 through EU22, is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each emission unit is less than twenty-five (25) tons per year.
- (c) 326 IAC 8-7 (Specific VOC Reduction Requirements for Lake, Porter, Clark and Floyd Counties)
The injection molding operation at this source, identified as EU1 through EU22, is not subject to the requirements of 326 IAC 8-7 even though the source is located in Porter County because the unlimited VOC potential emissions are less than twenty-five (25) tons per year.
- (d) There are no VOC 326 IAC 8 rules that apply to the injection molding operation at this source, identified as EU1 through EU22.

Regrinding Machines

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

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the three (3) scrap regrinders (EU23) shall not exceed 0.98 pounds per hour total when operating at a process weight rate of 0.12 tons per hour. The pound 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:

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

Based on the calculations in Appendix A, (Grinding Emission p. 3) the uncontrolled overall potential emission rate is:

$$0.0096 \text{ tons/year} \times (2000 \text{ lbs/ton} / 8760 \text{ hours/year}) = 0.002 \text{ lbs/hour.}$$

The integral cyclone shall be in operation at all times the grinding machines are in operation, in order to comply with this limit.

Note: The 3 scrap regrinders are considered as one unit as they operate as one unit when the injection molding is operating.

- (b) There are no VOC 326 IAC 8 rules that apply to the scrap grinding operation at this source, identified as EU23.

Dry Offset Printing Operation

- (a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
The dry offset printing operation, consisting of two (2) printers identified as EU24 and EU25, is not subject to the requirements of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) because the dry offset printing operation is not a manufacturing process.
- (b) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The dry offset printing operation, consisting of two (2) printers identified as EU24 and EU25, is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each emission unit is less than twenty-five (25) tons per year.
- (c) 326 IAC 8-5-5 (Graphic Arts Operations)
The dry offset printing operation, consisting of two (2) printers identified as EU24 and EU25, is not subject to the requirements of 326 IAC 8-5-5 even though the source is located in Porter County. The printing process is dry offset rather than rotogravure or flexographic printing and the unlimited VOC potential emissions are less than twenty-five (25) tons per year.
- (d) There are no VOC 326 IAC 8 rules that apply to the dry offset printing operation at this source, consisting of two (2) printers identified as EU24 and EU25.

Flame Treater Emissions (Natural Gas Combustion)

- (a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
The flame treater operations, consisting of seventeen (17) process heaters, identified as EU26 - EU43, is not subject to the requirements of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) because the flame treater operation is not a manufacturing process.
- (b) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The flame treater operations, consisting of seventeen (17) process heaters, identified as EU26 - EU43, is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential

emissions from each emission unit is less than twenty-five (25) tons per year.

- (c) There are no VOC 326 IAC 8 rules that apply to the flame treater operations located at this source, consisting of seventeen (17) process heaters identified as EU26 - EU43.

Clean Up Operations

- (a) 326 IAC 8-3-1 (Organic Solvent Degreasing Operations)
The cleanup of the injection molding operation (EU1 - EU22) is not subject to the requirements of 326 IAC 8-3-1 because the cleanup of the injection molding machines is not considered a degreasing operation.
- (b) 326 IAC 8-3-1 (Organic Solvent Degreasing Operations)
The cleanup of the dry offset printing operations, consisting of two (2) printers identified as EU24 and EU25, is not subject to the requirements of 326 IAC 8-3-1 because the cleanup of the dry offset printing operation is not considered a degreasing operation.

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 September 24, 2010. Additional information was received on September 30, 2010; October 4, 7, 22, 2010; November 10 and 30, 2010.

The operation of this source shall be subject to the conditions of the attached proposed Exemption No. 127-29723-00120. The staff recommends to the Commissioner that this Exemption be approved.

IDEM Contact

- (a) Questions regarding this proposed permit 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 extension 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: North American Packaging Corp.
Address City IN Zip: 4002 Montdale Dr, Valparaiso, IN 46383
Permit Number: 127-29723-00120
Reviewer: Deborah Cole
Date: 10/21/2010

POTENTIAL TO EMIT IN TONS PER YEAR - Criteria Pollutants

Emission Units	PM	PM10	PM2.5	SO ₂	NOx	VOC	CO	Single HAP	Total HAPs
Injection Molding Machines (EU-1 through EU-22)	0.90	0.90	0.90			0.29		0.002	0.006
Grinding Machines (EU-23 through EU-25)	0.01	0.01	0.01						
Dry Offset Printers (EU-26 and EU-27)						0.002			
Natural Gas Combustion -Process Heaters (EU-28 through EU-45)	0.01	0.03	0.02	0.00	0.39	0.02	0.33	0.007	0.007
Clean up of Injection Molding Machines and Dry Offset Printers						4.32			
TOTAL	0.91	0.94	0.93	0.00	0.39	4.64	0.33		0.013

POTENTIAL TO EMIT IN TONS PER YEAR - HAPs

Emission Units	Formaldehyde	Acrolein	Acetaldehyde	Propionaldehyde	Lead	Cadmium	Chromium	Manganese	Nickel
Injection Molding Machines (EU-1 through EU-22)	0.002	0.001	0.002	0.001					
Grinding Machines (EU-23 through EU-25)									
Dry Offset Printers (EU-26 and EU-27)									
Natural Gas Combustion -Process Heaters (EU-28 through EU-45)	0.00				0.00	0.00	0.00	0.00	0.00
Clean up of Injection Molding Machines and Dry Offset Printers									
Total Emissions (TPY) by HAP	0.002	0.001	0.002	0.001	0.00	0.00	0.00	0.00	0.00

**Appendix A: Emissions Calculations
Injection Molding - VOC and PM**

Company Name: North American Packaging Corp.
Address City IN Zip: 4002 Montdale Dr, Valparaiso, IN 46383
Permit Number: 127-29723-00120
Reviewer: Deborah Cole
Date: 10/21/2010

Potential to Emit Criteria Air Pollutants from the Injection Molding Machines Processing HDPE at 425° F Melt Temperature

	m (slope)	t (temperature F)	c (y-intercept)
VOC emission equation	0.27	425	-77.6
PM emission equation	0.141	425	-34

NAMPAC Machine #	Resin Type	Max. Throughput Rate (lbs resin/hr)	Max Throughput Rate (tons/hr)	VOC			PM					
				Emission Factor (lb/10 ⁶ lbs) (y)	Emissions (lbs/hr)	Emissions (tpy)	Emission Factor (lb/10 ⁶ lbs) (y)	Emissions (lbs/hr)	Emissions (tpy)			
1	HDPE	456	0.228	37.15	0.02	0.07	25.93	0.012	0.052			
2	HDPE	456	0.228	37.15	0.02	0.07	25.93	0.012	0.052			
3	HDPE	153	0.077	37.15	0.01	0.02	25.93	0.004	0.017			
4	HDPE	253	0.127	37.15	0.01	0.04	25.93	0.007	0.029			
5	HDPE	250	0.125	37.15	0.01	0.04	25.93	0.006	0.028			
6	HDPE	240	0.120	37.15	0.01	0.04	25.93	0.006	0.027			
7	HDPE	368	0.184	37.15	0.01	0.06	25.93	0.010	0.042			
8	HDPE	317	0.159	37.15	0.01	0.05	25.93	0.008	0.036			
9	HDPE	386	0.193	37.15	0.01	0.06	25.93	0.010	0.044			
10	HDPE	407	0.204	37.15	0.02	0.07	25.93	0.011	0.046			
11	HDPE	381	0.191	37.15	0.01	0.06	25.93	0.010	0.043			
12	HDPE	350	0.175	37.15	0.01	0.06	25.93	0.009	0.040			
13	HDPE	377	0.189	37.15	0.01	0.06	25.93	0.010	0.043			
14	HDPE	387	0.194	37.15	0.01	0.06	25.93	0.010	0.044			
15	HDPE	389	0.195	37.15	0.01	0.06	25.93	0.010	0.044			
16	HDPE	386	0.193	37.15	0.01	0.06	25.93	0.010	0.044			
17	HDPE	385	0.193	37.15	0.01	0.06	25.93	0.010	0.044			
18	HDPE	396	0.198	37.15	0.01	0.06	25.93	0.010	0.045			
19	HDPE	386	0.193	37.15	0.01	0.06	25.93	0.010	0.044			
20	HDPE	386	0.193	37.15	0.01	0.06	25.93	0.010	0.044			
21	HDPE	387	0.194	37.15	0.01	0.06	25.93	0.010	0.044			
22	HDPE	400	0.200	37.15	0.01	0.07	25.93	0.010	0.045			
7,896				0.29			1.28			0.20		0.90

Notes and Methodology

Emission Factors for PM, VOC, and HAPs from HDPE were taken from a technical paper, volume 46 in June 1996, published by the Journal of Air and Waste Management Association, titled "Development of Emission Factors for Polyethylene Processing."

Emission factors are based on the emission equation $y = mt + c$, where "t" is the extrusion temperature (F) and "y" is emission quantity in lbs per million lbs of resin.

M (slope) and C (y-intercept) are constants.

Emissions (tpy) = Emissions (lbs/hr) x 8,760 hours per year / 2,000 lbs per ton

Hazardous Air Pollutant Emission Factors from Injection Molding Machines Processing HDPE at a 425° F Melt Temperature

HAP Constituent	CAS #	Emission Factor (lb/10 ⁶ lbs)				
Formaldehyde	50-00-0	0.06				
Acrolein	107-02-8	0.02				
Acetaldehyde	75-07-0	0.05				
Propionaldehyde	123-38-6	0.02				
NAMPAC Machine #	Resin Type	Max. Throughput Rate (lbs resin/hr)	Formaldehyde Emissions (tons/yr)	Acrolein Emissions (tons/hr)	Acetaldehyde Emissions (tons/yr)	Propionaldehyde Emissions (tons/yr)
1	HDPE	456	0.0001	0.0000	0.0001	0.0000
2	HDPE	456	0.0001	0.0000	0.0001	0.0000
3	HDPE	153	0.0000	0.0000	0.0000	0.0000
4	HDPE	253	0.0001	0.0000	0.0001	0.0000
5	HDPE	250	0.0001	0.0000	0.0001	0.0000
6	HDPE	240	0.0001	0.0000	0.0001	0.0000
7	HDPE	368	0.0001	0.0000	0.0001	0.0000
8	HDPE	317	0.0001	0.0000	0.0001	0.0000
9	HDPE	386	0.0001	0.0000	0.0001	0.0000
10	HDPE	407	0.0001	0.0000	0.0001	0.0000
11	HDPE	381	0.0001	0.0000	0.0001	0.0000
12	HDPE	350	0.0001	0.0000	0.0001	0.0000
13	HDPE	377	0.0001	0.0000	0.0001	0.0000
14	HDPE	387	0.0001	0.0000	0.0001	0.0000
15	HDPE	389	0.0001	0.0000	0.0001	0.0000
16	HDPE	386	0.0001	0.0000	0.0001	0.0000
17	HDPE	385	0.0001	0.0000	0.0001	0.0000
18	HDPE	396	0.0001	0.0000	0.0001	0.0000
19	HDPE	386	0.0001	0.0000	0.0001	0.0000
20	HDPE	386	0.0001	0.0000	0.0001	0.0000
21	HDPE	387	0.0001	0.0000	0.0001	0.0000
22	HDPE	400	0.0001	0.0000	0.0001	0.0000
Totals			0.002	0.001	0.002	0.001

0.006**Notes and Methodology**

Emission Factors for PM, VOC, and HAPs from HDPE were taken from a technical paper, volume 46 in June 1996, published by the Journal of Air and Waste Management Association, titled "Development of Emission Factors for Polyethylene Processing." Emission factors are based on the emission equation $y = mt + c$, where "t" is the extrusion temperature (F) and "y" is emission quantity in lbs per million lbs of resin. M (slope) and C (y-intercept) are constants.

Emissions (tpy) = Emissions (lbs/hr) x 8,760 hours per year / 2,000 lbs per ton

**Appendix A: Emissions Calculations
Injection Molding Allowable Emission Rates**

North American Packaging, Corporation
Address City IN Zip: 4002 Montdale Dr, Valparaiso, IN 46383
Permit Number: 127-29723-00120
Permit Number: 127-29723-00120
Date: 10/21/2010

326 IAC 6-3-2(e) Allowable Rate of Emissions

Unit ID	Process Rate	Process Weight Rate *	Allowable Emissions
Injection Molding Machines	(total lbs/hr)	(tons/hr/line)	(lbs/hr/line)
EU1	456	0.23	1.52
EU2	456	0.23	1.52
EU3	153	0.08	0.73
EU4	253	0.13	1.03
EU5	250	0.13	1.02
EU6	240	0.12	0.99
EU7	368	0.18	1.32
EU8	317	0.16	1.19
EU9	386	0.19	1.36
EU10	407	0.20	1.41
EU11	381	0.19	1.35
EU12	350	0.18	1.28
EU13	377	0.19	1.34
EU14	387	0.19	1.36
EU15	389	0.19	1.37
EU16	386	0.19	1.36
EU17	385	0.19	1.36
EU18	396	0.20	1.39
EU19	386	0.19	1.36
EU20	386	0.19	1.36
EU21	387	0.19	1.36
EU22	400	0.20	1.39

Methodology

* Process weight; weight rate: Total weight of all materials introduced into any source operation (326 IAC 1-2-59(a)).

Allowable Emissions (lb/hr) = 4.10(Process Weight Rate (lb/hr))^0.67

Allowable Emissions (tons/yr) = (Allowable Emissions (lb/hr)*8760)/2000

**Appendix A: Emission Calculations
Grinding Emissions**

**Company Name: North American Packaging Corp.
Address City IN Zip: 4002 Montdale Dr, Valparaiso, IN 46383
Permit Number: 127-29723-00120
Reviewer: Deborah Cole
Date: 10/21/2010**

Potential to Emit Criteria Air Pollutants from the Scrap Regrinders

Facility Wide Scrap % ¹	3%
Maximum hourly throughput rate (lbs resin/hr) of HDPE resin to injection molding machines (EU1-EU22) ²	7,896
Maximum Hourly Scrap Throughput (lbs) ³	237
Grinding Emission Factor for PM (lbs/ton) ⁴	0.62
Control Efficiency of Cyclone and Filter	97%
Potential Hourly PM Emissions (lbs)⁵	0.0022
Potential Annual PM Emissions (tons)⁶	0.0096

326 IAC 6-3-2(e) Allowable Rate of Emissions

Unit ID	Process Rate (total lbs/hr)	Process Weight Rate * (tons/hr/line)	Allowable Emissions (lbs/hr/line)
Scrap Regrinders	237	0.12	0.98

Methodology

* Process weight; weight rate: Total weight of all materials introduced into any source operation (326 IAC 1-2-59(a)).
Allowable Emissions (lb/hr) = 4.10(Process Weight Rate (lb/hr)^{0.67}
Allowable Emissions (tons/yr) = (Allowable Emissions (lb/hr)*8760)/2000

Justification for Integral Control **

Actual 2008 Plastic Usage (lbs)	28,900,000
Facility Wide Scrap %	3.0%
Percent of Scrap Recovered from Re grind Process	99.79%
Amount of Plastic Recovered (lbs)	865,179
Cost of Virgin Polypropylene (dollars/lb)	0.577
Savings from Use of Recovered Material (dollars)	\$499,208.28

Notes and Methodology

- ¹ This is the percentage of virgin HDPE that is considered scrap which is collected and reused.
- ² Sum of total maximum throughput of the twenty-two (22) HDPE injection molding machines.
- ³ Maximum Hourly Scrap Throughput = Maximum Hourly Throughput * 3%
- ⁴ The emission factor for grinding comes from AP-42 Table 11.17-4, Scalping screen and hammermill (SCC 3-05-016-02). This emission factor was used because no emission factor for plastic grinding exists and the materials and processes used for the emission factor are similar in nature.
- ⁵ Potential Hourly Emissions = Max hourly scrap throughput (lbs) / 2000 * EF * (1-control efficiency)
- ⁶ Emissions (tpy) = Emissions (lbs/hr) * 8760 hours per year / 2000 lbs per ton

** The information contained in this table is used in the TSD to explain "Integral to the Process" for the grinders but the TSD information has been expanded to include the annualized costs of operating and maintaining the grinders as well. Therefore, the "Savings from Use of Recovered Material (dollars)" amount

**Appendix A: Emissions Calculations
Dry Offset and Screen Printing VOC Emissions**

**Company Name: North American Packaging Corp.
Address City IN Zip: 4002 Montdale Dr, Valparaiso, IN 46383
Permit Number: 127-29723-00120
Reviewer: Deborah Cole
Date: 10/21/2010**

North American Packaging Corporation
Printing Emissions

Potential Emissions from Dry Offset and Screen Printing

Area Ink Usage	Estimated Max. Usage (lbs/hr)	VOC Content (wt%)	VOC Emission Factor	VOC Emissions (tons/yr)
Dry Offset	1.00	1%	5%	0.002

Notes and Methodology

Printing emission factor comes from Alternative Control Techniques Document: Offset Lithographic Printing (EPA-453/R-94-054, which allows for a 95% retention factor for offset inks).

Emissions (tpy) = usage (lbs/hr) * VOC content (wt%) * VOC Emission Factor * 8760/2000

Appendix A: Emissions Calculations

Natural Gas Combustion Only

MM BTU/HR <100

Company Name: North American Packaging Corp.

Address City IN Zip: 4002 Montdale Dr, Valparaiso, IN 46383

Permit Number: 127-29723-00120

Reviewer: Deborah Cole

Date: 10/21/2010

Flame Treater Emissions

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
0.9	7.9

	Pollutant						CO
	PM*	PM10*	PM2.5	SO2	NOx	VOC	
Emission Factor in lb/MMCF	1.9	7.6	5.7	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.01	0.03	0.02	0.00	0.39	0.02	0.33

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

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

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, ar

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

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

See page 7 for HAPs emissions calculations.

Appendix A: Emissions Calculations

Natural Gas Combustion Only

MM BTU/HR <100

HAPs Emissions

Company Name: North American Packaging Corp.

Address City IN Zip: 4002 Montdale Dr, Valparaiso, IN 46383

Permit Number: 127-29723-00120

Reviewer: Deborah Cole

Date: 10/21/2010

HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	0.000	0.000	0.000	0.007	0.000

HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	0.000	0.000	0.000	0.000	0.000

Methodology is the same as page 6.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations
Cleanup Solvent VOC Emissions**

Company Name: North American Packaging Corp.
Address City IN Zip: 4002 Montdale Dr, Valparaiso, IN 46383
Permit Number: 127-29723-00120
Reviewer: Deborah Cole
Date: 10/21/2010

Potential Emissions from Cleanup Solvent Usage

Area of Cleanup Solvent Usage	Product Name	Manufacturer	Estimated Max. Usage (gal/month)	Density (lbs/gal)	VOC Content (wt%)	VOC Emissions (tons/yr)
Injection and Blow Molding	Mineral Spirits	Citgo	55.00	6.51	100%	2.15
Dry Offset Printing	Isopropyl Alcohol	Shell Chemical	55.00	6.59	100%	2.17
Total						4.32

Notes and Methodology

Source operates 24 hours a day, 7 days a week therefore emissions from clean-up were not scaled.
Emissions (tpy) = Usage (gal/month) * Density (lbs/gal) * VOC content (wt%) * 12 (months) / 2000



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

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

TO: Cheri Jabaay
North American Packaging Corp.
4002 Mondale Dr
Valparaiso, IN 46383

DATE: January 18, 2011

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

SUBJECT: Final Decision
Exemption
127 - 29723 - 00120

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:
Tom Dimick Plant Mgr
Adam Estes Cornerstone Environmental, Health & Safety, Inc.
OAQ Permits Branch Interested Parties List

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

Final Applicant Cover letter.dot 11/30/07

Mail Code 61-53

IDEM Staff	LPOGOST 1/18/2011 North American Pkg Corp 127 - 29723 - 00120 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		Cheri Jabaay North American Pkg Corp 4002 Mondale Dr Valparaiso IN 46383 (Source CAATS) Via confirmed delivery										
2		Tom Dimick Plant Mgr North American Pkg Corp 4002 Mondale Dr Valparaiso IN 46383 (RO CAATS)										
3		Laurence A. McHugh Barnes & Thornburg 100 North Michigan South Bend IN 46601-1632 (Affected Party)										
4		Porter County Board of Commissioners 155 Indiana Ave, Ste 205 Valparaiso IN 46383 (Local Official)										
5		Porter County Health Department 155 Indiana Ave, Suite 104 Valparaiso IN 46383-5502 (Health Department)										
6		Shawn Sobocinski 3229 E. Atlanta Court Portage IN 46368 (Affected Party)										
7		Mr. Ed Dybel 2440 Schrage Avenue Whiting IN 46394 (Affected Party)										
8		Ms. Carolyn Marsh Lake Michigan Calumet Advisory Council 1804 Oliver St Whiting IN 46394-1725 (Affected Party)										
9		Mr. Dee Morse National Park Service 12795 W Alameda Pky, P.O. Box 25287 Denver CO 80225-0287 (Affected Party)										
10		Mr. Joseph Virgil 128 Kinsale Avenue Valparaiso IN 46385 (Affected Party)										
11		Mark Coleman 9 Locust Place Ogden Dunes IN 46368 (Affected Party)										
12		Mr. Chris Hernandez Pipefitters Association, Local Union 597 8762 Louisiana St., Suite G Merrillville IN 46410 (Affected Party)										
13		Eric & Sharon Haussman 57 Shore Drive Ogden Dunes IN 46368 (Affected Party)										
14		Joseph Hero 11723 S Oakridge Drive St. John IN 46373 (Affected Party)										
15		Adam Estes Cornerstone Environmental, Health & Safety, Inc. 880 Lennox Court Zionsville IN 46077 (Consultant)										

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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Mail Code 61-53

IDEM Staff	LPOGOST 1/18/2011 North American Pkg Corp 29723 (draft/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		Gitte Post Tribune 1433 E. 83rd Ave Merrillville IN 46410 (Affected Party)										
2		Mark Zeltwanger 26545 CR 52 Nappanee IN 46550 (Affected Party)										
3												
4												
5												
6												
7												
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10												
11												
12												
13												
14												
15												

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	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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