



# 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](http://www.idem.IN.gov)

TO: Interested Parties / Applicant

DATE: July 13, 2011

RE: Berry Plastics Corporation / 163-30301-00106

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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Mr. John Patterson  
Berry Plastics Corporation  
101 Oakley Street  
Evansville, IN 47710

July 13, 2011

Re: M163-30301-00106  
Third Notice-Only Change to  
M163-22999-00106

Dear Mr. Patterson:

Berry Plastics Corporation (Permittee) was issued a Minor Source Operating Permit (MSOP) Renewal No. M163-22999-00106 on November 9, 2007 for a stationary molded plastic packaging plant located at 101 Oakley Street, Evansville, Indiana 47710. On March 03, 2011, the Office of Air Quality (OAQ) received an application from the source requesting that the permit be revised to add the equipments listed below. The addition of new emission units is of the same type as the other permitted emission units at the source, and will comply with the same applicable requirements and permit terms and conditions as the existing injection molding, thermoform machines, extruders, printer lines and degreasing units, but will not cause the source's potential to emit to be greater than the threshold levels specified in 326 IAC 2-2 or 326 IAC 2-3. The uncontrolled/unlimited potential to emit of the entire source will continue to be less than the threshold levels specified in 326 IAC 2-7. The addition of the following units to the permit is considered a notice-only change pursuant to 326 IAC 2-6.1-6(d)(13). See Appendix A for the PTE of the entire source.

Following emission units are added during this revision process:

### **Injection Molding Machines:**

- (a) One (1) injection-molding machine, identified as #54, constructed in 2008, with a maximum throughput of 650 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system for particulate control, which vents internally.
- (b) One (1) injection-molding machine, identified as #56, constructed in 2009, with a maximum throughput of 1084 lbs of plastic resin/hr, utilizing an integral cyclone dust collection system for particulate control, which vents internally.
- (c) One (1) injection-molding machine, identified as #57, constructed in 2009, with a maximum throughput of 650 lbs of resin/hr, utilizing an integral cyclone dust collection system for particulate control, which vents internally.

### **Thermoforming Machines:**

- (d) One (1) thermoform machine, identified as TFE#9, constructed in 2010, with a maximum process capacity of 2,200 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.

- (e) One (1) thermoform machine, identified as TFE#12, constructed in 2010, with a maximum process capacity of 2,350 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.
- (f) One (1) thermoform machine, identified as TFE#14, constructed in 2010, with a maximum process capacity of 2,350 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.
- (g) One (1) thermoform machine, identified as TFE#15, constructed in 2010, with a maximum process capacity of 10,600 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.
- (h) One (1) thermoform machine, identified as TFE#16, constructed in 2010, with a maximum process capacity of 10,600 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.
- (i) One (1) thermoform machine, identified as TFE#17, constructed in 2010, with a maximum process capacity of 2,350 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.

**Extruders:**

- (j) Five (5) R&D extruders, identified as extruders A, B, C, D and E, constructed in 2011, with a combined maximum capacity of 534 lb/hr, and vent internally.

**Printers:**

- (k) One (1) ultraviolet cure ink Gallus printer line, identified as WPE02, constructed in 2011, consisting of 10 stations.
- (l) Eight (8) UV cure dry offset ink printers, identified as TPE 60 and TPE 68, constructed in 2009.

**Degreasing:**

- (m) One (1) degreasing machine, constructed in 2011, using specially denatured alcohol as a degreaser solvent, for cleaning ink from resin scrap that has been printed on, annual throughput of less than 145 gallons.

**Description Change:**

1. The source requested that the name of the thermoform machine, identified as TFE#12, constructed in 2008, listed in Permit # M163-22999, Section A.2(f) be changed to TFE #13. This change is notice-only change pursuant to 326 IAC2-6.1-6(d).
2. The source requested that the name of the WDC-3 scrubber and dust collector be changed to WDC-2 which was its original designation. This change is notice-only change pursuant to 326 IAC2-6.1-6(d).

**Air Pollution Control Justification as an Integral Part of the Process**

Berry Plastics has submitted the following justification that the cyclone dust collection system be considered as an integral part of the injection molding and thermoforming operations:

- (a) The operation of the cyclone dust collection system results in a positive net economic effect because it enables the plastics forming operations to recycle excess materials that did not form into plastic and results in at least a 95% decrease in plastic forming material use over what it would be if there were no collection and recycling equipment operating.

- (b) The dust collectors located at the facility are all passive dust collection-filtering devices. All transfer of the raw material and the recycled material is done with pneumatic conveying. The pneumatic conveying is achieved using a vacuum pump. In order to operate the vacuum pump, an integral cyclone must be operated to prevent the vacuum pump from becoming fouled by the resin rendering it inoperable. Therefore, the cyclone is necessary to the passive dust collection system.

IDEM, OAQ has evaluated the justifications and agreed that the cyclone dust collection system will be considered as an integral part of the injection molding and thermoforming operations. Therefore, the permitting level will be determined using the potential to emit after the cyclone dust control system. Operating conditions in the proposed permit will specify that the passive dust collection-filtering devices shall operate at all times when the injection molding and thermoforming operations are in operation.

NOTE: Pursuant to the Notice only change Permit # 163-27883-00106, issued on May 8, 2009, the cyclone dust collection system for the existing injection molding and thermoforming operations is considered as an integral part.

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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 Prior to Revision (tons/year)							
	PM	PM10 *	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	Total HAPs	Worst Single HAP
Injection Molding machines**	3.27	3.27	0	0	16.32	0	0.40	0.24
Thermoforming Lines 1-7**	3.27	3.27	0	0	9.52	0	0.50	0.29
Extruders	3.94	3.94	0	0	0.19	0	0	0
Printing Operations	0	0	0	0	2.59	0	0.11	0.06
Cleaning Operations	0	0	0	0	38.64	0	6.82	0
Natural Gas Usage (MMCF/Year)	0.08	0.08	0.01	1.02	0.06	0.86	0.02	0.02
Total PTE of Entire Source	10.56	10.56	0.01	1.02	67.31	0.86	7.85	0.61
Title V Major Source Thresholds	NA	100	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	NA	NA
Nonattainment NSR Major Source Thresholds	NA	NA	100	NA	NA	NA	NA	NA
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".  These emissions are based upon MSOP First renewal No.: 163-22999-00106, issued on November 9, 2007. ** PM, PM10 and PM2.5 control is considered integral to Injection Molding and Thermoforming processes.								

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The table below summarizes the potential to emit of the entire source, with updated emissions shown as **bold** values and previous emissions shown as ~~strikethrough~~ values:

Process/ Emission Unit	Potential To Emit of the Entire Source to accommodate the Proposed Revision (tons/year)								
	PM	PM10*	PM2.5	SO <sub>2</sub>	NOx	VOC	CO	Total HAPs	Worst Single HAP
** <del>(53)</del> Injection Molding machines	3.27	3.27	<b>3.27</b>	0	0	16.32	0	0.40	0.24
** <b>Injection Molding Machines #54, #56 and #57</b>	<b>0.36</b>	<b>0.36</b>	<b>0.36</b>	0	<b>0</b>	<b>0.84</b>	<b>0</b>	<b>0.014</b>	<b>0.01</b>
**Thermoforming Lines 1-7	3.27	3.27	<b>3.27</b>	0	0	9.52	0	0.50	0.29
** <b>Thermoforming Machines TEF #9, #12, #14, #15, #16, and #17</b>	<b>5.14</b>	<b>5.14</b>	<b>5.14</b>	0	<b>0</b>	<b>11.38</b>	<b>0</b>	<b>0.17</b>	<b>0.099</b>
Extruders 1-5	3.94	3.94	<b>3.94</b>	0	0	0.19	0	0	0
<b>Five (5) Extruders A, B, C, D and E</b>	<b>1.71</b>	<b>1.71</b>	<b>1.71</b>	0	<b>0</b>	<b>0.08</b>	<b>0</b>	<b>0</b>	
Printing Operations	0	0	<b>0</b>	0	0	2.59	0	0.11	0.06
<b>Printing Operations WPE02</b>	<b>0</b>	<b>0</b>	<b>0</b>	0	<b>0</b>	<b>1.47</b>	<b>0</b>	<b>0</b>	<b>0</b>
Cleaning Operations	0	0	<b>0</b>	0	0	38.64	0	6.82	0
<b>Cleaning Operations</b>	<b>0</b>	<b>0</b>	<b>0</b>	0	<b>0</b>	<b>5.32</b>	<b>0</b>	<b>0</b>	<b>0</b>
Natural Gas Usage (MMCF/Year)	0.08	0.08	<b>0.08</b>	0.01	1.02	0.06	0.86	0.02	0.02
Total PTE of Entire Source	<del>10.56</del> <b>17.77</b>	<del>10.56</del> <b>17.77</b>	<b>17.77</b>	0.01	1.02	<del>67.31</del> <b>86.18</b>	0.86	<del>7.85</del> <b>8.03</b>	<del>0.61</del> <b>3.07</b>
Title V Major Source Thresholds	N/A	100	100	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	<b>250</b>	250	250	250	250	N/A	N/A
Emission Offset/ Nonattainment NSR Major Source Thresholds	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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". These emissions are based upon MSOP First renewal No.: 163-22999-00106 issued on November 9, 2007.  
 \*\* PM, PM10 and PM2.5 control is considered integral to Injection Molding and Thermoforming processes.

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Revision (tons/year)								
	PM	PM10*	PM2.5	SO <sub>2</sub>	NOx	VOC	CO	Total HAPs	Worst Single HAP
** (53) Injection Molding machines	3.27	3.27	3.27	0	0	16.32	0	0.40	0.24
** Injection Molding Machines #54, #56 and #57	0.36	0.36	0.36	0	0	0.84	0	0.014	0.01
** Thermoforming Lines 1-7	3.27	3.27	3.27	0	0	9.52	0	0.50	0.29
** Thermoforming Machines TEF #9, #12, #14, #15, #16, and #17	5.14	5.14	5.14	0	0	11.38	0	0.17	0.099
Extruders 1-5	3.94	3.94	3.94	0	0	0.19	0	0	0
Five (5) Extruders A, B, C, D and E	1.71	1.71	1.71	0	0	0.08	0	0	
Printing Operations	0	0	0	0	0	2.59	0	0.11	0.06
Printing Operations WPE02	0	0	0	0	0	1.47	0	0	0
Cleaning Operations	0	0	0	0	0	38.64	0	6.82	0
Cleaning Operations	0	0	0	0	0	5.32	0	0	0
Natural Gas Usage (MMCF/Year)	0.08	0.08	0.08	0.01	1.02	0.06	0.86	0.02	0.02
Total PTE of Entire Source	17.77	17.77	17.77	0.01	1.02	86.18	0.86	8.03	3.07
Title V Major Source Thresholds	N/A	100	100	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	N/A	N/A
Emission Offset/ Nonattainment NSR Major Source Thresholds	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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". These emissions are based upon MSOP First renewal No.: 163-22999-00106 issued on November 9, 2007.  
 \*\* PM, PM10 and PM2.5 control is considered integral to Injection Molding and Thermoforming processes.

**Federal Rule Applicability**

- (a) This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), Subpart T – National Emission Standards for Halogenated Solvent Cleaning because they do not use any of the solvents listed in Subpart T. Therefore, these requirements are not included in the permit.
- (b) This source is not a major source of Hazardous Air Pollutants, as defined in 40 CFR 63.2; therefore, Subpart KK – National Emission Standards for the printing and publishing industries is not included in the permit.

**State Rule Applicability – Individual Facilities**

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

This rule applies to facilities located anywhere in the state that were constructed on or after January 1, 1980, which have potential volatile organic compound (VOC) emissions of 25 tons per year or more, and which are not otherwise regulated by another provision of Article 8.

This rule does not apply to the injection molding machines, identified as #54, #56, #57, five (5) R&D extruders, identified as A, B, C, D and E, one degreasing machine, one ultraviolet cure dry ink printer, thermoform machines, identified as TEF#9, TEF#12, TEF#14, TEF#15, TEF#16, TEF#17, and one (1) ultraviolet cure ink Gallus printer line because these facilities do not have the potential to emit greater than 25 tons VOC per year each. Therefore, the requirements of 326 IAC 8-1-6 are not included in this permit for these facilities.

326 IAC 6.5-1-2 (Particulate Emissions Limitations)

The requirements of this rule apply to sources located in designated counties with potential to emit greater than 100 tons per year or actual emissions greater than 10 tons per year. This source is located in Vanderburgh County which is one of the designated counties in 326 IAC 6.5-1, but the source does not have potential emissions or actual emissions greater than the threshold values. Therefore, pursuant to 326 IAC 6.5-1-1(a)(2) the requirements of 326 IAC 6.5-1-2 are not applicable to this source.

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emitted from the facilities listed below shall be limited as stated, based on the following:

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:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and  
 P = process weight rate in tons per hour

Emission Unit/Activity	Process Weight Rate (lbs/hr) each	Allowable Emissions (326 IAC 6-3-2) (lb/hr) each
Injection molding operations, #54 and 57	650	1.93
Injection molding operations, #56	1084	2.72
Thermoform machine TEF#9	2200	4.37
Thermoform machine TEF#12, #14, #17	2350	4.56
Thermoform machine TEF#15, #16	10600	12.53
Five extruders A, B, C, D, and E	534	1.69

The integral dust collection system associated with each of the facilities listed above shall be in operation at all times that these facilities are in operation, in order to comply with this limit.

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

This rule is not applicable to this source because there is not 100% saturation of the substrate in either the ultraviolet or screen printing operations.

326 IAC 8-3-2 (Cold cleaner operation)

Pursuant to 326 IAC 8-3-1(a)(2), the degreasing machine is subject to the requirements of 326 IAC 8-3-2 (Cold cleaner operation) since it was constructed after January 1, 1980. Pursuant to 326 IAC 8-3-2 the Permittee shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

326 IAC 8-3-5 (Organic Solvent Degreasing Operations)

Pursuant to 326 IAC 8-3-1(b)(2), 326 IAC 8-3-5 applies to the cold cleaner degreaser without remote solvent reservoir constructed after July 1, 1990 located any county.

“Cold cleaner degreaser” means a tank containing organic solvent at a temperature below the boiling point of the solvent which is used to spray, brush or immerse an article for the purpose of cleaning or degreasing the article.

The degreaser is maintained at 90°C, which is below 100°C, the boiling point of the solvent used. Therefore, it is a cold cleaner degreaser and is subject 326 IAC 8-3-5:

- (a) The owner or operator of the cold cleaner degreaser shall ensure that the following control equipment requirements are met:
  - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
    - (A) the solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));
    - (B) the solvent is agitated; or
    - (C) the solvent is heated.
  - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
  - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
  - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
  - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF)):
    - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
    - (B) A water cover when solvent used is insoluble in, and heavier than, water.
    - (C) Other systems of demonstrated equivalent control such as a refrigerated

chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

- (b) The owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
  - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
  - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Pursuant to the provisions of 326 IAC 2-6.1-6, the permit is hereby revised as follows with the deleted language as ~~strikeouts~~ and new language **bolded**.

1. Sections A.2, and D.1 are revised to add the new emission units.
2. The Conditions D.1.4, and D.1.6 "Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]" and related "Record Keeping Requirements [326 IAC 2-6.1-5(a)(2)]" are removed from the permit # M163-22999-00106 because emission units, injection molding machines, #1-52, thermoforming machines, Lines #1-7, and extruders, #1-5, vent internally.

#### A.2 Emission Units and Pollution Control Equipment Summary

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

##### A. Injection Molding Machines:

- (a) Fifty-three (53) injection-molding machines, with a combined maximum throughput of 18 tons per hour, which utilize **an integral** cyclone dust collection system for particulate control and ~~do not vent to an exhaust stack~~ **vent internally**. These injection-molding machines consist of:

...

- (b) **One (1) injection-molding machine, identified as #54, constructed in 2008, with a maximum throughput of 650 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system for particulate control, which vents internally.**
- (c) **One (1) injection-molding machine, identified as #56, constructed in 2009, with a maximum throughput of 1084 lbs of plastic resin/hr, utilizing an integral cyclone dust collection system for particulate control, which vents internally.**
- (d) **One (1) injection-molding machine, identified as #57, constructed in 2009, with a maximum throughput of 650 lbs of resin/hr, utilizing an integral cyclone dust collection system for particulate control, which vents internally.**

##### B. Thermoforming Machines:

- (~~b-e~~) One (1) Thermoforming Machine, identified as Line #1, constructed in 2001, rated at 3300 lbs/hr, utilizing **an integral** cyclone dust collection system for particulate control and ~~do not vent to an exhaust stack~~ **vents internally**.
- (~~b-f~~) Six (6) Thermoforming Machines, each rated at 4000 lbs/hr, utilizing **an integral** cyclone dust collection system for particulate control and ~~not venting to an exhaust~~ **vent internally**, consisting of:
1. one (1) unit identified as Line #2, installed in 2002;

2. one (1) unit identified as Line #3, installed in 2003;
  3. one (1) unit identified as Line #4, installed in 2004;
  4. one (1) unit identified as Line #5, installed in 2006; and
  5. two (2) units identified as Line #6 and Line #7, installed in 2005.
- ~~(b-g)~~ One (1) thermoform machine, identified as TFE#8, constructed in 2007, with a maximum process capacity of 1,800 pounds per hour of plastic resin, utilizing **an integral** cyclone dust collection system as integral part of the process and for particulate control, which vents internally;
- ~~(b-h)~~ One (1) thermoform machine, identified as TFE#10, constructed in 2008, with a maximum process capacity of 6,000 pounds per hour of plastic resin, utilizing **an integral** cyclone dust collection system as integral part of the process and for particulate control, which vents internally;
- ~~(f i)~~ One (1) thermoform machine, identified as TFE#42 **13**, constructed in 2008, with a maximum process capacity of 4,500 pounds per hour of plastic resin, utilizing **an integral** cyclone dust collection system as integral part of the process and for particulate control, which vents internally.
- (j) One (1) thermoform machine, identified as TFE#9, constructed in 2010, with a maximum process capacity of 2,200 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.**
- (k) One (1) thermoform machine, identified as TFE#12, constructed in 2010, with a maximum process capacity of 2,350 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.**
- (l) One (1) thermoform machine, identified as TFE#14, constructed in 2010, with a maximum process capacity of 2,350 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.**
- (m) One (1) thermoform machine, identified as TFE#15, constructed in 2010, with a maximum process capacity of 10,600 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.**
- (n) One (1) thermoform machine, identified as TFE#16, constructed in 2010, with a maximum process capacity of 10,600 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.**
- (o) One (1) thermoform machine, identified as TFE#17, constructed in 2010, with a maximum process capacity of 2,350 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.**

**C. Extruders:**

- ~~(g p)~~ Five (5) extruders, identified as Extruder numbers 1 - 5, constructed in 2007, with a combined maximum capacity of 1,231 lb/hr, utilizing **an integral** cyclone dust collection system for particulate control and **vent internally**.

- (q) Five (5) R&D extruders, identified as extruders A, B, C, D and E, constructed in 2011, with a combined maximum capacity of 534 lb/hr, and do not vent to a stack vent internally.**

**D. Printers:**

- (h r)** Twenty-two (22) ultraviolet cure ink printers, each with a maximum capacity of 18 plastic parts per minute, which have no air pollution control devices and **vents inside**, consisting of:
1. two (2) units identified as TPE15 and TPE17, installed in 2002;
  2. six (6) units identified as TPE22-TPE24, TPE39, TPE40 and TPE42, installed in 2003;
  3. three (3) units identifies as TPE19-TPE21, installed in 2004;
  4. seven (7) units identified as TPE27-TPE33 and TPE41, installed in 2005; and
  5. four (4) units identified as TPE35-TPE38, installed in 2006.
- (i-s)** Six (6) silkscreen machines, rated at 0.20 pounds of ink per hour, identified as PSE05, OSE06, OSE08, OSE10, OSE11, OSE04, constructed prior to 1980, which have no air pollution control devices, and vent thru an exhaust stack to the outside air. Each silkscreen machine has its own natural gas burner for process heat;
- (j-t)** Sixteen (16) ultraviolet cure ink printers, with a maximum annual ink use of 90 tons per year, which have no air pollution control devices. Nine (9) of which vent through an exhaust stack to the outside air, seven (7) do not vent to an exhaust stack. Each ultraviolet cure ink printer has its own natural gas burner for process heat. These ultraviolet cure ink printers consist of:
- (k-u)** One (1) ultraviolet cure ink Gallus printer line, consisting of 10 stations, constructed in 2007;
- (v) One (1) ultraviolet cure ink Gallus printer line, identified as WPE02, consisting of 10 stations, constructed in 2011;**
- (l w)** Two (2) UV cure dry offset ink printers, identified as TPE 50 and TPE 51, constructed in 2009;
- (x) Eight (8) UV cure dry offset ink printers, identified as TPE 60 and TPE 68, constructed in 2009.**

**Degreasing:**

- (m y)** Fifteen (15) solvent parts washers, with a combined maximum capacity of 2.04 tons of cleaning solvent per year, identified as numbers 1 – 15, constructed in 2002. Four (4) of which vent through an exhaust stack to the outside air, the other eleven (11) do not vent to an exhaust stack.
- (z) One (1) degreasing machine, constructed in 2010, using specially denatured alcohol as a degreaser solvent, for cleaning ink from resin scrap that has been printed on, annual throughput of less than 145 gallons.**
- (n aa)** One (1) 500 gallon above ground hydraulic oil storage tank, constructed in 1989; and
- (e ab)** One (1) 550 gallon above ground virgin solvent storage tank, constructed in 1989.

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

---

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emitted from the facilities listed below shall be limited as stated, based on the following:

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:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and  
 P = process weight rate in tons per hour

Emission Unit/Activity	Process Weight Rate (lbs/hr)	Allowable Emissions (326 IAC 6-3-2) (lb/hr)
injection molding machines, #1-52	36,000 (each)	28.43 (each)
thermoforming machines, Lines #1-7	28,000 (each)	24.03 (each)
extruders, #1-5	1,231 (each)	2.96 (each)
<b>Injection molding operations, #54 and #57</b>	<b>650 (each)</b>	<b>1.93 (each)</b>
<b>Injection molding operations, #56</b>	<b>1,084</b>	<b>2.72</b>
<b>Thermoform machine TEF#9</b>	<b>2,200</b>	<b>4.37</b>
<b>Thermoform machine TEF#12, #14, #17</b>	<b>2,350 (each)</b>	<b>4.56 (each)</b>
<b>Thermoform machine TEF#15, #16</b>	<b>10,600 (each)</b>	<b>12.53 (each)</b>
<b>Five extruders A, B, C, D, and E</b>	<b>534 (each)</b>	<b>1.69 (each)</b>

**D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]**

A Preventive Maintenance Plan is required for the injection molding machines, #1-52, #54, #56, #57, thermoforming machines, lines #1-7, TFE#8, TEF#9, TFE#10, TEF#12, and TFE#123, TEF#14, TEF#15, TEF#16, TEF#17, and five (5) extruders, identified as extruder numbers 1-5, five (5) R&D extruders A, B, C, D and E. in accordance with Section B - Preventive Maintenance Plan contains Permittee's obligation with regard to the preventive maintenance plan required by this condition, of this permit, is required for these facilities and any control devices.

**Compliance Determination Requirements**

**D.1.3 Particulate Matter (PM)**

In order to comply with Condition D.1.1 and to render 326 IAC 2-2 not applicable, the integral cyclone dust control systems shall be in operation and control emissions from the injection molding machines, #1-52, #54, #56, #57, thermoforming machines, lines #1-7, TFE#8, TEF#9, TFE#10, TEF#12, and TFE#123, TEF#14, TEF#15, TEF#16, TEF#17, and five (5) extruders, identified as extruder numbers 1-5, at all times that the emission units are in operation.

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

**D.1.4 Visible Emissions Notations**

- (a) Visible emission notations of the cyclone dust collection systems controlling the injection molding machines, #1-52, thermoforming machines, Lines #1-7, and extruders, #1-5, shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

- ~~(e) — If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances shall be considered a deviation from this permit.~~

#### **D.1.54 Integral Cyclone Failure Detection**

In the event that **integral** cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

...

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

##### **D.1.6 Record Keeping Requirement**

- ~~(a) — To document compliance with Condition D.1.4, the Permittee shall maintain a daily record of visible emission notations of the cyclone dust collection systems controlling the injection molding machines, #1-52, thermoforming machines, Lines #1-7, and extruders, #1-5, stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (e.g. the process did not operate that day).~~
- ~~(b) — All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.~~

#### **Additional Changes**

IDEM, OAQ has decided to make additional revisions to the permit as described below in order to update the language to match the most current version of the applicable rule, to eliminate redundancy within the permit, and to provide clarification regarding the requirements of these conditions.

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

1. Section A.1 of the permit and the reporting forms have been revised to remove all references to the source mailing address. IDEM, OAQ will continue to maintain records of the mailing address.
2. For clarity, IDEM has changed references to the general conditions: “in accordance with Section B”, “in accordance with Section C”, or other similar language to “Section C...contains the Permittee's obligations with regard to the records required by this condition.”
3. IDEM has decided that the phrases “no later than” and “not later than” are clearer than “within” in relation to the end of a timeline. Therefore all timelines have been switched to “no later than” or “not later than” except when the underlying rule states “within.”
4. IDEM has decided to clarify throughout the permit that a certification needs to meet the requirements of 326 IAC 2-8-5(a)(1). In addition, IDEM has decided to remove the last sentence dealing with the need for certification from the forms because the conditions requiring the forms already addresses this issue.
5. IDEM has decided to clarify the certification requirements in Section B - Duty to Provide Information and Section B - Certification.

6. IDEM has decided to clarify the requirements of Section B – Preventive Maintenance Plan and to add a new paragraph (b) to handle a future situation where the Permittee adds units that need preventive maintenance plans.
7. IDEM has revised the language of the Section B - Preventive Maintenance Plan, Section C - Compliance Monitoring, Section C - General Record Keeping, and Section C - General Reporting to allow the Permittee to not have to begin implementing the requirements of these conditions until ninety days after initial start up.
8. IDEM has revised Section B - Emergency Provisions to delete paragraph (h). 326 IAC 2-8-4(3)(C)(ii) allows that deviations reported under an independent requirement do not have to be included in the Quarterly Deviation and Compliance Monitoring Report.
9. IDEM has decided that having a separate condition for the reporting of deviations is unnecessary. Therefore, IDEM has removed Section B - Deviations from Permit Requirements and Conditions and added the requirements of that condition to Section C - General Reporting Requirements. Paragraph (d) of Section C - General Reporting Requirements has been removed because IDEM already states the timeline and certification needs of each report in the condition requiring the report.
10. IDEM has revised Section B - Permit Renewal paragraph (c) to state which rule establishes the authority to set a deadline for the Permittee to submit additional information.
11. IDEM has decided to reference 326 IAC 2 in Section B - Source Modification Requirements, rather than specific construction rule.
12. IDEM has added 326 IAC 5-1-1 to the exception clause of Section C - Opacity, since 326 IAC 5-1-1 does list exceptions.
13. IDEM has revised the language of the Section C - Asbestos Abatement Projects to change the terminology "Accredited" to "Licensed" in order to match the rule. In addition IDEM has revised the language of the Section C - Asbestos Abatement Projects to remove the statement that the requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable, since all conditions and requirements in a FESOP are federally enforceable.
14. IDEM has removed the first paragraph of Section C - Performance Testing as due to the fact that specific testing conditions elsewhere in the permit will specify the timeline and procedures.
15. IDEM has revised Section C - Compliance Monitoring. The reference to recordkeeping has been removed due to the fact that other conditions already address recordkeeping. The voice of the condition has been change to clearly indicate that it is the Permittee that must follow the requirements of the condition
16. IDEM has removed Section C - Monitoring Methods. The conditions that require the monitoring or testing, if required, state what methods shall be used, and entire Section C is renumberd.
17. IDEM has revised Section C - Response to Excursions or Exceedances. The introduction sentence has been added to clarify that it is only when an excursion or exceedance is detected that the requirements of this condition need to be followed. The word "excess" was added to the last sentence of paragraph (a) because the Permittee only has to minimize excess emissions. The middle of paragraph (b) has been deleted as it was duplicative of paragraph (a). The phrase "or are returning" was added to subparagraph (b)(2) as this is an acceptable response assuming the operation or emission unit does return to normal or its usual manner of operation. The phrase "within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable" was replaced with "normal or usual manner of operation" because the first phrase is just a limited list of the second phrase. The recordkeeping required by paragraph (e) was changed to require only records of the response because the previously listed items are required to be recorded elsewhere in the permit.

18. IDEM has revised Section C - Actions Related to Noncompliance Demonstrated by a Stack Test. The requirements to take response steps and minimize excess emissions have been removed because Section C - Response to Excursions or Exceedances already requires response steps related to exceedances and excess emissions minimization. The start of the timelines was switched from "the receipt of the test results" to "the date of the test." There was confusion if the "receipt" was by IDEM, the Permittee, or someone else. Since the start of the timelines has been moved up, the length of the timelines was increased. The new timelines require action within a comparable timeline; and the new timelines still ensure that the Permittee will return to compliance within a reasonable timeframe.
19. The voice of paragraph (b) of Section C - General Record Keeping Requirements has been changed to clearly indicate that it is the Permittee that must follow the requirements of the paragraph.
20. IDEM has decided to simplify the referencing in Section C - Compliance with 40 CFR 82 and 326 IAC 22-1.
21. IDEM has decided to clarify Section D - Testing Requirements.
22. IDEM has included the replacement of an instrument as an acceptable action in Section D - Parametric Monitoring.
23. The word "status" has been added to Section D - Record Keeping Requirements and Section D - Reporting Requirements. The Permittee has the obligation to document the compliance status. The wording has been revised to properly reflect this.
24. The phrase "of this permit" has been added to the paragraph of the Quarterly Deviation and Compliance Monitoring Report Form to match the underlying rule.

The permit has been revised as follows with deleted language as ~~strikeouts~~ and new language **bolded**:

SECTION A SOURCE SUMMARY

A.1 General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)]...

Mailing Address: ~~\_\_\_\_\_~~ P.O. Box 959, Evansville, IN 47706-0959

...

B.7 Duty to Provide Information

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. ~~The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~ Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

...

~~B.8 Certification~~

- ~~(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.~~
- ~~(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.~~
- ~~(c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).~~

...

~~B.409~~ Preventive Maintenance Plan [326 IAC 1-6-3]

...

- (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 Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions ~~or potential to emit~~. ~~The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

...

~~B.4312~~ Permit Renewal [326 IAC 2-6.1-7]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require **an affirmation that the certification statements in the application are true and complete** by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

...

~~B.4413~~ Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]

...

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

...

~~Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

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

**B.4716** Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

---

...

- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management  
~~Permits Branch~~**Permit Administration and Support Section**, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require ~~the certification an~~**affirmation that the statements in the application are true and complete** by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

...

**B.4817** Annual Fee Payment [326 IAC 2-1.1-7]

---

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

...

**C.2** Opacity [326 IAC 5-1]

---

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

...

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

---

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

...

**C.6** Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

---

...

- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).  
...  
The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. ~~The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

...

**C.7** Performance Testing [326 IAC 3-6]

---

- ~~(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.~~

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

...

no later than thirty-five (35) days prior to the intended test date. ~~The protocol submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. ~~The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

...

~~C.10 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]~~

~~Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.~~

..

~~C.1514 General Record Keeping Requirements [326 IAC 2-6.1-5]~~

...

- (b) Unless otherwise specified in this permit, **for** all record keeping requirements not already legally required, **the Permittee shall be allowed up to** ~~shall be implemented within~~ ninety (90) days **from the date** of permit issuance **or the date of initial start-up, whichever is later, to begin such record keeping.**

~~C.1615 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]~~

...

- (c) ~~Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~
- (cd) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

...

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY**

**MINOR SOURCE OPERATING PERMIT (MSOP)  
CERTIFICATION**

Source Name: ~~Berry Plastics Corporation~~  
Source Address: ~~101 Oakley Street, Evansville, Indiana 47710~~  
Mailing Address: ~~P.O. Box 959, Evansville, IN 47706-0959~~  
MSOP No.: ~~M163-22999-00106~~

**~~This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.~~**

~~Please check what document is being certified:~~

~~Annual Compliance Notification~~

~~Test Result (specify) \_\_\_\_\_~~

~~Report (specify) \_\_\_\_\_~~

~~Notification (specify) \_\_\_\_\_~~

<input type="checkbox"/> Affidavit (specify) _____
<input type="checkbox"/> Other (specify) _____

<del>I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.</del>
Signature:
Printed Name:
Title/Position:
Date:

All other conditions of the permit shall remain unchanged and in effect. Attached please find the entire revised permit. A copy of the permit 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](http://www.idem.in.gov)

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Swarna Prabha, of my staff, at 317-234-5676 or 1-800-451-6027, and ask for extension 4-5376.

Sincerely,



Iryn Calilung, Section Chief  
Permits Branch  
Office of Air Quality

Attachments: Updated Permit and appendix A

IC/SP

cc: File - Vanderburgh County  
Vanderburgh County Health Department  
U.S. EPA, Region V  
Compliance and Enforcement Branch  
Billing, Licensing and Training Section



# 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](http://www.idem.IN.gov)

## Minor Source Operating Permit Renewal OFFICE OF AIR QUALITY

**Berry Plastics Corporation**  
**101 Oakley Street**  
**Evansville, Indiana 47710**

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

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a MSOP under 326 IAC 2-6.1.

Operation Permit No.: M163-22999-00106	
Issued by: <i>Original Signed by:</i> Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: November 9, 2007 Expiration Date: November 9, 2017
First Notice Only Change No: 163-27114-00106, issued on January 6, 2009 Second Notice Only Change No. 163-27883-00106, issued on May 8, 2009	
Third Notice Only Change No. 163-30301-00106	
Issued by:  Iryn Calitung, Section Chief Office of Air Quality	Issuance Date: July 13, 2011 Expiration Date: November 9, 2017

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- C.9 Compliance Monitoring [326 IAC 2-1.1-11]
- C.10 Instrument Specifications [326 IAC 2-1.1-11]

#### **Corrective Actions and Response Steps**

- C.11 Response to Excursions or Exceedances
- C.12 Actions Related to Noncompliance Demonstrated by a Stack Test

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

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

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

- D.1.1 Particulate Matter [326 IAC 6-3-2]
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**Compliance Determination Requirements**

- D.1.3 Particulate Matter (PM)

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

- D.1.4 Integral Cyclone Failure Detection

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

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## SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)]

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The Permittee owns and operates a stationary molded plastic packaging plant.

Source Address:	101 Oakley Street, Evansville, Indiana 47710
General Source Phone Number:	(812) 424-2904
SIC Code:	3089 (Plastic Products, Not Classified Elsewhere)
County Location:	Vanderburgh
Source Location Status:	Nonattainment for PM 2.5 standard Attainment for all other criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Nonattainment NSR Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

### A.2 Emission Units and Pollution Control Equipment Summary

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

#### A. Injection Molding Machines:

- (a) Fifty-three (53) injection-molding machines, with a combined maximum throughput of 18 tons per hour, which utilize an integral cyclone dust collection system for particulate control and vent internally. These injection-molding machines consist of:
- one (1) unit, identified as #34, rated at 660 pounds resin per hour, installed in 1972;
  - three (3) units, identified as #5, #8, and #29, rated at 550, 704, and 550 lb/hr, respectively, installed in 1978;
  - one (1) unit, identified as #4, rated at 550 lb/hr, installed in 1980;
  - one (1) unit, identified as #1, rated at 704 lb/hr, installed in 1983;
  - three (3) units, identified as #10, #20, and #35, rated at 704, 704 and 660 lb/hr, respectively, installed in 1984;
  - four (4) units, identified as #2, #13, #22, and #24, rated at 701, 704, 330, and 330 lb/hr, respectively, installed in 1985;
  - two (2) units, identified as #17 and #18, rated at 330 and 704 lb/hr, respectively, installed in 1987;
  - one (1) unit, identified as #26, rated at 330 lb/hr, installed in 1988;
  - one (1) unit, identified as #23, rated at 330 lb/hr, installed in 1989;
  - four (4) units, identified as #6, #7, #14, and #19, each rated at 704 lb/hr and installed in 1990;
  - three (3) units, identified as #27, #28, and #39, rated at 330, 330, and 660 lb/hr, respectively, installed in 1992;
  - one (1) unit, identified as #9, rated at 704 lb/hr, installed in 1994;
  - one (1) unit, identified as #43, rated at 880 lb/hr, installed in 1996;
  - one (1) unit, identified as #47, rated at 660 lb/hr, installed in 1997;
  - one (1) unit, identified as #49, rated at 1100 lb/hr, installed in 1998;

16. three (3) units, identified as #45, #46, and #50, each rated at 1,100 lb/hr and installed in 1999;
  17. four (4) units, identified as #3, #37, #52, and #53, rated 770, 660, 1,100, and 1,100 lb/hr, respectively, installed in 2000; and
  18. two (2) units, identified as #25 and #54, rated at 440 and 330 lb/hr, respectively, installed in 2001.
  19. eight (8) units, identified as #11, #12, #15, #16, #40, #41, #42, and #51, rated at 440, 440, 770, 770, 1,100, 1,100, 1,100, and 1,100 lb/hr, respectively, installed in 2002;
  20. one (1) unit, identified as #48, rated at 880 lb/hr, installed in 2003;
  21. two (2) units, identified as #32 and #44, rated at 242 and 880 lb/hr, respectively, installed in 2004;
  22. two (2) units, identified as #30 and #33, rated at 330 and 550 lb/hr, respectively, installed in 2005; and
  23. three (3) units, identified as #21, #31, and #38, rated at 242, 242, and 1,100 lb/hr, respectively, constructed in 2006.
- (b) One (1) injection-molding machine, identified as #54, constructed in 2008, with a maximum throughput of 650 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system for particulate control, which vents internally.
- (c) One (1) injection-molding machine, identified as #56, constructed in 2009, with a maximum throughput of 1084 lbs of plastic resin/hr, utilizing an integral cyclone dust collection system for particulate control, which vents internally.
- (d) One (1) injection-molding machine, identified as #57, constructed in 2009, with a maximum throughput of 650 lbs of resin/hr, utilizing an integral cyclone dust collection system for particulate control, which vents internally.

**B. Thermoforming Machines:**

- (e) One (1) Thermoforming Machine, identified as Line #1, constructed in 2001, rated at 3300 lbs/hr, utilizing an integral cyclone dust collection system for particulate control and vent internally.
- (f) Six (6) Thermoforming Machines, each rated at 4000 lbs/hr, utilizing an integral cyclone dust collection system for particulate control and vents internally, consisting of:
1. one (1) unit identified as Line #2, installed in 2002;
  2. one (1) unit identified as Line #3, installed in 2003;
  3. one (1) unit identified as Line #4, installed in 2004;
  4. one (1) unit identified as Line #5, installed in 2006; and
  5. two (2) units identified as Line #6 and Line #7, installed in 2005.
- (g) One (1) thermoform machine, identified as TFE#8, constructed in 2007, with a maximum process capacity of 1,800 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.
- (h) One (1) thermoform machine, identified as TFE#10, constructed in 2008, with a maximum process capacity of 6,000 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.
- (i) One (1) thermoform machine, identified as TFE#13, constructed in 2008, with a maximum process capacity of 4,500 pounds per hour of plastic resin, utilizing an integral

cyclone dust collection system as integral part of the process and for particulate control, which vents internally.

- (j) One (1) thermoform machine, identified as TFE#9, constructed in 2010, with a maximum process capacity of 2,200 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.
- (k) One (1) thermoform machine, identified as TFE#12, constructed in 2010, with a maximum process capacity of 2,350 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.
- (l) One (1) thermoform machine, identified as TFE#14, constructed in 2010, with a maximum process capacity of 2,350 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.
- (m) One (1) thermoform machine, identified as TFE#15, constructed in 2010, with a maximum process capacity of 10,600 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.
- (n) One (1) thermoform machine, identified as TFE#16, constructed in 2010, with a maximum process capacity of 10,600 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.
- (o) One (1) thermoform machine, identified as TFE#17, constructed in 2010, with a maximum process capacity of 2,350 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.

**C. Extruders:**

- (p) Five (5) extruders, identified as Extruder numbers 1 - 5, constructed in 2007, with a combined maximum capacity of 1,231 lb/hr, utilizing an integral cyclone dust collection system for particulate control and vent internally.
- (q) Five (5) R&D extruders, identified as extruders A, B, C, D and E, constructed in 2011, with a combined maximum capacity of 534 lb/hr, vent internally.

**D. Printers:**

- (r) Twenty-two (22) ultraviolet cure ink printers, each with a maximum capacity of 18 plastic parts per minute, which have no air pollution control devices and vent internally, consisting of:
  - 1. two (2) units identified as TPE15 and TPE17, installed in 2002;
  - 2. six (6) units identified as TPE22-TPE24, TPE39, TPE40 and TPE42, installed in 2003;
  - 3. three (3) units identified as TPE19-TPE21, installed in 2004;
  - 4. seven (7) units identified as TPE27-TPE33 and TPE41, installed in 2005; and
  - 5. four (4) units identified as TPE35-TPE38, installed in 2006.

- (s) Six (6) silkscreen machines, rated at 0.20 pounds of ink per hour, identified as PSE05, OSE06, OSE08, OSE10, OSE11, OSE04, constructed prior to 1980, which have no air pollution control devices, and vent thru an exhaust stack to the outside air. Each silkscreen machine has its own natural gas burner for process heat.
- (t) Sixteen (16) ultraviolet cure ink printers, with a maximum annual ink use of 90 tons per year, which have no air pollution control devices. Nine (9) of which vent through an exhaust stack to the outside air, seven (7) do not vent to an exhaust stack. Each ultraviolet cure ink printer has its own natural gas burner for process heat. These ultraviolet cure ink printers consist of:
  - 1. three (3) units, identified as TPE08, TPE10, TPE11, installed in 1985;
  - 2. one (1) unit, identified as TPE09, installed in 1986;
  - 3. three (3) units, identified as TPE01-TPE03, installed in 1990;
  - 4. one (1) unit, identified as TPE04, , installed in 1993;
  - 5. one (1) unit, identified as TPE05, installed in 1994;
  - 6. one (1) unit, identified as TPE06, installed in 1996;
  - 7. one (1) unit, identified as TPE07, installed in 1997;
  - 8. two (2) units, identified as TPE13, and TPE16, installed in 1998;
  - 9. one (1) unit, identified as TPE14, installed in 2000; and
  - 10. two (2) units, identified as TPE12 and TPE18, installed in 2001.
- (u) One (1) ultraviolet cure ink Gallus printer line, consisting of 10 stations, constructed in 2007.
- (v) One (1) ultraviolet cure ink Gallus printer line, identified as WPE02, consisting of 10 stations, constructed in 2011.
- ( w) Two (2) UV cure dry offset ink printers, identified as TPE 50 and TPE 51, constructed in 2009.
- (x) Eight (8) UV cure dry offset ink printers, identified as TPE 60 and TPE 68, constructed in 2009.

**E. Degreasing:**

- (y) Fifteen (15) solvent parts washers, with a combined maximum capacity of 2.04 tons of cleaning solvent per year, identified as numbers 1 – 15, constructed in 2002. Four (4) of which vent through an exhaust stack to the outside air, the other eleven (11) do not vent to an exhaust stack.
- (z) One (1) degreasing machine, constructed in 2011, using specially denatured alcohol as a degreaser solvent, for cleaning ink from resin scrap that has been printed on, annual throughput of less than 145 gallons.
- (aa) One (1) 500 gallon above ground hydraulic oil storage tank, constructed in 1989.
- (ab) One (1) 550 gallon above ground virgin solvent storage tank, constructed in 1989.

## **SECTION B GENERAL CONDITIONS**

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

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Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-1.1-1) shall prevail.

### **B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]**

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- (a) This permit, M163-22999-00106, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

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

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

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

### **B.4 Enforceability**

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

### **B.5 Severability**

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The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

### **B.6 Property Rights or Exclusive Privilege**

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This permit does not convey any property rights of any sort or any exclusive privilege.

### **B.7 Duty to Provide Information**

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- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

**B.8 Annual Notification [326 IAC 2-6.1-5(a)(5)]**

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- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:  
  
Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, 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.9 Preventive Maintenance Plan [326 IAC 1-6-3]**

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- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) 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.
- (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 Permittee 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 Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

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- (a) All terms and conditions of permits established prior to M081-25263-00032 and issued pursuant to permitting programs approved into the state implementation plan have been either:
  - (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

**B.11 Termination of Right to Operate [326 IAC 2-6.1-7(a)]**

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The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least ninety one hundred twenty (120) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

**B.12 Permit Renewal [326 IAC 2-6.1-7]**

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- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require an affirmation that the statements in the application are true and complete by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permit Administration and Support Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:
- (1) Submitted at least ninety (90) days prior to the date of the expiration of this permit; and
  - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-6.1-4(b), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

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- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:
- Indiana Department of Environmental Management  
Permit Administration and Support Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251
- (c) The Permittee shall notify the OAQ no later than thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

**B.14 Source Modification Requirement**

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

**B.15 Inspection and Entry**

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[326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

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

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

**B.16 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]**

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- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management  
Permit Administration and Support Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require affirmation that the statements in the application are true and complete by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

**B.17 Annual Fee Payment [326 IAC 2-1.1-7]**

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- (a) The Permittee shall pay annual fees due no later than thirty (30) calendar days of receipt of a bill from IDEM, OAQ.
  
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

**B.18 Credible Evidence [326 IAC 1-1-6]**

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For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

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## SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

#### C.1 Permit Revocation [326 IAC 2-1.1-9]

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

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

#### C.2 Opacity [326 IAC 5-1]

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

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

#### C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

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

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

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

#### C.5 Fugitive Dust Emissions [326 IAC 6-4]

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

#### C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

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

- (e) **Procedures for Asbestos Emission Control**  
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**  
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Licensed Asbestos Inspector**  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to

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

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

#### **C.7 Performance Testing [326 IAC 3-6]**

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

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

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

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date.
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

### **Compliance Requirements [326 IAC 2-1.1-11]**

#### **C.8 Compliance Requirements [326 IAC 2-1.1-11]**

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

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

#### **C.9 Compliance Monitoring [326 IAC 2-1.1-11]**

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Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

#### **C.10 Instrument Specifications [326 IAC 2-1.1-11]**

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- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

## Corrective Actions and Response Steps

### C.11 Response to Excursions or Exceedances

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- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
  - (1) initial inspection and evaluation;
  - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
  - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
  - (1) monitoring results;
  - (2) review of operation and maintenance procedures and records; and/or
  - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
  - (1) monitoring data;
  - (2) monitor performance data, if applicable; and
  - (3) corrective actions taken.

## Corrective Actions and Response Steps

### C.12 Actions Related to Noncompliance Demonstrated by a Stack Test

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- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred-eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ

that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline.

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

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

#### **C.13 Malfunctions Report [326 IAC 1-6-2]**

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

#### **C.14 General Record Keeping Requirements [326 IAC 2-6.1-5]**

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

#### **C.15 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]**

- (a) Reports required by conditions in Section D of this permit shall be submitted to:

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

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
  
- (c) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

## SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

#### A. Injection Molding Machines:

- (a) Fifty-three (53) injection-molding machines, with a combined maximum throughput of 18 tons per hour, which utilize an integral cyclone dust collection system for particulate control and vent internally. These injection-molding machines consist of:
24. one (1) unit, identified as #34, rated at 660 pounds resin per hour, installed in 1972;
  25. three (3) units, identified as #5, #8, and #29, rated at 550, 704, and 550 lb/hr, respectively, installed in 1978;
  26. one (1) unit, identified as #4, rated at 550 lb/hr, installed in 1980;
  27. one (1) unit, identified as #1, rated at 704 lb/hr, installed in 1983;
  28. three (3) units, identified as #10, #20, and #35, rated at 704, 704 and 660 lb/hr, respectively, installed in 1984;
  29. four (4) units, identified as #2, #13, #22, and #24, rated at 701, 704, 330, and 330 lb/hr, respectively, installed in 1985;
  30. two (2) units, identified as #17 and #18, rated at 330 and 704 lb/hr, respectively, installed in 1987;
  31. one (1) unit, identified as #26, rated at 330 lb/hr, installed in 1988;
  32. one (1) unit, identified as #23, rated at 330 lb/hr, installed in 1989;
  33. four (4) units, identified as #6, #7, #14, and #19, each rated at 704 lb/hr and installed in 1990;
  34. three (3) units, identified as #27, #28, and #39, rated at 330, 330, and 660 lb/hr, respectively, installed in 1992;
  35. one (1) unit, identified as #9, rated at 704 lb/hr, installed in 1994;
  36. one (1) unit, identified as #43, rated at 880 lb/hr, installed in 1996;
  37. one (1) unit, identified as #47, rated at 660 lb/hr, installed in 1997;
  38. one (1) unit, identified as #49, rated at 1100 lb/hr, installed in 1998;
  39. three (3) units, identified as #45, #46, and #50, each rated at 1,100 lb/hr and installed in 1999;
  40. four (4) units, identified as #3, #37, #52, and #53, rated 770, 660, 1,100, and 1,100 lb/hr, respectively, installed in 2000; and
  41. two (2) units, identified as #25 and #54, rated at 440 and 330 lb/hr, respectively, installed in 2001.
  42. eight (8) units, identified as #11, #12, #15, #16, #40, #41, #42, and #51, rated at 440, 440, 770, 770, 1,100, 1,100, 1,100, and 1,100 lb/hr, respectively, installed in 2002;
  43. one (1) unit, identified as #48, rated at 880 lb/hr, installed in 2003;
  44. two (2) units, identified as #32 and #44, rated at 242 and 880 lb/hr, respectively, installed in 2004;
  45. two (2) units, identified as #30 and #33, rated at 330 and 550 lb/hr, respectively, installed in 2005; and
  46. three (3) units, identified as #21, #31, and #38, rated at 242, 242, and 1,100 lb/hr, respectively, constructed in 2006.
- (b) One (1) injection-molding machine, identified as #54, constructed in 2008, with a maximum throughput of 650 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system for particulate control, which vents internally.

- (c) One (1) injection-molding machine, identified as #56, constructed in 2009, with a maximum throughput of 1084 lbs of plastic resin/hr, utilizing an integral cyclone dust collection system for particulate control, which vents internally.
- (d) One (1) injection-molding machine, identified as #57, constructed in 2009, with a maximum throughput of 650 lbs of resin/hr, utilizing an integral cyclone dust collection system for particulate control, which vents internally.

**B. Thermoforming Machines:**

- (e) One (1) Thermoforming Machine, identified as Line #1, constructed in 2001, rated at 3300 lbs/hr, utilizing an integral cyclone dust collection system for particulate control and vents internally.
- (f) Six (6) Thermoforming Machines, each rated at 4000 lbs/hr, utilizing an integral cyclone dust collection system for particulate control and vent internally, consisting of:
  - 6. one (1) unit identified as Line #2, installed in 2002;
  - 7. one (1) unit identified as Line #3, installed in 2003;
  - 8. one (1) unit identified as Line #4, installed in 2004;
  - 9. one (1) unit identified as Line #5, installed in 2006; and
  - 10. two (2) units identified as Line #6 and Line #7, installed in 2005.
- (g) One (1) thermoform machine, identified as TFE#8, constructed in 2007, with a maximum process capacity of 1,800 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.
- (h) One (1) thermoform machine, identified as TFE#10, constructed in 2008, with a maximum process capacity of 6,000 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.
- (i) One (1) thermoform machine, identified as TFE#13, constructed in 2008, with a maximum process capacity of 4,500 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.
- (j) One (1) thermoform machine, identified as TFE#9, constructed in 2010, with a maximum process capacity of 2,200 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.
- (k) One (1) thermoform machine, identified as TFE#12, constructed in 2010, with a maximum process capacity of 2,350 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.
- (l) One (1) thermoform machine, identified as TFE#14, constructed in 2010, with a maximum process capacity of 2,350 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.
- (m) One (1) thermoform machine, identified as TFE#15, constructed in 2010, with a maximum process capacity of 10,600 pounds per hour of plastic resin, utilizing a n

<p>integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.</p> <p>(n) One (1) thermoform machine, identified as TFE#16, constructed in 2010, with a maximum process capacity of 10,600 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.</p> <p>(o) One (1) thermoform machine, identified as TFE#17, constructed in 2010, with a maximum process capacity of 2,350 pounds per hour of plastic resin, utilizing an integral cyclone dust collection system as integral part of the process and for particulate control, which vents internally.</p> <p><b>C. Extruders:</b></p> <p>(p) Five (5) extruders, identified as Extruder numbers 1 - 5, constructed in 2007, with a combined maximum capacity of 1,231 lb/hr, utilizing a, integral cyclone dust collection system for particulate control and vent internally.</p> <p>(q) Five (5) R&amp;D extruders, identified as extruders A, B, C, D and E, constructed in 2011, with a combined maximum capacity of 534 lb/hr, vent internally.</p> <p>(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)</p>
---

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

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emitted from the facilities listed below shall be limited as stated, based on the following:

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:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and  
 P = process weight rate in tons per hour

Emission Unit/Activity	Process Weight Rate (lbs/hr)	Allowable Emissions (326 IAC 6-3-2) (lb/hr)
injection molding machines, #1-52	36,000 (each)	28.43 (each)
thermoforming machines, Lines #1-7	28,000 (each)	24.03 (each)
extruders, #1-5	1,231 (each)	2.96 (each)
Injection molding operations, #54 and #57	650 (each)	1.93 (each)
Injection molding operations, #56	1,084	2.72
Thermoform machine TEF#9	2,200	4.37
Thermoform machines TEF#12, #14, #17	2,350 (each)	4.56 (each)
Thermoform machines TEF#15, #16	10,600 (each)	12.53 (each)
Five extruders A, B, C, D, and E	534 (each)	1.69 (each)

**D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]**

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- (a) A Preventive Maintenance Plan is required for the injection molding machines, #1-52, #54, #56, #57, thermoforming machines, lines #1-7, TFE#8, TEF#9, TFE#10, TEF#12, TFE#13, TEF#14, TEF#15, TEF#16, TEF#17, five (5) extruders, identified as extruder numbers 1-5.
- (b) A Preventive Maintenance Plan is required for the five (5) R&D extruders A, B, C, D and E. Section B - Preventive Maintenance Plan contains Permittee's obligation with regard to the preventive maintenance plan required by this condition, and any control devices.

**Compliance Determination Requirements**

**D.1.3 Particulate Matter (PM)**

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In order to comply with Condition D.1.1 and to render 326 IAC 2-2 not applicable, the integral cyclone dust control systems shall be in operation and control emissions from the injection molding machines, #1-52, #54, #56, #57, thermoforming machines, lines #1-7, TFE#8, TEF#9, TFE#10, TEF#12, TFE#13, TEF#14, TEF#15, TEF#16, TEF#17, five (5) extruders, identified as extruder numbers 1-5, at all times that the emission units are in operation.

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

**D.1.4 Integral Cyclone Failure Detection**

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In the event that integral cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

## SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

#### E. Degreasing:

- (y) Fifteen (15) solvent parts washers, with a combined maximum capacity of 2.04 tons of cleaning solvent per year, identified as numbers 1 – 15, constructed in 2002. Four (4) of which vent through an exhaust stack to the outside air, the other eleven (11) do not vent to an exhaust stack.
- (z) One (1) degreasing machine, constructed in 2011, using specially denatured alcohol as a degreaser solvent, for cleaning ink from resin scrap that has been printed on, annual throughput of less than 145 gallons.

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

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

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

Pursuant to 326 IAC 8-3-2 (Cold cleaner operation), the owner or operator of a cold cleaning facility shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

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

Pursuant to 326 IAC 8-3-5 (Organic Solvent Degreasing Operations)

- (a) The owner or operator of the cold cleaner degreaser shall ensure that the following control equipment requirements are met:
  - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
    - (A) the solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
    - (B) the solvent is agitated; or

- (C) the solvent is heated.
- (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
- (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
  - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
  - (B) A water cover when solvent used is insoluble in, and heavier than, water.
  - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) The owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:
  - (1) Close the cover whenever articles are not being handled in the degreaser.
  - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
  - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

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

**MINOR SOURCE OPERATING PERMIT  
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

<b>Company Name:</b>	Berry Plastics Corporation
<b>Address:</b>	101 Oakley Street
<b>City:</b>	Evansville, Indiana 47710
<b>Phone #:</b>	(812) 424-2904
<b>MSOP #:</b>	M163-22999-00106

I hereby certify that Berry Plastics Corporation is :

still in operation.

no longer in operation.

I hereby certify that Berry Plastics Corporation is :

in compliance with the requirements of MSOP M163-22999-00106.

not in compliance with the requirements of MSOP M163-22999-00106.

<b>Authorized Individual (typed):</b>
<b>Title:</b>
<b>Signature:</b>
<b>Date:</b>

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.

<b>Noncompliance:</b>

### MALFUNCTION REPORT

#### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY FAX NUMBER - 317 233-6865

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?\_\_\_\_\_, 25 TONS/YEAR SULFUR DIOXIDE ?\_\_\_\_\_, 25 TONS/YEAR NITROGEN OXIDES?\_\_\_\_\_, 25 TONS/YEAR VOC ?\_\_\_\_\_, 25 TONS/YEAR HYDROGEN SULFIDE ?\_\_\_\_\_, 25 TONS/YEAR TOTAL REDUCED SULFUR ?\_\_\_\_\_, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?\_\_\_\_\_, 25 TONS/YEAR FLUORIDES ?\_\_\_\_\_, 100 TONS/YEAR CARBON MONOXIDE ?\_\_\_\_\_, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?\_\_\_\_\_, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?\_\_\_\_\_, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?\_\_\_\_\_, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?\_\_\_\_\_. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION \_\_\_\_\_.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC \_\_\_\_\_ OR, PERMIT CONDITION # \_\_\_\_\_ AND/OR PERMIT LIMIT OF \_\_\_\_\_

THIS INCIDENT MEETS THE DEFINITION OF "MALFUNCTION" AS LISTED ON REVERSE SIDE?    Y        N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT?    Y        N

COMPANY: \_\_\_\_\_ PHONE NO. (    ) \_\_\_\_\_

LOCATION: (CITY AND COUNTY) \_\_\_\_\_

PERMIT NO. \_\_\_\_\_ AFS PLANT ID: \_\_\_\_\_ AFS POINT ID: \_\_\_\_\_ INSP: \_\_\_\_\_

CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: \_\_\_\_\_

DATE/TIME MALFUNCTION STARTED: \_\_\_\_/\_\_\_\_/20\_\_\_\_        AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: \_\_\_\_\_

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE \_\_\_\_/\_\_\_\_/20\_\_\_\_        AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: \_\_\_\_\_

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: \_\_\_\_\_

MEASURES TAKEN TO MINIMIZE EMISSIONS: \_\_\_\_\_

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL\* SERVICES: \_\_\_\_\_

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: \_\_\_\_\_

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: \_\_\_\_\_

INTERIM CONTROL MEASURES: (IF APPLICABLE) \_\_\_\_\_

MALFUNCTION REPORTED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_  
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

\*SEE PAGE 2

**Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.**

**326 IAC 1-6-1 Applicability of rule**

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

**326 IAC 1-2-39 "Malfunction" definition**

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

**\*Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

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**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY**

**MINOR SOURCE OPERATING PERMIT (MSOP)  
CERTIFICATION**

Source Name: Berry Plastics Corporation  
Source Address: 101 Oakley Street, Evansville, Indiana 47710  
Mailing Address: P.O. Box 959, Evansville, IN 47706-0959  
MSOP No.: M163-22999-00106

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.**

Please check what document is being certified:

- Annual Compliance Notification
- Test Result (specify) \_\_\_\_\_
- Report (specify) \_\_\_\_\_
- Notification (specify) \_\_\_\_\_
- Affidavit (specify) \_\_\_\_\_
- Other (specify) \_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

## Appendix A: Emission Calculations Summary - Entire Source

Company Name: Berry Plastics Corporation  
Address City IN Zip: 101 Oakley Street, Evansville, IN 47710  
Notice Only Change No.: 163-30301-00106  
MSOP No.: 163-22999-00106  
Reviewer: Swarna Prabha

Potential Emissions (tons/year)												
Emissions Generating Activity												
Pollutant	* 53 Injection Molding Machines	*Injection Molding Machines #54, #56 and #57	*Thermoforming Lines 1-7	*Thermoforming Machines TEF #9, #12, #14, #15, #16, and #17	Extruders	Five (5) Extruders A, B, C, D & E	Printing Operations	Printing Operations	Cleaning Operations	new cleaning Operations	Natural Gas Usage (MMCF/Year)	TOTAL
PM	3.27	<b>0.36</b>	3.27	<b>5.14</b>	3.94	<b>1.71</b>	0.00	<b>0.00</b>	0.00	<b>0.00</b>	0.08	<b>17.77</b>
PM10	3.27	<b>0.36</b>	3.27	<b>5.14</b>	3.94	<b>1.71</b>	0.00	<b>0.00</b>	0.00	<b>0.00</b>	0.08	<b>17.77</b>
PM2.5	3.27	<b>0.36</b>	3.27	<b>5.14</b>	3.94	<b>1.71</b>	0.00	<b>0.00</b>	0.00	<b>0.00</b>	0.08	<b>17.77</b>
SO2	0.00	<b>0.00</b>	0.00	<b>0.00</b>	0.00	<b>0.00</b>	0.00	<b>0.00</b>	0.00	<b>0.00</b>	0.01	<b>0.01</b>
NOx	0.00	<b>0.00</b>	0.00	<b>0.00</b>	0.00	<b>0.00</b>	0.00	<b>0.00</b>	0.00	<b>0.00</b>	1.02	<b>1.02</b>
VOC	16.32	<b>0.84</b>	9.52	<b>11.38</b>	0.19	<b>0.08</b>	2.59	<b>1.48</b>	38.48	<b>5.23</b>	0.06	<b>86.18</b>
CO	0.00	<b>0.00</b>	0.00	<b>0.00</b>	0.00	<b>0.00</b>	0.00	<b>0.00</b>	0.00	<b>0.00</b>	0.86	<b>0.86</b>
total HAPs	0.40	<b>0.014</b>	0.50	<b>0.17</b>	0.00	<b>0.00</b>	0.11	<b>0.00</b>	6.82	<b>0.00</b>	0.02	<b>8.03</b>
worst case single HAP	0.24	<b>0.01</b>	0.29	<b>0.099</b>	0.00	<b>0.00</b>	0.06	<b>0.00</b>	3.07	<b>0.00</b>	0.02	<b>3.07</b>

\*PM, PM10 and PM2.5 control is considered integral to Injection Molding and Thermoforming processes.  
Total emissions based on rated capacity at 8,760 hours/year, after integral control.  
There are no emissions for PM2.5 in AP-42, PM10 = PM2.5

Bold indicates emissions from new emission units added during this revision

**Appendix A: Emissions Calculations  
Emissions From Injection Molding Operations**

**Company Name: Berry Plastics  
Address City IN Zip: 101 Oakley Street, Evansville, IN 47710  
Notice Only Change No.: 163-30301-00106  
MSOP No.: 163-22999-00106  
Reviewer: Swarna Prabha**

PRODUCTION RATE	
I.D.	MAXIMUM CAPACITY (TON/HR)
53 Injection Molding Machines	18

MATERIAL RATE		
MATERIAL	MATERIAL USE* BY WEIGHT %	MATERIAL RATE (TON/HR)
Polypropylene	45.0%	8
Polyethylene	55.0%	10

EMISSIONS					
MATERIAL	POLLUTANT	EMISSION FACTOR (LB/TON)*	POTENTIAL EMISSIONS (TON/YEAR)**	CONTROL EFFICIENCY %	CONTROLLED EMISSIONS (POUNDS/HOUR)*
Polypropylene	VOC	0.382	13.64	0	3.11
	PM	2.8	99.99	98.00%	0.46
	Total HAP from Polypropylene	0.01072	0.38	0.00%	0.09
Polyethylene	VOC	0.0614	2.68	0	0.61
	PM	1.46	63.72	98.00%	0.29
	HAP	0.00034	0.01	0.00%	0.00

\*Material use ratios specified in Process Design as 55% polyethylene and 45% polypropylene.

\*\*The cyclone dust control system is considered integral to the injection molding operations, therefore uncontrolled pte is equal to controlled pte for PM.

**METHODOLOGY**

Potential Emission= Emission Factor \* Material Rate \* 8760 /2000

Controlled Emission= Emission Factor \* Material Rate \* 8760 / 2000 \* (1 - control Efficiency)

Dust collector on plastic transfer and storage controls 98% of dust.

Polyethylene usage is High Density Polyethylene with an emission factor of 0.0614 lbs voc per ton resin

Polypropylene usage is 80% reactor impact copolymer at a temperature of 505 F and 20% controlled rheology homopolymer (with Antistat)

The weighted Polypropylene emission factor is 80% (80.3 lbs VOC per million pound resin) + 20%(191 lbs voc per million pounds resin)=0.2049 lbVOC / ton resin

(1) Polypropylene copolymer processing source, Battelle Institute study published in the Journal of Air and Waste Management (JAWMA) -January 1999

(2) Polyethylene copolymer processing source Barlow, Conlos, Holden, Garrison, Harris and Janke -JAWMA- June 1996

**Appendix A: Emissions Calculations  
Emissions From Injection Molding #54, #56, #57 Operations**

**Company Name: Berry Plastics Corporation  
Address City IN Zip: 101 Oakley Street, Evansville, IN 47712  
Notice Only Change No.: 163-30301-00106  
MSOP No.: 163-22999-00106  
Prepared By: Cornerstone Environmental, Health and safety, Inc.  
Reviewer: Swarna Prabha**

**Potential to Emit Criteria Air Pollutants from the Injection Molding Machines Processing Polypropylene with a 505 °F Melt Temperature**

*Injection Molding	Resin Type	Max Throughput Rate (lbs resin/hr)	PM			VOC		
			<sup>(1)</sup> Emission Factor (lbs/10 <sup>6</sup> lbs)	Emissions (lbs/hr)	Emissions (tons/yr)	<sup>(1)</sup> Emission Factor (lbs/10 <sup>6</sup> lbs)	Emissions (lbs/hr)	Emissions (tons/yr)
54	PP	650	34.5	0.02	0.10	80.3	0.05	0.23
56	PP	1,084	34.5	0.04	0.16	80.3	0.09	0.38
57	PP	650	34.5	0.02	0.10	80.3	0.05	0.23
<b>Totals</b>		<b>2,384</b>		<b>0.08</b>	<b>0.36</b>		<b>0.19</b>	<b>0.84</b>

**Hazardous Air Pollutant Emission Factors from Processing Polypropylene**

HAP Constituent	CAS #	<sup>(1)</sup> Emission Factor
Formaldehyde	50-00-0	0.18
Acrolein	107-02-8	0.01
Acetaldehyde	75-07-0	0.2
Propionaldehyde	123-38-6	0.95

*Injection Molding	Resin Type	Max Throughput Rate (lbs resin/hr)	Formaldehyde Emissions (tons/yr)	Acrolein Emissions (tons/yr)	Acetaldehyde Emissions (tons/yr)	Propionaldehyde Emissions (tons/yr)
54	PP	650	0.0005	0.0000	0.0006	0.0027
56	PP	1,084	0.0009	0.0000	0.0009	0.0045
57	PP	650	0.0005	0.0000	0.0006	0.0027
<b>Totals</b>			<b>0.002</b>	<b>0.000</b>	<b>0.002</b>	<b>0.010</b>
<b>Total HAPs</b>			<b>0.014</b>			

**Notes and Methodology**

<sup>(1)</sup> Emission factors for PM, VOC and HAPs from Polypropylene molding were taken from a technical paper, volume 49 in January 1999, published by the Journal of Air and Waste Management Association titled "Development of Emission Factors for Polypropylene Processing". A melt temperature of 505 °F and reactor impact copolymer was used as the emission factor

\*New Units added during this revision

**Appendix A: Emissions Calculations  
Emissions From Thermoforming Operations**

**Company Name:** Berry Plastics  
**Address City IN Zip:** 101 Oakley Street, Evansville, IN 47710  
**Notice Only Change No.:** 163-30301-00106  
**MSOP No.:** 163-22999-00106  
**Reviewer:** Julia Handley/EVP

PRODUCTION RATE	
I.D.	ANUAL RATE (TON/HR)
<b>7 Thermoforming Machines</b>	14

MATERIAL RATE		
MATERIAL	MATERIAL USE BY WEIGHT %	ANNUAL MATERIAL RATE (TON/HR)
<b>Polypropylene</b>	94.5%	13
<b>Polystyrene</b>	5.5%	1

EMISSIONS						
MATERIAL	POLLUTANT	EMISSION FACTOR (LB/TON)	POTENTIAL UNCONTROLLED EMISSIONS (TON/YEAR)*	CONTROL EFFICIENCY %	CONTROLLED EMISSIONS (POUNDS/HOUR)	CONTROLLED EMISSIONS (TONS/YEAR)*
<b>Polypropylene</b>	VOC	0.16	9.11	0	2.08	9.11
	PM	2.80	158.76	98.00%	0.72	3.18
	HAP	0.00	0.16	0.00%	0.04	0.16
<b>Polystyrene</b>	VOC	0.12	0.41	0	0.09	0.41
	PM	1.46	4.82	98.00%	0.02	0.10
	HAP	0.10	0.34	0.00%	0.08	0.34

\*The cyclone dust control system is considered integral to the thermoforming operations, therefore uncontrolled pte is equal to controlled pte for PM.

**METHODOLOGY**

Potential Emission= Emission Factor \* Material Rate \* 8760 / 2000

Controlled Emission= Emission Factor \* Material Rate \* 8760 / 2000 \* (1 - control Efficiency)

Dust collector on plastic transfer and storage controls 98% of dust.

(1) Polypropylene copolymer processing source, Battelle Institute study published in the Journal of Air and Waste Management (JAWMA) -January 1999

(2) Polyethylene copolymer processing source Barlow, Conlos, Holden, Garrison, Harris and Janke -JAWMA- June 1996

**Appendix A: Emissions Calculations**  
**Emissions From Thermoforming Machines TEF #9, #12, #14, #15, #16, #17**

**Company Name: Berry Plastics Corporation**  
**Address City IN Zip: 101 Oakley Street, Evansville, IN 47710**  
**Notice Only Change No.: 163-30301-00106**  
**MSOP No.: 163-22999-00106**  
**Prepared By: Cornerstone Environmental, Health and safety, Inc.**  
**Reviewer: Swarna Prabha**

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Potential to Emit Criteria Air Pollutants from the Thermoforming Machines Processing Polypropylene at a 505 °F Melt Temperature

*Thermoforming Machines	Resin Type	Max Throughput Rate (lbs resin/hr)	PM			VOC		
			<sup>(1)</sup> Emission Factor (lbs/10 <sup>6</sup> lbs)	Emissions (lbs/hr)	Emissions (tons/yr)	<sup>(1)</sup> Emission Factor (lbs/10 <sup>6</sup> lbs)	Emissions (lbs/hr)	Emissions (tons/yr)
TFE 9	PP	2,200	35.5	0.08	0.34	82.3	0.18	0.79
TFE 12	PP	2,350	36.5	0.09	0.38	83.3	0.20	0.86
TFE 14	PP	2,350	37.5	0.09	0.39	84.3	0.20	0.87
TFE 15	PP	10,600	38.5	0.41	1.79	85.3	0.90	3.96
TFE 16	PP	10,600	39.5	0.42	1.83	86.3	0.91	4.01
TFE17	PP	2,350	40.5	0.10	0.42	87.3	0.21	0.90
<b>Totals</b>		<b>30,450</b>		<b>1.17</b>	<b>5.14</b>	<b>508.80</b>	<b>2.60</b>	<b>11.38</b>

Hazardous Air Pollutant Emission Factors from Processing Polypropylene at a 505 °F Melt Temperature

HAPs	CAS #	<sup>(1)</sup> Emission Factor (lbs/10 <sup>6</sup> lbs)
Formaldehyde	50-00-0	0.74
Acrolein	107-02-8	0.01
Acetaldehyde	75-07-0	0.46
Propionaldehyde	123-38-6	0.05

*Thermoforming Machines	Resin Type	Max Throughput Rate (lbs resin/hr)	Formaldehyde Emissions (tons/yr)	Acrolein Emissions (tons/hr)	Acetaldehyde Emissions (tons/yr)	Propionaldehyde Emissions (tons/yr)
TFE 9	PP	2,200	0.0071	0.0001	0.0044	0.0005
TFE 12	PP	2,350	0.0076	0.0001	0.0047	0.0005
TFE 14	PP	2,350	0.0076	0.0001	0.0047	0.0005
TFE 15	PP	10,600	0.0344	0.0005	0.0214	0.0023
TFE 16	PP	10,600	0.0344	0.0005	0.0214	0.0023
TFE17	PP	2,350	0.0076	0.0001	0.0047	0.0005
<b>Totals</b>			<b>0.099</b>	<b>0.001</b>	<b>0.061</b>	<b>0.007</b>

Total HAPs 0.168

**Notes and Methodology**

<sup>(1)</sup> Emission factors for PM, VOC and HAPs from Polypropylene molding were taken from a technical paper, volume 49 in January 1999, published by the Journal of Air and Waste Management Association titled "Development of Emission Factors for Polypropylene Processing". A melt temperature of 505 oF and reactor impact copolymer was used as the emission factor

\* Thermoforming Machines added during this revision

**Appendix A: Emissions Calculations  
Emissions From Thermoforming Operations**

**Company Name:** Berry Plastics  
**Address City IN Zip:** 101 Oakley Street, Evansville, I  
**Notice Only Change No.:** 163-30301-00106  
**MSOP No.:** 163-22999-00106  
**Reviewer:** Swarna Prabha

Emission Unit	Maximum Capacity (lb/hr)	Emission Factor	Emission Factor (lb/ton)	Source of Emission Factor	Control Efficiency %	Potential Emissions					
						PM (Tons/Year)	PM10 (Tons/Year)	SOx (Tons/Year)	NOx (Tons/Year)	VOC (Tons/Year)	CO (Tons/Year)
Multi-Layer Extrusion Line 1	Extruder 1	508.00	VOC-ethylene	0.0706	1						
	Regrind - LDPE @ 500 deg F		PM-ethylene	1.46	AP-42	98%	1.6243	1.6243	0.0000	0.0000	0.0785
	SCC 30101802, 30101811										
	Extruder 2	294.00	VOC-ethylene	0.0706	1		0.9400	0.9400	0.0000	0.0000	0.0455
	Polyethylene - LDPE @ 500 deg F		PM-ethylene	1.46	AP-42	98%					
	SCC 30101812, 30101811										
	Extruder 3	294.00	VOC-ethylene	0.0706	1		0.9400	0.9400	0.0000	0.0000	0.0455
	Polyethylene - LDPE @ 500 deg F		PM-ethylene	1.46	AP-42	98%					
	SCC 30101812, 30101811										
	Extruder 4	75.00	VOC-ethylene	0.0706	1		0.2398	0.2398	0.0000	0.0000	0.0116
	Tie - LLDPE @ 500 Deg F		PM-ethylene	1.46	AP-42	98%					
	SCC 30101812, 30101811										
	Extruder 5	60.00	VOC-ethylene	0.0706	1		0.1918	0.1918	0.0000	0.0000	0.0093
	EVOH - LDPE @ 500 deg F		PM-ethylene	1.46	AP-42	98%					
	SCC 30101812, 30101811										
<b>Total</b>						<b>3.9360</b>	<b>3.9360</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1903</b>	<b>0.0000</b>

Potential VOC Emissions = (Maximum Capacity (lb)) / 2000 \*(Emission Factor)\* 8760 hrs/yr / 2000 lb/ton

Dust Collector on plastic transfer and storage controls 98% of dust.

Polyethylene emission factor is worst case Low Density Polyethylene extrusion coating at 500 degrees F. which is 35 lb VOC per million lb resin (0.0706 lbs VOC per Ton Resin)

1. Polyethylene copolymer processing source Barlow, Conlos, Holdren, Garrison, Harris and Janke-JAWMA-June 1996

**Appendix A: Emissions Calculations  
Extruders A, B, C, D and E**

**Company Name: Berry Plastics Corpo**  
**Address City IN Zip: 101 Oakley Street, E**  
**Notice Only Change No.: 163-30301-00106**  
**MSOP No.: 163-22999-00106**  
**Prepared By: Cornerstone Environmental, Health and safety, Inc.**  
**Reviewer: Swarna Prabha**

*Extruders	Maximum Capacity (lb/hr)	Emission Factor	Emission Factor (lb/ton)	Control Efficiency %	Potential Emissions					
					PM (Tons/Year)	PM10 (Tons/Year)	SOx (Tons/Year)	NOx (Tons/Year)	VOC (Tons/Year)	CO (Tons/Year)
Five (5) Extruders A, B, C, D, and E Regrind - LDPE @ 500 deg F SCC 30101802, 30101811	534.00	VOC-ethylene	0.0706		1.7074	1.7074	0.0000	0.0000	0.0826	0.0000
		PM-ethylene	1.46	98%						
						1.7074	1.7074	0.0000	0.0000	0.0826

\* Extruders added during this revision

**Appendix A: Emissions Calculations  
VOC from Printing**

**Company Name: Berry Plastics**  
**Address City IN Zip: 101 Oakley Street, Evansville, IN 47710**  
**Notice Only Change No.: 163-30301-00106**  
**MSOP No.: 163-22999-00106**  
**Reviewer: Swarna Prabha**

FACILITY	INK ID.	MAXIMUM INK USE (lb/hr)	Weight % Volatiles	Flash Off %	VOC Emissions (TONS/YEAR)
<b>38 Flexographic Ultraviolet Cure Ink Printers</b>	Sun Chemicals Energy Cured UV Ink INKCV5481170	47	1%	100.00%	2.07
<b>10 Station Ultraviolet Cure Ink Gallus Printer line</b>	Water Ink Technologies UV Curable Ink RVG001212	110.59	0.00%	100.00%	0.00
<b>6 Screen Printing Machines</b>	Nazdar Poly All Scrrre Printing Ink PA70 Black	0.20	59%	100.00%	0.52

**Total emissions from Printing Opeartions**

**2.59 Tons VOC per year**

**METHODOLOGY**

VOC = Weight percentage volatiles (water minus organics) \* Flash off \* Max Ink Use \* 8760 / 2000 = Tons per Year

Weight % VOC in Ultraviolet Ink Specified in MSDS as less than 1%. 1% Voc assumption is worst case.

NOTE: HEAT SET OFFSET PRINTING HAS A FLASH OFF OF 80%. OTHER TYPES OF PRINTERS HAVE A FLASH OFF OF 100%.

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

Inks used in silk screen machines are polyall or 7900 series color gloss screen inks. Ink shown above represents worst case VOC emissions

Weight % VOC from supplied by source from MSDS.

**Appendix A: Emissions Calculations  
Worst Case VOC Emissions from Cleaning Processes**

**Company Name: Berry Plastics  
Address City IN Zip: 101 Oakley Street, Evansville, IN 47710  
Notice Only Change No.: 163-30301-00106  
MSOP No.: 163-22999-00106  
Reviewer: Swarna Prabha**

FACILITY	MATERIAL	MAX MATERIAL USE (lb/hr)	WEIGHT % VOC	Flash off %	Potential VOC (Tons/year)
Solvent Parts Washer 1	Blend 8	0.47	100%	100.0%	2.04
Cleaning of Molders	BP627	2.70	100%	100.0%	11.82
Cleaning of Printers	Blend 2279	11.29	50%	100.0%	24.62
Cleaning of Printers	Flexowash	0.29	0%	100.0%	0.00

**METHODOLOGY**

38.48

VOC = Weight percentage volatiles (water minus organics) \* Flash off \* Max Ink Use \* 8760 / 2000 = Tons per Year

(1) Worst case assumption: max potential solvent use = VOC emission

(2) Worst case assumption: max HAP content of max potential solvent use = HAP emission

Weight % VOC from supplied by source from MSDS.

**Appendix A: Emissions Calculations  
Emissions From Cleaning Operations**

**Company Name: Berry Plastics Corpor:  
Address City IN Zip: 101 Oakley Street, Eva  
Notice Only Change No.: 163-30301-00106  
MSOP No.: 163-22999-00106  
Prepared By: Cornerstone Environmental, Health and safety, Inc.  
Reviewer: Swarna Prabha**

**PTE for Cleanup Solvent Usage**

Area of Cleanup Solvent Usage	Product Name	Manufacturer	Estimated Max Usage (lb/hr)	Density (lbs/gal)	VOC Content (wt%)	VOC Emissions (tons/yr)	Xylene (tons/yr)	Toluene (tons/yr)	Cumene (tons/yr)
Decorating (Injection and Thermoform), Overcap	L-1439	Superior	2.400	6.62	49.8%	5.23	-	-	-
Gallus Printer Lines	Rotary UV Cleaner	FlexoWash	0.29	8.85	0%	0.00	-	-	-
Total						5.23			

**PTE for Printing**

Area Ink Usage	Product Name	Manufacturer	Estimated Max Usage (lbs/hr)	VOC Content (wt%)	VOC Emissions (tons/yr)
Injection Print and Thermoform	Various UV Curable Inks	Sun	14.73	1%	0.65
Gallus Printer Line	Various UV Curable Inks	Water Ink Tech	18.91	1%	0.83
Overcap Department	Various UV Curable Inks	Sun	0.02	1%	0.00
Overcap Department	Various Screen Inks	Nazdar	0.002	59%	0.01
Total					1.48

**Appendix A: Emissions Calculations**

**Natural Gas Combustion Only**

**MM BTU/HR <100**

**Natural gas combustion units**

**UV and silk screen printing**

**Company Name: Berry Plastics**

**Address City IN Zip: 101 Oakley Street, Evansville, IN 4**

**Notice Only Change No.: 163-30301-00106**

**MSOP No.: 163-22999-00106**

**Reviewer: Swarna Prabha**

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

2.3

20.4

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	7.6	7.6	0.6	100.0	5.5	84.0
Potential Emission in tons/yr	0.08	0.08	0.01	1.02	0.06	0.86

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

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

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 1-03-006-0 (SUPPLEMENT D 3/98)

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

See next page for HAPs emissions calculations.

**Appendix A: Emissions Calculations**

**Natural Gas Combustion Only**

**MM BTU/HR <100**

**HAPs Emissions**

**Company Name: Berry Plastics**

**Address City IN Zip: 101 Oakley Street, Evansville, IN 47**

**Permit Number: 163-22999-00106**

**Reviewer: Julia Handley/EVP**

Emission Factor in lb/MMcf	HAPs - 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	2.142E-05	1.224E-05	7.650E-04	0.02	3.468E-05

Emission Factor in lb/MMcf	HAPs - 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	5.100E-06	1.122E-05	1.428E-05	3.876E-06	2.142E-05

Combined HAPs      0.02      tons per year

Methodology is the same as previous page.

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  
HAP Emissions - Injection Molding, Thermoforming & Cleaning c**

**Company Name: Berry Plastics  
Address City IN Zip: 101 Oakley Street, Evansvill  
Notice Only Change No.: 163-30301-00106  
MSOP No.: 163-22999-00106  
Reviewer: Swarna Prabha**

Emission Unit	Maximum Capacity (lb/hr)	Emission Factor	Emission Factor (%)	Potential HAP Emissions											Total HAPS (Tons/Year)	
				Formaldehyde (Tons/Year)	Acrolein (Tons/Year)	Acetaldehyde (Tons/Year)	Propionaldehyde (Tons/Year)	Acrylic Acid (Tons/Year)	Ethyl Benzene (Tons/Year)	Styrene (Tons/Year)	Acetophenone (Tons/Year)	Xylene (Tons/Year)	Napthalene (Tons/Year)	1,2,4 Trimethylbenzene (Tons/Year)		
Injection Molding Machines	16,305.51	Formaldehyde	1.3	0.0928	0.0100	0.0379	0.2364	0.0057	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	<b>0.3828</b>
		Acrolein	0.14													
		Acetaldehyde	0.53													
Controlled Rheology homopolymer with antistat		Propionaldehyde	3.31													
		Acrylic Acid	0.08													
		<b>TOTAL</b>	<b>5.36</b>													
Injection Molding Machines	19,928.96	Formaldehyde	0.06	0.0052	0.0017	0.0044	0.0017	0.0017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	<b>0.0148</b>
		Acrolein	0.02													
		Acetaldehyde	0.05													
		Propionaldehyde	0.02													
		Acrylic Acid	0.02													
		<b>TOTAL</b>	<b>0.17</b>													
Thermoforming Line 1-6	25,890.41	Formaldehyde	0.18	0.0204	0.0011	0.0227	0.1077	0.0091	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	<b>0.1610</b>
		Acrolein	0.01													
		Acetaldehyde	0.2													
Controlled Rheology homopolymer with antistat		Propionaldehyde	0.95													
		Acrylic Acid	0.08													
		<b>TOTAL</b>	<b>1.42</b>													
Thermoforming Line 7	1,506.85	Ethyl Benzene	6.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0403	0.2924	0.0046	0.0000	0.0000	0.0000	0.0000	<b>0.3394</b>
		Styrene	44.3													
		Acetophenone	0.7													
		<b>TOTAL</b>	<b>51.43</b>													
Extruders 1-5	1,231.00	Formaldehyde	0.06	0.0003	0.0001	0.0003	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	<b>0.0009</b>
		Acrolein	0.02													
		Acetaldehyde	0.05													
		Propionaldehyde	0.02													
		Acrylic Acid	0.02													
		<b>TOTAL</b>	<b>0.17</b>													
UV Cure Ink Printers	47.26	<b>TOTAL</b>	<b>0.00</b>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	<b>0.0000</b>
Screen printing	0.20	Xylene	0.07	0.0622	0.0444	0.0000	0.0000	0.0000	0.0044	0.0000	0.0000	0.0622	0.0444	0.0000	0.0000	<b>0.1111</b>
		Napthalene	0.05													
PA11 Polyall Extra or White		Ethyl Benzene	0.01													
		<b>TOTAL</b>	<b>0.13</b>													
Solvent Parts Washer 1	0.47	<b>TOTAL</b>	<b>0.00</b>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	<b>0.0000</b>
Cleaning of Molders BP627	2.70	Xylene	0.26	0.0000	0.0000	0.0000	0.0000	0.0000	0.7092	0.0000	0.0000	3.0732	0.0000	2.8368	0.0000	<b>6.8201</b>
		1,2,4 Trimethylbenzene	0.24													
		Ethylbenzene	0.06													
		<b>TOTAL</b>	<b>0.58</b>													
Cleaning of Printers	11.29	<b>TOTAL</b>	<b>0.00</b>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	<b>0.0000</b>
<b>Total</b>				<b>0.1810</b>	<b>0.0574</b>	<b>0.0652</b>	<b>0.3460</b>	<b>0.0166</b>	<b>0.7539</b>	<b>0.2924</b>	<b>0.0046</b>	<b>3.1354</b>	<b>0.0444</b>	<b>2.8368</b>	<b>0.0000</b>	<b>7.8302</b>

Potential HAP Emissions = (Maximum Capacity (lb/hr))\*(Emission Factor)\*8760/2000  
Resin useage is 55% polyethylene and 45% Polypropylene

**Injection Molding Systems**

- (1) Polypropylene copolymer processing source, Battelle Institute study published in the Journal of Air and Waste Management Association (JAWMA)-January 1999
- (2) Polyethylene copolymer processing source Barlow, Conlos, Holdren, Garrison, Harris and Janke-JAWMA-June 1996

**Thermoformer Systems**

- (3) Polypropylene copolymer processing source, Battelle Institute study published in the Journal of Air and Waste Management Association (JAWMA)-January 1999
- (4) Polyethylene copolymer processing source Barlow, Conlos, Holdren, Garrison, Harris and Janke-JAWMA-June 1996

**Screen Printing emission calculations:**

HAP emission based on use of worst case ink  
maximum capacity(ton/year) = maximum capacity (gallons of ink/year) \* density of ink /2000 lbs/ton = 214.44 gal/yr \*11.1 lb/gal / 2000 lb/ton=1.1884 ton  
potential Hap emission= maximum capacity (ton/year) \* emission factor

**Cleaning Processes**

- (1) Worst case assumption: max potential solvent use = VOC emission
  - (2)Worst case assumption: max hap content of max potential solvent use = HAP emission
- Weight % VOC from supplied by source from MSDS,



# 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](http://www.idem.IN.gov)

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

TO: John Patterson  
Berry Plastics Corporation  
101 Oakley St  
Evansville, IN 47710

DATE: July 13, 2011

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

SUBJECT: Final Decision  
MSOP  
163-30301-00106

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:  
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](mailto:jbrush@idem.IN.gov).

Final Applicant Cover letter.dot 11/30/07

# Mail Code 61-53

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Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

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3		Vanderburgh County Commissioners 1 NW MLK Blvd, Rm 305 Evansville IN 47708 (Local Official)									
4		Mr. Charles L. Berger Berger & Berger, Attorneys at Law 313 Main Street Evansville IN 47700 (Affected Party)									
5		Mr. Wendell Hibdon Plumbers & Steam Fitters Union, Local 136 2300 St. Joe Industrial Park Dr Evansville IN 47720 (Affected Party)									
6		Mr. Don Mottley Save Our Rivers 6222 Yankeetown Hwy Boonville IN 47601 (Affected Party)									
7		Vanderburgh County Health Dept. 420 Milberry Street Evansville IN 47713-1888 (Health Department)									
8		Mr. David Howard Cornerstone Environmental, Health & Safety, Inc. 880 Lennox Court Zionsville IN 46077 (Consultant)									
9		Kim Sherman 3355 Woodview Drive Newburgh IN 47630 (Affected Party)									
10		Mr. John Blair 800 Adams Ave Evansville IN 47713 (Affected Party)									
11		Evansville EPA 100 E. Walnut St. Suite 100, Newsome Center Evansville IN 47713 (Local Official)									
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