

Indiana Department of Environmental Management

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr. Governor

Thomas W. Easterly Commissioner

100 North Senate Avenue Indianapolis, Indiana 46204 MC 61-54 (317) 232-8603 (800) 451-6027

www.IN.gov/idem

TO: Interested Parties / Applicant

DATE: March 14, 2008

RE: Ball Metal Beverages / 181-25614-00022

FROM: Matthew Stuckey, Deputy Branch Chief

> Permits Branch Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this approval is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, within eighteen (18) calendar days of the mailing of this notice. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filina:

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

- the name and address of the person making the request; (1)
- (2) the interest of the person making the request;
- identification of any persons represented by the person making the request; (3)
- (4) the reasons, with particularity, for the request;
- the issues, with particularity, proposed for considerations at any hearing; and (5)
- (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-MOD.dot 12/3/07





Indiana Department of Environmental Management

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr. Governor

Thomas W. Easterly Commissioner

100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251 (317) 232-8603 (800) 451-6027 www.IN.gov/idem

Ms. Virginia Peck **EHS Manager** Ball Metal Beverage Container Corp. 501 North Sixth Street Monticello, IN 47960

March 13, 2008

181-25614-00022 Re:

Minor Source Modification to

Part 70 Renewal No.: T 181-17684-00022

Dear Ms. Peck:

Ball Metal Beverage Container Corp. was issued a Part 70 Operating Permit Renewal on November 16, 2006 for a stationary aluminum based beverage can manufacturing and coating plant. A letter requesting changes to this permit was received on December 4, 2007. Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for construction at the source:

- (a) The following new proposed emission units:
 - (1) One (1) Lithographic dry offset printing press for printing and overvarnish, identified as PTR-4, approved for construction in 2008, with a maximum capacity of 114,000 16-oz. cans per hour or 102,000 24-oz. cans per hour, with natural gas drying oven (PO-4), rated at 2.7 MMBtu/hr, and exhausting to thermal oxidizer RTO-1 and
 - (2) One (1) inside spray machine line, identified as ISM-4, approved for construction in 2008, with a maximum capacity of 114,000 16-oz. cans per hour or 102,000 24oz. cans per hour, using airless application systems, using a dry box and baghouse for particulate control, with natural gas drying oven (ISO-4) with two (2) 0.8 MMBtu/hr burners and one (1) 1.6 MMBtu/hr burner, and exhausting to thermal oxidizer RTO-1.
- (b) The following proposed insignificant activities related to this modification:
 - (1) One (1) natural gas Washer drying oven, identified as W-03, rated at 1.6 MMBtu/hr;
 - (2)One (1) natural gas hot water boiler, identified as B-06, rated at less than 5 MMBtu/hr;
 - One (1) Ultraviolet bottom coater, identified as UV-04; (3)
 - (4) One (1) line of equipment for metal working, processing hot water, closed loop heating and cooling, six (6) ovens with natural gas burners less than 10 MMBtu/hr, with a total of 24.1 MMBtu/hr;



- (5) One (1) ID system, consisting of ink and cleanup solvent with a VOC potential to emit less than three (3) pounds per hour and less than fifteen (15) pounds per day; and
- (6) Two (2) natural gas air makeup units, identified as Mup-01-02, rated at 6.25 MMBtu/hr each.
- (c) The following proposed modified unit:
 - One (1) Degreasing operation, identified as CPW-01, with a maximum capacity of 220 gallons per twelve (12) consecutive month period for cold cleaner parts washing.
- (d) The following emission unit is being removed:
 - One (1) end making line, constructed in 1992 and identified as FE 36, with a maximum capacity of 540,000 ends per hour, with no controls and exhausting to atmosphere.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

- 1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
- This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13 17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
- 3. <u>Effective Date of the Permit</u> Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
- 4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
- 5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
- 6. Pursuant to 326 IAC 2-7-10.5(I) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

The source may begin construction when the source modification has been issued. Operating conditions shall be incorporated into the Part 70 operating permit as a significant permit modification in accordance with 326 IAC 2-7-10.5(I)(2) and 326 IAC 2-7-12. Operation is not approved until the significant permit modification has been issued.

All other conditions of the permit shall remain unchanged and in effect. For your convenience, the entire Part 70 Operating Permit as modified will be provided at issuance.

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 Laura Spriggs, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251, or call at (800) 451-6027, and ask for Laura Spriggs or extension (3-5693), or dial (317) 233-5693.

Original Signed By:

Matthew Stuckey, Branch Chief Permits Branch Office of Air Quality

Attachments:
Updated Permit
Technical Support Document
PTE Calculations

Iss

cc: File – White County

White County Health Department

U.S. EPA, Region V Air Compliance Inspector Compliance Data Section

Permit Reviewer

Permits Administration and Development

Mr. Ross Rittberg Plant Manager 501 North Sixth St. Monticello, IN 47960



Indiana Department of Environmental Management

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr. Governor

Thomas W. Easterly Commissioner

100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251 (317) 232-8603 (800) 451-6027 www.IN.gov/idem

Part 70 Minor Source Modification OFFICE OF AIR QUALITY

Ball Metal Beverage Container Corp. 501 North Sixth Street Monticello, Indiana 47960

(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 in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-2 and 326 IAC 2-7-10.5, applicable to those conditions.

Minor Source Modification No.: 181-25614-00022					
Issued by: Original Signed By:	Issuance Date:	March 13, 2008			
Matthew Stuckey, Branch Chief Permits Branch Office of Air Quality					

Page 2 of 39 Minor Source Modification No.: 181-25614-00022

TABLE OF CONTENTS

SECTIO	N A	SOURCE SUMMARY4		
	A.1	General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]		
	A.2	Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]		
	A.3	Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]		
	A.4	Part 70 Permit Applicability [326 IAC 2-7-2]		
SECTIO	NB (GENERAL CONDITIONS 6		
	B.1	Definitions [326 IAC 2-7-1]		
	B.2	Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5] [326 IAC 2-7-4(a)(1)(D)] [IC 13-15-3-6(a)]		
	B.3	Enforceability [326 IAC 2-7-7]		
	B.4	Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]		
	B.5	Severability [326 IAC 2-7-5(5)]		
	B.6	Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]		
	B.7	Duty to Provide Information [326 IAC 2-7-5(6)(E)]		
	B.8	Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]		
	B.9 B.10	Annual Compliance Certification [326 IAC 2-7-6(5)] Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and		
		(6)][326 IAC 1-6-3]		
	B.11	Emergency Provisions [326 IAC 2-7-16]		
	B.12	Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]		
	B.13	Prior Permits Superseded [326 IAC 2-1.1-9.5] [326 IAC 2-7-10.5]		
	B.14	Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]		
	B.15	Permit Modification, Reopening, Revocation and Reissuance, or Termination		
		[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]		
	B.16	Permit Renewal [326 IAC 2-7-3] [326 IAC 2-7-4] [326 IAC 2-7-8(e)]		
	B.17	Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]		
	B.18	Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]		
	B.19	Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]		
	B.20	Source Modification Requirement [326 IAC 2-7-10.5]		
	B.21	Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC 13-30-3-1] [IC 13-17-3-2]		
	B.22	Transfer of Ownership or Operational Control [326 IAC 2-7-11]		
	B.23	Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]		
	B.24	Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]		
	B.25	Term of Conditions [326 IAC 2-1.1-9.5]		
SECTIO	NC S	SOURCE OPERATION CONDITIONS17		
	Emissio	n Limitations and Standards [326 IAC 2-7-5(1)]		
	C.1	Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]		
	C.2	Opacity [326 IAC 5-1]		
	C.3	Open Burning [326 IAC 4-1] [IC 13-17-9]		
	C.4	Incineration [326 IAC 4-2] [326 IAC 9-1-2]		
	C.5	Fugitive Dust Emissions [326 IAC 6-4]		
	C.6	Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]		
	Testing I C.7	Requirements [326 IAC 2-7-6(1)] Performance Testing [326 IAC 3-6]		
	Compliance Requirements [326 IAC 2-1.1-11]			

Compliance Requirements [326 IAC 2-1.1-11]

C.8

	D.1.3 D.1.4 Complian D.1.5 D.1.6	Particulate [326 IAC 6-3-2(d)] Preventive Maintenance Plan [326 IAC 2-7-5(13)] nce Determination Requirements Volatile Organic Compounds (VOC) [326 IAC 8-1-4] [326 IAC 8-1-2(a)] [40 CFR 60.49 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]	93]
	D.1.6		, ,
	D.1.7 D.1.8	Monitoring Thermal Oxidizer Temperature [40 CFR 64]	
	Record P D.1.9 D.1.10	Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19] Record Keeping Requirements Reporting Requirements	
	New Sou D.1.11 D.1.12	General Provisions Relating to New Source Performance Standards [326 IAC 2-7-5(1)] CFR Part 60, Subpart A] Standards of Performance for the Beverage Can Surface Coating Industry Requirements Requirements [40 CFR Part 60, Subpart WW]	0
SECTIO	N D.2	FACILITY OPERATIONS CONDITIONS	33
SECTIO	N D.2	FACILITY OPERATIONS CONDITIONS	33
	D.2.1	Volatile Organic Compounds (VOC) [326 IAC 8-3-2]	
	D.2.2	Particulate [326 IAC 6-3-2(e)(2)]	
CEDTIE	ICATION		. .
		CCURRENCE REPORT	
		/ Report	
Part /U			
CERTIF	D.2.2	Particulate [326 IAC 6-3-2(e)(2)]	

Ball Metal Beverage Container Corp. Minor Source Modification No.: 181-25614-00022 Monticello, Indiana

Permit Reviewer: Laura Spriggs

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 through A.3 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.

General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)] A.1

The Permittee owns and operates a stationary aluminum based beverage can manufacturing and coating plant.

Source Address: 501 North Sixth Street, Monticello, IN 47960 Mailing Address: 501 North Sixth Street, Monticello, IN 47960

General Source Phone Number: 574-583-9418

SIC Code: 3411 County Location: White

Source Location Status: Attainment for all criteria pollutants Source Status: Part 70 Operating Permit Program Minor Source, under PSD Rules

Minor Source, under Section 112 of the Clean Air Act

Page 4 of 39

Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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

- Four (4) lithographic printing presses for printing and overvarnish: (a)
 - (1) Two (2) constructed in 1993, identified as PTR-1 and PTR-2, each with a maximum capacity of 138,000 twelve (12) ounce cans per hour, with two (2) natural gas-fired drying ovens (PO-1 and PO-2), each rated at 4 MMBtu/hr, and exhausting to the thermal oxidizer, RTO-1;
 - One (1) constructed in 1993, identified as PTR-3, with a maximum capacity of (2) 138,000 twelve (12) ounce cans per hour or 114,000 sixteen (16) ounce cans per hour, with one (1) natural gas-fired drying oven (PO-3), rated at 4 MMBtu/hr, and exhausting to the thermal oxidizer, RTO-1; and
 - One (1) approved for construction in 2008, identified as PTR-4, with a maximum (3) capacity of 114,000 sixteen (16) ounce cans per hour or 102,000 twenty-four (24) ounce cans per hour, with one (1) natural gas-fired drying oven (PO-4), rated at 2.7 MMBtu/hr, and exhausting to the thermal oxidizer, RTO-1.
- One (1) natural gas-fired regenerative thermal oxidizer, constructed in 1988 and identified (b) as RTO-1, rated at 16.0 MMBtu/hr, exhausting to stack TO-1.
- Four (4) inside spray machine lines: (c)
 - Two (2) constructed in 1993, identified as ISM-1 and ISM-2, each consisting of six (1) machines, each using airless application systems with filtering so that no overspray is visibly detectable at the exhaust, each with a coating capacity of 138,000 twelve (12) ounce cans per hour, with two (2) natural gas-fired drying ovens (ISO-1 and ISO-2), each rated at 6.0 MMBtu/hr, and each exhausting to the thermal oxidizer, RTO-1;
 - (2) One (1) constructed in 1993, identified as ISM-3, consisting of six machines, each

Ball Metal Beverage Container Corp. Monticello, Indiana Minor Source Modification No.: 181-25614-00022

Permit Reviewer: Laura Spriggs

using airless application systems with filtering so that no overspray is visibly detectable at the exhaust, with a coating capacity of 138,000 twelve (12) ounce cans per hour or 114,000 sixteen (16) ounce cans per hour, with one (1) natural gas-fired drying oven (ISO-3), rated at 6.0 MMBtu/hr, and exhausting to the thermal oxidizer, RTO-1; and

Page 5 of 39

- (3) One (1) approved for construction in 2008, identified as ISM-4, with a coating capacity of 114,000 sixteen (16) ounce cans per hour or 102,000 twenty-four (24) ounce cans per hour, using airless application systems with filtering so that no overspray is visibly detectable at the exhaust, with natural gas drying oven (ISO-4), with two (2) 0.8 MMBtu/hr burners and one (1) 1.6 MMBtu/hr burner, and exhausting to the thermal oxidizer, RTO-1.
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- Degreasing operations, identified as CPW-01, with a maximum usage of 220 gallons per (a) twelve (12) consecutive month period for cold cleaner parts washing;
- (b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment [326] IAC 6-3-2]; and
- (c) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone [326 IAC 6-3-2].

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- It is a major source, as defined in 326 IAC 2-7-1(22); (a)
- It is a source in a source category designated by the United States Environmental (b) Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

Page 6 of 39 Minor Source Modification No.: 181-25614-00022

SECTION B

GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5] [326 IAC 2-7-4(a)(1)(D)] [IC 13-15-3-6(a)]

- This permit, T181-17684-00022, is issued for a fixed term of five (5) 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.
- If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to (b) 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, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

Enforceability [326 IAC 2-7-7] B.3

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.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

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 [326 IAC 2-7-5(6)(D)]

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

Duty to Provide Information [326 IAC 2-7-5(6)(E)] B.7

- The Permittee shall furnish to IDEM, OAQ within a reasonable time, any information that (a) 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 the "responsible official" as defined by 326 IAC 2-7-1(34). 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.

Ball Metal Beverage Container Corp. Page 7 of 39
Monticello, Indiana Minor Source Modification No.: 181-25614-00022

Permit Reviewer: Laura Spriggs

B.8 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

(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 a responsible official 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) The responsible official is defined at 326 IAC 2-7-1(34).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 1st of each year to:

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

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

- (b) The annual compliance certification report 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) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Ball Metal Beverage Container Corp. Monticello, Indiana Minor Source Modification No.: 181-25614-00022

Permit Reviewer: Laura Spriggs

Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] B.10 [326 IAC 1-6-3]

If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) including the following information on each facility:

Page 8 of 39

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- A description of the items or conditions that will be inspected and the inspection (2)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 or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation (c) 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.11 Emergency Provisions [326 IAC 2-7-16]

- An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - An emergency occurred and the Permittee can, to the extent possible, identify the (1) causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - During the period of an emergency, the Permittee took all reasonable steps to (3)minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ within four (4) daytime business hours after the beginning of the emergency. or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,

Compliance Section), or

Telephone Number: 317-233-0178 (ask for Compliance Section)

Facsimile Number: 317-233-6865

Ball Metal Beverage Container Corp. Page 9 of 39
Monticello, Indiana Minor Source Modification No.: 181-25614-00022

Permit Reviewer: Laura Spriggs

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

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

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

Page 10 of 39 Minor Source Modification No.: 181-25614-00022

B.12 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced 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 Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ has issued the modification. [326 IAC 2-7-12(b)(8)]

Ball Metal Beverage Container Corp.

Monticello, Indiana

Permit Reviewer: Laura Spriggs

Page 11 of 39

Minor Source Modification No.: 181-25614-00022

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5] [326 IAC 2-7-10.5]

- (a) All terms and conditions of permits established prior to T181-17684-00022 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this combined permit, all previous registrations and permits are superseded by this Part 70 operating permit.

B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

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

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

Ball Metal Beverage Container Corp. Monticello, Indiana Minor Source Modification No.: 181-25614-00022

Permit Reviewer: Laura Spriggs

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

Page 12 of 39

The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated (d) before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-3] [326 IAC 2-7-4] [326 IAC 2-7-8(e)]

The application for renewal shall be submitted using the application form or forms (a) prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management Permits Branch, 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 nine (9) months 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.
- If the Permittee submits a timely and complete application for renewal of this permit, the (c) source's failure to have a permit is not a violation of 326 IAC 2-7 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 in writing by IDEM, OAQ, any additional information identified as being needed to process the application.

Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12] B.17

- Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted

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

Ball Metal Beverage Container Corp. Monticello, Indiana Minor Source Modification No.: 181-25614-00022

Permit Reviewer: Laura Spriggs

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

Page 13 of 39

The Permittee may implement administrative amendment changes addressed in the (c) request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

- No Part 70 permit revision shall be required under any approved economic incentives, (a) marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5] B.19

- The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air
 - Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained; (2)
 - The changes do not result in emissions which exceed the limitations provided in (3)this permit (whether expressed herein as a rate of emissions or in terms of total emissions):

The Permittee notifies the:

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

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

Ball Metal Beverage Container Corp. Monticello, Indiana

Permit Reviewer: Laura Spriggs

on-site, on a rolling five (5) year basis, which

Minor Source Modification No.: 181-25614-00022

Page 14 of 39

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document, all such changes and emissions trades that are subject to 326 IAC 2-7-20(b), (c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
 - (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
 The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
 The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.20 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

B.21 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC 13-30-3-1] [IC 13-17-3-2]

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 Part 70 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 any records that must be kept under the conditions of this permit;

Page 15 of 39 Minor Source Modification No.: 181-25614-00022

(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 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 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.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 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 Permits Branch, 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 by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) 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.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

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

Page 16 of 39 Minor Source Modification No.: 181-25614-00022

Term of Conditions [326 IAC 2-1.1-9.5] B.25

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:

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

Page 17 of 39 Minor Source Modification No.: 181-25614-00022

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this 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 or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

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). 326 IAC 6-4-2(4) is not federally enforceable.

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.

Ball Metal Beverage Container Corp. Page 18 of 39
Monticello, Indiana Minor Source Modification No.: 181-25614-00022

Permit Reviewer: Laura Spriggs

(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 Asbestos Section, Office of Air Quality 100 North Senate Avenue MC 61-52 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. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control
 The Permittee shall comply with the applicable emission control procedures in 326 IAC 1410-4 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 Accredited Asbestos inspector is not federally enforceable.

Ball Metal Beverage Container Corp. Monticello, Indiana

Minor Source Modification No.: 181-25614-00022 Permit Reviewer: Laura Spriggs

Testing Requirements [326 IAC 2-7-6(1)]

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

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.

Page 19 of 39

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, 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. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (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 the "responsible official" as defined by 326 IAC 2-7-1(34).
- Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM not later than (c) 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]

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 2-7-5(1)] [326 IAC 2-7-6(1)]

C.9 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

Page 20 of 39 Minor Source Modification No.: 181-25614-00022

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

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.11 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- (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 [326 IAC 2-7-5] [326 IAC 2-7-6]

C.12 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on June 3, 1996.
- (b) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.13 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.14 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

- (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.

Ball Metal Beverage Container Corp. Monticello, Indiana

Minor Source Modification No.: 181-25614-00022 Permit Reviewer: Laura Spriggs

(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:

Page 21 of 39

- monitoring results; (1)
- (2) review of operation and maintenance procedures and records:
- (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.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- When the results of a stack test performed in conformance with Section C Performance (a) Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- A retest to demonstrate compliance shall be performed within one hundred twenty (120) (b) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- IDEM, OAQ reserves the authority to take any actions allowed under law in response to (c) noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)] C.16 [326 IAC 2-6]
 - In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), every three (a) (3) years, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
 - Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a); (1)
 - Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC (2) 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Quality

Page 22 of 39 Minor Source Modification No.: 181-25614-00022

100 North Senate Avenue MC 61-50 IGCN 1003 Indianapolis, Indiana 46204-2251

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The emission statement 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.17 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (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, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

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

- (c) 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.
- (d) 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 the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) 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.
- (f) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this

Page 23 of 39 Minor Source Modification No.: 181-25614-00022

information from the IDEM, OAQ under 326 IAC 17.1.

Stratospheric Ozone Protection

C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

Page 24 of 39 Minor Source Modification No.: 181-25614-00022

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (a) Four (4) lithographic printing presses for printing and overvarnish:
 - (1) Two (2) constructed in 1993, identified as PTR-1 and PTR-2, each with a maximum capacity of 138,000 twelve (12) ounce cans per hour, with two (2) natural gas-fired drying ovens (PO-1 and PO-2), each rated at 4 MMBtu/hr, and exhausting to the thermal oxidizer, RTO-1;
 - (2) One (1) constructed in 1993, identified as PTR-3, with a maximum capacity of 138,000 twelve (12) ounce cans per hour or 114,000 sixteen (16) ounce cans per hour, with one (1) natural gas-fired drying oven (PO-3), rated at 4 MMBtu/hr, and exhausting to the thermal oxidizer, RTO-1; and
 - (3) One (1) approved for construction in 2008, identified as PTR-4, with a maximum capacity of 114,000 sixteen (16) ounce cans per hour or 102,000 twenty-four (24) ounce cans per hour, with one (1) natural gas-fired drying oven (PO-4), rated at 2.7 MMBtu/hr, and exhausting to the thermal oxidizer, RTO-1.
- (b) One (1) natural gas-fired regenerative thermal oxidizer, constructed in 1988 and identified as RTO-1, rated at 16.0 MMBtu/hr, exhausting to stack TO-1.
- (c) Four (4) inside spray machine lines:
 - (1) Two (2) constructed in 1993, identified as ISM-1 and ISM-2, each consisting of six machines, each using airless application systems with filtering so that no overspray is visibly detectable at the exhaust, each with a coating capacity of 138,000 twelve (12) ounce cans per hour, with two (2) natural gas-fired drying ovens (ISO-1and ISO-2), each rated at 6.0 MMBtu/hr, and each exhausting to the thermal oxidizer, RTO-1;
 - (2) One (1) constructed in 1993, identified as ISM-3, consisting of six machines, each using airless application systems with filtering so that no overspray is visibly detectable at the exhaust, with a coating capacity of 138,000 twelve (12) ounce cans per hour or 114,000 sixteen (16) ounce cans per hour, with one (1) natural gas-fired drying oven (ISO-3), rated at 6.0 MMBtu/hr, and exhausting to the thermal oxidizer, RTO-1; and
 - (3) One (1) approved for construction in 2008, identified as ISM-4, with a coating capacity of 114,000 sixteen (16) ounce cans per hour or 102,000 twenty-four (24) ounce cans per hour, using airless application systems with filtering so that no overspray is visibly detectable at the exhaust, with natural gas drying oven (ISO-4), with two (2) 0.8 MMBtu/hr burners and one (1) 1.6 MMBtu/hr burner, and exhausting to the thermal oxidizer, RTO-1.

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-3]

Pursuant to 326 IAC 8-2-3(b), (Can Coating Operations), the operator of four (4) overvarnish lines, PTR-1 through PTR-4, and four (4) inside spray machine lines, ISM-1 through ISM-4, shall not cause, allow or permit the discharge into the atmosphere of any volatile organic compounds in excess of the following:

Minor Source Modification No.: 181-25614-00022 Permit Reviewer: Laura Spriggs

Page 25 of 39

Coating	326 IAC 8-2-3 Limit (lb VOC/gal), less water
Interior Spray	4.2
Overvarnish	2.8

PSD Minor Limit [326 IAC 2-2]

Pursuant to CP 181-5079-00022, issued on June 12, 1996 and revised by MSM 181-25614-00022, the use of VOC, including coatings, dilution solvents, and cleaning solvents at the four (4) lithographic printing presses and overvarnish lines (PTR- 1 through PTR-4) and the four (4) inside spray machine lines (ISM-1 through ISM-4) shall be limited such that the potential to emit VOC shall be less than 240.2 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with this limit, combined with the potential to emit VOC from other emission units at the source, shall limit the VOC from the entire source to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-2 not applicable.

D.1.3 Particulate [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), particulate from the inside spray machines operations shall be controlled by a dry particulate filter, waterwash, or an equivalent control device and the Permittee shall operate the control device in accordance with manufacturer's specifications.

Preventive Maintenance Plan [326 IAC 2-7-5(13)] D.1.4

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its emission control devices.

Compliance Determination Requirements

Volatile Organic Compounds (VOC) [326 IAC 8-1-4] [326 IAC 8-1-2(a)] [40 CFR 60.493] D.1.5

- Compliance with the VOC content limitations contained in Conditions D.1.1 and D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets, VOC certifications, or VOC certificates of analysis. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.
- (b) Compliance with the VOC emission limitation in Condition D.1.2 shall be determined based on the following equation:

VOC emissions = (Input VOC to Solvent Wipe Cleaning for Coating Operations) + [(Input VOC to Printing and Overvarnish Operations * (1 - CE/100)] + [(Input VOC to Inside Spray Operations) * (1 - CE/100)]

Where: CE = Percent Overall Control Efficiency of the thermal oxidizer,

RTO-1, as determined from the latest stack test.

Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] D.1.6

Before July 19, 2012, the Permittee shall conduct a performance test to verify VOC control efficiency (as the product of destruction efficiency and capture efficiency) required by condition D.1.2 for the thermal oxidizer utilizing methods as approved by the Commissioner. The destruction efficiency test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C -Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.7 Monitoring

The following monitoring condition shall apply if baghouse filters are used to control

Page 26 of 39 Minor Source Modification No.: 181-25614-00022

particulate emissions:

Monthly cleaning of the baghouse filters shall be performed per manufacturer's recommendation and semi-annual inspections shall be performed for the presence of overspray near the baghouse. When there is a noticeable change in overspray emissions, or when evidence of overspray emissions is 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.

- (b) The following monitoring conditions shall apply if dry filters are used to control particulate emissions:
 - (1) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating stacks while one or more of the spray lines are in operation. If a condition exists which should result in a response step, 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.
 - (2) Monthly inspections shall be performed of the coating emissions from the stacks and the presence of overspray nearby the filters. When there is a noticeable change in overspray emissions, or when evidence of overspray emissions is 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.
- (c) The following monitoring conditions shall apply if water pans are used to control particulate emissions:
 - (1) Daily inspections shall be performed to verify that the water level of the water pans meet the manufacturer's recommended level. To monitor the performance of the water pans, the water level of the pans shall be maintained weekly at a level where surface agitation indicates impact of the air flow. Water shall be kept free of solids and floating material that reduces the capture efficiency of the water pan. In addition, weekly observations shall be made of the overspray from the surface coating stacks while one or more of the spray lines are in operation. Section C Response to Excursions or Exceedances shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Response to Excursions or Exceedances, shall be considered a deviation from this permit.
 - (2) Monthly inspections shall be performed of the coating emissions from the stacks and the presence of overspray on the nearby ground. Section C Response to Excursions or Exceedances for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. Section C Response to Excursions or Exceedances shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Response to Excursions or Exceedances, shall be considered a deviation in this permit.
- (d) Particulate control methods other than baghouse filtration, dry filters, or water pans for controlling particulate emissions from the four (4) inside spray machine lines (ISM-1 through ISM-4) are subject to approval by IDEM, OAQ, Permits Branch to determine if additional monitoring conditions are required.

Page 27 of 39 Minor Source Modification No.: 181-25614-00022

D.1.8 Thermal Oxidizer Temperature [40 CFR 64]

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer (RTO-1) for measuring operating temperature. For the purpose of this condition, continuous means no less than once per fifteen (15) minutes. The output of this system shall be recorded as the oxidizer operating temperature. The 3-hour average oxidizer temperature shall be determined once per fifteen (15) minutes either as an output of the data acquisition system or by other means. From the date of issuance of this permit until approved stack test results are available, the Permittee shall operate the thermal oxidizer at or above the 3-hour average temperature of 1300 °F whenever the oxidizer is in operation.
- (b) The Permittee shall determine the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with limits in Condition D.1.2, as approved by IDEM.
- (c) On and after the date the approved stack test results are available, the Permittee shall operate the thermal oxidizer at or above the 3-hour average temperature as observed during the compliant stack test.

Compliance with these requirements satisfies Compliance Assurance Monitoring (CAM) requirements.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.9 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.1.1 and D.1.2. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
 - (1) The VOC content of each coating material and solvent used.
 - (2) The amount of coating material and solvent used less water on monthly basis.
 - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Records kept may be in an electronic format.
 - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
 - (3) The volume weighted VOC content of the coatings used for each month;
 - (4) The cleanup solvent usage for coating operations for each month; and
 - (5) The total VOC usage for each month.
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain a log of particulate control method employed and the following:
 - (1) When baghouse filtration is used for particulate control, the Permittee shall maintain a log of semi-annual inspections.
 - (2) When dry filters are used for particulate control, the Permittee shall maintain a log of weekly overspray observations and daily and monthly inspections.

Ball Metal Beverage Container Corp. Page 28 of 39 Monticello, Indiana Minor Source Modification No.: 181-25614-00022

Permit Reviewer: Laura Spriggs

(3) When water pans are used for particulate control, the Permittee shall maintain a log of weekly overspray observations, weekly observations of the water level in the pans, and daily and monthly inspections.

- (c) To document compliance with Condition D.1.8, the Permittee shall maintain a record of the 3-hour average thermal oxidizer temperatures.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

D.1.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the calendar quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-1.1-1(1).

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

- D.1.11 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]
 - (a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A General Provisions, which are incorporated by reference as 326 IAC 12-1 for the four (4) lithographic printing presses (PTR-1 through PTR-4) for overvarnish and the four (4) inside spray machine lines (ISM-1 through ISM-4) except as otherwise specified in 40 CFR Part 60, Subpart WW.
 - (b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

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

D.1.12 Standards of Performance for the Beverage Can Surface Coating Industry Requirements [40 CFR Part 60, Subpart WW] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart WW, the Permittee shall comply with the provisions of 40 CFR 60, Subpart WW, Standards of Performance for the Beverage Can Surface Coating Industry for the four (4) lithographic printing presses (PTR-1 through PTR-4) for overvarnish and the four (4) inside spray machine lines (ISM-1 through ISM-4) as specified as follows.

- § 60.490 Applicability and designation of affected facility.
- (a) The provisions of this subpart apply to the following affected facilities in beverage can surface coating lines: each exterior base coat operation, each overvarnish coating operation, and each inside spray coating operation.
- (b) The provisions of this subpart apply to each affected facility which is identified in paragraph (a) of this section and commences construction, modification, or reconstruction after November 26, 1980.
- § 60.491 Definitions.
- (a) All terms which are used in this subpart and are not defined below are given the same meaning as in the Act and subpart A of this part.
- (1) Beverage can means any two-piece steel or aluminum container in which soft drinks or beer, including malt liquor, are packaged. The definition does not include containers in which fruit or vegetable juices are packaged.
- (2) Exterior base coating operation means the system on each beverage can surface coating line used to

Page 29 of 39 Minor Source Modification No.: 181-25614-00022

apply a coating to the exterior of a two-piece beverage can body. The exterior base coat provides corrosion resistance and a background for lithography or printing operations. The exterior base coat operation consists of the coating application station, flashoff area, and curing oven. The exterior base coat may be pigmented or clear (unpigmented).

- (3) *Inside spray coating operation* means the system on each beverage can surface coating line used to apply a coating to the interior of a two-piece beverage can body. This coating provides a protective film between the contents of the beverage can and the metal can body. The inside spray coating operation consists of the coating application station, flashoff area, and curing oven. Multiple applications of an inside spray coating are considered to be a single coating operation.
- (4) Overvarnish coating operation means the system on each beverage can surface coating line used to apply a coating over ink which reduces friction for automated beverage can filling equipment, provides gloss, and protects the finished beverage can body from abrasion and corrosion. The overvarnish coating is applied to two-piece beverage can bodies. The overvarnish coating operation consists of the coating application station, flashoff area, and curing oven.
- (5) Two-piece can means any beverage can that consists of a body manufactured from a single piece of steel or aluminum and a top. Coatings for a two-piece can are usually applied after fabrication of the can body.
- (6) VOC content means all volatile organic compounds (VOC) that are in a coating. VOC content is expressed in terms of kilograms of VOC per liter of coating solids.
- (b) Notations used under §60.493 of this subpart are defined below:

C_a=the VOC concentration in each gas stream leaving the control device and entering the atmosphere (parts per million as carbon)

C_b=the VOC concentration in each gas stream entering the control device (parts per million as carbon)

D_c=density of each coating, as received (kilograms per liter)

D_d=density of each VOC-solvent added to coatings (kilograms per liter)

D_r=density of VOC-solvent recovered by an emission control device (kilograms per liter)

E=VOC destruction efficiency of the control device (fraction)

F=the proportion of total VOC emitted by an affected facility which enters the control device to total emissions (fraction)

G=the volume-weighted average of VOC in coatings consumed in a calendar month per volume of coating solids applied (kilograms per liter of coating solids)

H_e=the fraction of VOC emitted at the coater and flashoff areas captured by a collection system

H_n=the fraction of VOC emitted at the cure oven captured by a collection system

L_c=the volume of each coating consumed, as received (liters)

L_d=the volume of each VOC-solvent added to coatings (liters)

L_r=the volume of VOC-solvent recovered by an emission control device (liters)

L_s=the volume of coating solids consumed (liters)

M_d=the mass of VOC-solvent added to coatings (kilograms)

M_o=the mass of VOC-solvent in coatings consumed, as received (kilograms)

M_r=the mass of VOC-solvent recovered by emission control device (kilograms)

N=the volume-weighted average mass of VOC emissions to atmosphere per unit volume of coating solids applied (kilograms per liter of coating solids)

Q_a=the volumetric flow rate of each gas stream leaving the control device and entering the atmosphere (dry standard cubic meters per hour)

Q_b=the volumetric flow of each gas stream entering the control device (dry standard cubic meters per hour)

R=the overall emission reduction efficiency for an affected facility (fraction)

S_e=the fraction of VOC in coating and diluent VOC-solvent emitted at the coater and flashoff area for a

coating operation

 S_h =the fraction of VOC in coating and diluent solvent emitted at the cure oven for a coating operation

V_s=the proportion of solids in each coating, as received (fraction by volume)

W_o=the proportion of VOC in each coating, as received (fraction by weight).

§ 60.492 Standards for volatile organic compounds.

On or after the date on which the initial performance test required by §60.8(a) is completed, no owner or operator subject to the provisions of this subpart shall discharge or cause the discharge of VOC emissions to the atmosphere that exceed the following volume-weighted calendar-month average emissions:

- (a) 0.29 kilogram of VOC per litre of coating solids from each two-piece can exterior base coating operation, except clear base coat:
- (b) 0.46 kilogram of VOC per litre of coating solids from each two-piece can clear base coating operation and from each overvarnish coating operation; and
- (c) 0.89 kilogram of VOC per litre of coating solids from each two-piece can inside spray coating operation.
- § 60.493 Performance test and compliance provisions.
- (a) Section 60.8(d) does not apply to monthly performance tests and §60.8(f) does not apply to the performance test procedures required by this subpart.
- (b) The owner or operator of an affected facility shall conduct an initial performance test as required under §60.8(a) and thereafter a performance test each calendar month for each affected facility.
- (1) The owner or operator shall use the following procedures for each affected facility that does not use a capture system and a control device to comply with the emission limit specified under §60.492. The owner or operator shall determine the VOC-content of the coatings from formulation data supplied by the manufacturer of the coating or by an analysis of each coating, as received, using Method 24. The Administrator may require the owner or operator who uses formulation data supplied by the manufacturer of the coating to determine the VOC content of coatings using Method 24 or an equivalent or alternative method. The owner or operator shall determine from company records the volume of coating and the mass of VOC-solvent added to coatings. If a common coating distribution system serves more than one affected facility or serves both affected and exiting facilities, the owner or operator shall estimate the volume of coating used at each facility by using the average dry weight of coating, number of cans, and size of cans being processed by each affected and existing facility or by other procedures acceptable to the Administrator.
- (i) Calculate the volume-weighted average of the total mass of VOC per volume of coating solids used during the calendar month for each affected facility, except as provided under paragraph (b)(1)(iv) of this section. The volume-weighted average of the total mass of VOC per volume of coating solids used each calendar month will be determined by the following procedures.
- (A) Calculate the mass of VOC used $(M_o + M_d)$ during the calendar month for the affected facility by the following equation:

$$M_o + M_d = \sum_{i=1}^{n} L_{ci} D_{ci} W_{oi} + \sum_{j=1}^{m} L_{dj} D_{dj},$$
 (1)

 $[\Sigma L_{dj}D_{dj}$ will be 0 if no VOC solvent is added to the coatings, as received.] where n is the number of different coatings used during the calendar month and m is the number of different diluent VOC-solvents used during the calendar month.

(B) Calculate the total volume of coating solids used (L_s) in the calendar month for the affected facility by the following equation:

$$L_s = \sum_{i=1}^n L_{ii} V_{si}, \qquad (2)$$

where n is the number of different coatings used during the calendar month.

(C) Calculate the volume-weighted average mass of VOC per volume of solids used (G) during the calendar month for the affected facility by the following equation:

Page 31 of 39 Minor Source Modification No.: 181-25614-00022

$$G = \frac{M_o + M_d}{L_c}$$
 (3)

(ii) Calculate the volume-weighted average of VOC emissions discharged to the atmosphere (N) during the calendar month for the affected facility by the following equation:

$$N = G$$
. (4)

- (iii) Where the value of the volume-weighted average mass of VOC per volume of solids discharged to the atmosphere (N) is equal to or less than the applicable emission limit specified under §60.492, the affected facility is in compliance.
- (iv) If each individual coating used by an affected facility has a VOC content equal to or less than the limit specified under §60.492, the affected facility is in compliance provided no VOC-solvents are added to the coating during distribution or application.
- § 60.495 Reporting and recordkeeping requirements.
- (a) The owner or operator of an affected facility shall include the following data in the initial compliance report required under §60.8(a).
- (1) Where only coatings which individually have a VOC content equal to or less than the limits specified under §60.492 are used, and no VOC is added to the coating during the application or distribution process, the owner or operator shall provide a list of the coatings used for each affected facility and the VOC content of each coating calculated from data determined using Method 24 or supplied by the manufacturers of the coatings.
- (2) Where one or more coatings which individually have a VOC content greater than the limits specified under §60.492 are used or where VOC are added or used in the coating process, the owner or operator shall report for each affected facility the volume-weighted average of the total mass of VOC per volume of coating solids.
- (b) Following the initial performance test, each owner or operator shall identify, record, and submit quarterly reports to the Administrator of each instance in which the volume-weighted average of the total mass of VOC per volume of coating solids, after the control device, if capture devices and control systems are used, is greater than the limit specified under §60.492. If no such instances occur during a particular quarter, a report stating this shall be submitted to the Administrator semiannually.
- (d) Each owner or operator subject to the provisions of this subpart shall maintain at the source, for a period of at least 2 years, records of all data and calculations used to determine VOC emissions from each affected facility in the initial and monthly performance tests. Where compliance is achieved through the use of thermal incineration, each owner or operator shall maintain, at the source, daily records of the incinerator combustion chamber temperature. If catalytic incineration is used, the owner or operator shall maintain at the source daily records of the gas temperature, both upstream and downstream of the incinerator catalyst bed. Where compliance is achieved through the use of a solvent recovery system, the owner or operator shall maintain at the source daily records of the amount of solvent recovered by the system for each affected facility.
- (e) The requirements of this section remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected facilities within the State will be relieved of the obligation to comply with this subsection, provided that they comply with the requirements established by the State.
- 60.496 Test methods and procedures.
- (a) The reference methods in appendix A to this part, except as provided in §60.8, shall be used to conduct performance tests.
- (1) Method 24, an equivalent or alternative method approved by the Administrator, or manufacturers' formulation data from which the VOC content of the coatings used for each affected facility can be calculated. In the event of a dispute, Method 24 data shall govern. When VOC content of water-borne coatings, determined from data generated by Method 24, is used to determine compliance of affected facilities, the results of the Method 24 analysis shall be adjusted as described in Section 12.6 of Method 24.
- (b) For Method 24, the coating sample must be a 1-litre sample collected in a 1-litre container at a point

Page 32 of 39 Minor Source Modification No.: 181-25614-00022

where the sample will be representative of the coating material.

- (d) Each owner or operator subject to the provisions of this subpart shall maintain at the source, for a period of at least 2 years, records of all data and calculations used to determine VOC emissions from each affected facility in the initial and monthly performance tests. Where compliance is achieved through the use of thermal incineration, each owner or operator shall maintain, at the source, daily records of the incinerator combustion chamber temperature. If catalytic incineration is used, the owner or operator shall maintain at the source daily records of the gas temperature, both upstream and downstream of the incinerator catalyst bed. Where compliance is achieved through the use of a solvent recovery system, the owner or operator shall maintain at the source daily records of the amount of solvent recovered by the system for each affected facility.
- (e) The requirements of this section remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected facilities within the State will be relieved of the obligation to comply with this subsection, provided that they comply with the requirements established by the State.

Minor Source Modification No.: 181-25614-00022

Page 33 of 39

SECTION D.2 FACILITY OPERATIONS CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Insignificant Activities consisting of:

- (a) Degreasing operations, identified as CPW-01, with a maximum usage of 220 gallons per twelve (12) consecutive month period for cold cleaner parts washing;
- (b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment [326 IAC 6-3-2]; and
- (c) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone [326 IAC 6-3-2].

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

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

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for all parts washers constructed after January 1, 1980, 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.

D.2.2 Particulate [326 IAC 6-3-2(e)(2)]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour. This limit applies to the following insignificant activities:

- (a) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (b) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone.

Page 34 of 39 Minor Source Modification No.: 181-25614-00022

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

PART 70 OPERATING PERMIT CERTIFICATION

Ball Metal Beverage Container Corp. 501 North Sixth Monticello Indiana 47960 Source Name: Source Address: Mailing Address: 501 North Sixth Mor Part 70 Permit No.: T181-17684-00022 501 North Sixth Monticello Indiana 47960

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 Certification Letter
☐ 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:
Phone:
Date:

Page 35 of 39 Minor Source Modification No.: 181-25614-00022

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

COMPLIANCE BRANCH 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251 Phone: 317-233-0178 Fax: 317-233-6865

PART 70 OPERATING PERMIT EMERGENCY OCCURRENCE REPORT

Source Name: Ball Metal Beverage Container Corp.
Source Address: 501 North Sixth Monticello Indiana 47960
Mailing Address: 501 North Sixth Monticello Indiana 47960

Part 70 Permit No.: T181-17684-00022

This form	consists	of 2	pages
-----------	----------	------	-------

Page 1 of 2

☐ This is an	emergency as defined in 326 IAC 2-7-1(12)
•	The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours
	(1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
•	The Permittee must submit notice in writing or by facsimile within two (2) working days
	(Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.
·	

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

Page 36 of 39 Minor Source Modification No.: 181-25614-00022

If any of the following are not applicable, mark N/A	Page 2 of 2
Date/Time Emergency started:	
Date/Time Emergency was corrected:	
Was the facility being properly operated at the time of the emergency? Y N	
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _X , CO, Pb, other:	
Estimated amount of pollutant(s) emitted during emergency:	
Describe the steps taken to mitigate the problem:	
Describe the corrective actions/response steps taken:	
Describe the measures taken to minimize emissions:	
If applicable, describe the reasons why continued operation of the facilities are necimminent injury to persons, severe damage to equipment, substantial loss of capital of product or raw materials of substantial economic value:	
Form Completed by:	
Title / Position:	
Date:	
Phone:	

A certification is not required for this report.

Page 37 of 39 Minor Source Modification No.: 181-25614-00022

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name:	Ball Metal Beverage Container Corp.
Source Address:	501 North Sixth Monticello Indiana 47960
Mailing Address:	501 North Sixth Monticello Indiana 47960

Part 70 Permit No.: T181-17684-00022

Facility: The four (4) lithographic printing presses and overvarnish lines (PTR-1 through PTR-4)

and the four (4) inside spray machine lines (ISM-1 through ISM-4)

Parameter: VOC Emissions

Limit: Use of VOC, including coatings, dilution solvents, and cleaning solvents shall be

limited such that the potential to emit VOC shall be less than 240.2 tons per twelve (12) consecutive month period, with compliance determined at the end of each month

VOC emissions = (Input VOC to Solvent Wipe Cleaning for Coating Operations + [(Input VOC to Printing and Overvarnish Operations * (1 - CE/100)] + [(Input VOC to

Inside Spray Operations) * (1 - CE/100)]

Where: CE = Percent Overall Control Efficiency of the thermal oxidizer,

RTO-1, as determined from the latest stack test.

YEAR:

	Column 1	Column 2	Column 1 + Column 2
Month (Specify Dates)	This Month	Previous 11 Months	12 Month Total
Month 1:			
From:			
To:			
Month 2:			
From:			
To:			
Month 3			
From:			
To:			

☐ No deviation occurred in this quarter.
$\hfill \square$ Deviation/s occurred in this quarter. Deviation has been reported on:
Submitted by: Title / Position: Signature: Date: Phone:

Attach a signed certification to complete this report and submit within thirty (30) days of the end of the calendar quarter.

Page 38 of 39 Minor Source Modification No.: 181-25614-00022

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Ball Metal Beverage Container Corp. Source Address: 501 North Sixth Monticello Indiana 47960 Mailing Address: 501 North Sixth Monticello Indiana 47960 Part 70 Permit No.: T181-17684-00022 Dates: _____ to ____ Year: ____ Page 1 of 2 This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period". ☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD. ☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD **Permit Requirement** (specify permit condition #) **Duration of Deviation: Date of Deviation:** Number of Deviations: **Probable Cause of Deviation: Response Steps Taken:** Permit Requirement (specify permit condition #) Date of Deviation: **Duration of Deviation: Number of Deviations: Probable Cause of Deviation:** Response Steps Taken:

Date:

Phone:

Page 39 of 39 Minor Source Modification No.: 181-25614-00022

Page 2 of 2

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Form Completed By:	
Title/Position:	

Attach a signed certification to complete this report and submit within thirty (30) days of the end of the calendar quarter.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Minor Source Modification and Significant Permit Modification

Source Description and Location

Source Name: Ball Metal Beverage Container Corp.

Source Location: 501 North Sixth Street, Monticello, IN 47960

County: White SIC Code: 3411

Operation Permit Renewal No.:

Operation Permit Issuance Date:

Minor Source Modification No.:

Significant Permit Modification No.:

Permit Reviewer:

T 181-17684-00022

November 16, 2006
181-25614-00022

181-25621-00022

Laura Spriggs

Existing Approvals

The source was issued Part 70 Operating Permit Renewal No. 181-17684-00022 on November 16, 2006. The source has since received the following approval:

Administrative Amendment No. 181-24828-00022, issued on August 9, 2007.

County Attainment Status

The source is located in White County

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
1 In algoritishle	o or attainment affective October 19, 2000, for the 1 hour azone standard which was

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

Unclassifiable or attainment effective April 5, 2005, for PM2.5.

(a) Ozone Standards

- (1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, St. Joseph as attainment for the 8-hour ozone standard.
- (3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and

Ball Metal Beverage Container Corp.

Monticello, Indiana

Permit Reviewer: Laura Spriggs

Permit Reviewer: Laura Spriggs

Page 2 of 25

TSD for Minor Source Modification No.: 181-25614-00022

TSD for Significant Permit Modification No.: 181-25621-00022

St. Joseph as attainment for the 8-hour ozone standard.

(4) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. White County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) PM2.5

White County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM2.5 emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions.

(c) Other Criteria Pollutants

White County has been classified as attainment or unclassifiable in Indiana for PM_{10} , SO_2 , NO_2 , CO, and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(d) Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

Source Status

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

Table 1: S	Source Status PTE
Pollutant	Emissions (ton/yr)
PM	5.87
PM ₁₀	72.2
SO ₂	0.14
VOC	249.2
CO	14.8
NO _X	17.6

- (a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).
- (b) These emissions are based upon potential to emit calculations and federally enforceable limits established in Part 70 Operating Permit Renewal No. 181-17684-00022 as well as the potential to emit of the bottle neck forming line natural gas ovens added in Administrative Amendment No. 181-24828-00022.

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

Ball Metal Beverage Container Corp. Page 3 of 25
Monticello, Indiana TSD for Minor Source Modification No.: 181-25614-00022
Permit Reviewer: Laura Spriggs TSD for Significant Permit Modification No.: 181-25621-00022

Table 2: Source Status HAP PTE	
HAPs	Potential To Emit (ton/yr)
Formaldehyde	0.18
Hexane	0.19
Total	0.38

This existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2006 OAQ emission data.

Table 3:	Actual Emissions
Pollutant	Actual Emissions (ton/yr)
PM	0.70
PM ₁₀	0.70
SO ₂	0.05
VOC	73.8
CO	6.93
NO _X	8.25
Total HAPs	not reported

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Ball Metal Beverage Container Corp. on December 4, 2007, relating to the installation of an additional multican size line and supporting equipment and to the removal of one (1) end line. The following is a list of the proposed emission units and pollution control devices:

- (a) The following new emission units are proposed:
 - (1) One (1) Lithographic dry offset printing press for printing and overvarnish, identified as PTR-4, approved for construction in 2008, with a maximum capacity of 114,000 16-oz. cans per hour or 102,000 24-oz. cans per hour, with natural gas drying oven (PO-4), rated at 2.7 MMBtu/hr, and exhausting to thermal oxidizer RTO-1 and
 - (2) One (1) inside spray machine line, identified as ISM-4, approved for construction in 2008, with a maximum capacity of 114,000 16-oz. cans per hour or 102,000 24-oz. cans per hour, using airless application systems, using a dry box and baghouse for particulate control, with natural gas drying oven (ISO-4) with two (2) 0.8 MMBtu/hr burners and one (1) 1.6 MMBtu/hr burner, and exhausting to thermal oxidizer RTO-1.
- (b) The following insignificant activities are also being proposed as a result of this modification:
 - (1) One (1) natural gas Washer drying oven, identified as W-03, rated at 1.6

Ball Metal Beverage Container Corp. Monticello, Indiana

Page 4 of 25 TSD for Minor Source Modification No.: 181-25614-00022 Permit Reviewer: Laura Spriggs TSD for Significant Permit Modification No.: 181-25621-00022

MMBtu/hr;

- (2)One (1) natural gas hot water boiler, identified as B-06, rated at less than 5 MMBtu/hr:
- One (1) Ultraviolet bottom coater, identified as UV-04; (3)
- (4) One (1) line of equipment for metal working, processing hot water, closed loop heating and cooling, six (6) ovens with natural gas burners less than 10 MMBtu/hr, with a total of 24.1 MMBtu/hr;
- (5) One (1) ID system, consisting of ink and cleanup solvent with a VOC potential to emit less than three (3) pounds per hour and less than fifteen (15) pounds per day; and
- (6) Two (2) natural gas air makeup units, identified as Mup-01-02, rated at 6.25 MMBtu/hr each.
- (c) The following unit is being modified as a result of this modification:
 - One (1) Degreasing operation, identified as CPW-01, with a maximum capacity of 220 gallons per twelve (12) consecutive month period for cold cleaner parts washing.
- (d) The following emission unit is being removed:

One (1) end making line, constructed in 1992 and identified as FE 36, with a maximum capacity of 540,000 ends per hour, with no controls and exhausting to atmosphere.

Enforcement Issues

There are no pending enforcement actions related to this modification.

Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

Permit Level Determination - Part 70

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency."

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Permit Reviewer: Laura Spriggs

Table 4: Total PTE Change due to the Modification							
Pollutant	PTE New Emission Units (ton/yr)	Net Increase to PTE of Modified Emission Units (ton/yr)	Total PTE for New and Modified Units (ton/yr)				
PM	23.83		23.83				
PM ₁₀	25.06		25.06				
SO ₂	0.13		0.13				
VOC	361.92	0.25	362.17				
CO	18.06		18.06				
NO _X	21.51		21.51				
HAPs	1.2		1.2				

This source modification is subject to 326 IAC 2-7-10.5(d)(8) because it is a modification that has a potential to emit greater than the thresholds under 326 IAC 2-7-10.5(3), but adds emissions units of the same type that are already permitted and will comply with the same applicable requirements and permit terms and conditions as the existing emission units. Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d) because the modification involves a change in a case-by-case determination of an emission limitation.

Permit Level Determination - PSD or Emission Offset

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 minor source modification and significant permit modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

	Table 5: Potential to Emit (ton/yr)						
Process / Emission Unit	PM	PM ₁₀	SO ₂	VOC	СО	NO _X	
PTR-1 - PTR-4: Printing							
PTR-1 - PTR-4: Overvarnish & Rim Coat				240.2			
ISM-1 - ISM-4: Inside Spray	0.72	0.72					
Solvent Wipe Cleaning							
RTO-1: Thermal Oxidizer	0.13	0.53	0.04	0.39	5.89	7.01	
Other Natural Gas Units	1.18	4.73	0.37	3.42	52.27	62.22	
Other Insignificant Activities	4.83	4.83		4.95			
Total for Source	6.87	10.81	0.42	249.0	58.15	69.23	
Major Source Thresholds	250	250	250	250	250	250	

This modification to an existing minor stationary source is not major because the total VOC emissions from the source are still less than the PSD major source thresholds of 250 tons per year. Therefore, 326 IAC 2-2, PSD requirements, do not apply.

Since the unrestricted potential to emit of this modification is greater than the major source threshold of 250 tons of VOC per year, the source has elected to limit the potential to emit of VOC as follows:

Ball Metal Beverage Container Corp. Monticello, Indiana

Monticello, Indiana TSD for Minor Source Modification No.: 181-25614-00022
Permit Reviewer: Laura Spriggs TSD for Significant Permit Modification No.: 181-25621-00022

The use of VOC, including coatings, dilution solvents, and cleaning solvents at the four (4) lithographic printing presses and overvanish lines (PTR-1 through PTR-4) and the four (4) inside spray machine lines (ISM-1 through ISM-4) shall be limited such that the potential to emit VOC shall be less than 240.2 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Page 6 of 25

Compliance with this limit, combined with the potential to emit VOC from other emission units at the source, shall limit the VOC from the entire source to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-2 not applicable.

Federal Rule Applicability Determination

The following federal rules are applicable to the source due to this modification:

- (a) This modification includes facilities that are subject to the New Source Performance Standards for the Beverage Can Surface Coating Industry (40 CFR 60.490, Subpart WW), which is incorporated by reference as 326 IAC 12. *Note: This source has other emissions units that are subject to this subpart.* The provisions of this 40 CFR 60, Subpart WW apply to each exterior base coat operation, each overvarnish coating operation, and each inside spray coating operations. The facilities, from this modification, subject to this rule include the following:
 - (1) One (1) Lithographic dry offset printing press for printing and overvarnish, identified as PTR-4, approved for construction in 2008, with a maximum capacity of 114,000 16-oz. cans per hour or 102,000 24-oz. cans per hour, with natural gas drying oven PO-4, rated at 2.7 MMBtu/hr, and exhausting to thermal oxidizer RTO-1 and
 - (2) One (1) inside spray machine line, identified as ISM-4, approved for construction in 2008, with a maximum capacity of 114,000 16-oz. cans per hour or 102,000 24-oz. cans per hour, using airless application systems, using a dry box and baghouse for particulate control, with natural gas drying oven ISO-4 with two (2) 0.8 MMBtu/hr burners and one (1) 1.6 MMBtu/hr burner, exhausting to thermal oxidizer RTO-1.

These facilities are subject to the following portions of Subpart WW:

- (1) 40 CFR 60.490
- (2) 40 CFR 60.491
- (3) 40 CFR 60.492
- (4) 40 CFR 60.493
- (5) 40 CFR 60.495
- (6) 40 CFR 60.496
- (b) This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Metal Cans, Subpart KKKK because the source does not emit and does not have the potential to emit, considering controls any single HAP at a rate of ten (10) tons or more per year or any combination of HAPs at a rate of twenty-five (25) tons or more per year.
- (c) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:
 - (1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;
 - (2) is subject to an emission limitation or standard for that pollutant; and

Ball Metal Beverage Container Corp. Monticello, Indiana

TSD for Minor Source Modification No.: 181-25614-00022 Permit Reviewer: Laura Spriggs TSD for Significant Permit Modification No.: 181-25621-00022

> (3)uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

Page 7 of 25

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each new or modified emission unit involved:

Table 6: CAM Applicability Analysis								
Emission Unit	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (ton/yr)	Controlled PTE (ton/yr)	Major Source Threshold (ton/yr)	CAM Applicable (Y/N)	Large Unit (Y/N)	
PTR-4 (Printing) - VOC	RTO	Υ	15.67	7.60	100	N	N	
PTR-4 (Overvarnish & Rim Coat) - VOC	RTO	Υ	118.88	57.7	100	Υ	N	
ISM-4 - VOC	RTO	Y	222.45	58.9	100	Y	N	
ISM-5-PM/PM10	Baghouse	N	N/A	N/A	100	N	N	

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to PTR-4 coating operations and ISM-4 coating operations for VOC. The Permittee has submitted a CAM plan on July 16, 2003 for PTR-1 through PTR-3 and ISM-1 through ISM-3. The CAM requirements for the new units are consistent with the CAM requirements of the existing units.

State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

326 IAC 2-2 and 2-3 (PSD and Emission Offset)

PSD and Emission Offset applicability is discussed under the Permit Level Determination - PSD and Emission Offset section.

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

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

326 IAC 8-2-9 (Miscellaneous Metal Coating)

Pursuant to 326 IAC 8-2-9(b)(1), this section is not applicable to the surface coating of metal parts or products limited by other sections of this rule. The surface coating of metal cans at this source is subject to 326 IAC 8-2-3, Can coating operations; therefore, 326 IAC 8-2-9 does not apply to the surface coating of metal cans due to this modification.

326 IAC 8-2-3 (Can Coating Operations)

The provisions of 326 IAC 8-2-3 apply to can coating operations for facilities in any county for which construction commenced after January 1, 1980 and which have potential emissions of twenty-five (25) tons or greater per year of VOC. The overvarnish operations associated with PTR-4 and the inside spray operations associated with ISM-4 are subject to the provisions of 326 IAC 8-2-3. The emission limitations for the inside spray and overvarnish operations due to this modification are as follows:

Pursuant to 326 IAC 8-2-3(b)(2), the Permittee shall not discharge into the (a) atmosphere any VOC in excess of 4.2 pounds per gallon, excluding water, delivered to the coating applicator from from two- and three-piece can interior body spray and two-piece can exterior end (spray or roll coat) operations, and

Page 8 of 25 Monticello, Indiana TSD for Minor Source Modification No.: 181-25614-00022 Permit Reviewer: Laura Spriggs TSD for Significant Permit Modification No.: 181-25621-00022

> Pursuant to 326 IAC 8-2-3(b)(5), the Permittee shall not discharge into the (b) atmosphere any VOC in excess of 2.8 pounds per gallon, excluding water, delivered to the coating applicator from two-piece can exterior (basecoat and overvarnish) operations.

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

The modification of the cold cleaner parts washer operation does not affect the existing requirements under this rule.

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

The provisions of 326 IAC 8-1-6 apply to new facilities as of January 1, 1980 that have potential emissions of twenty-five (25) tons or more per year of VOC; are located anywhere in the state; and that are not otherwise regulated by other provisions of article 8, 326 IAC 20-48, of 326 IAC 20-56.

PTR-4 and ISM-4 are subject to 326 IAC 8-2-3 and all other emissions units associated with this modification have potential emissions less than twenty-five (25) tons per year of VOC. Therefore, the provisions of 326 IAC 8-1-6 do not apply to any units due to this modification.

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

Pursuant to 326 IAC 6-3-2(d), the particulate matter (PM) from the Line 4 inside spray machine, ISM-4, shall be controlled by a dry particulate filter, waterwash, or an equivalent control device and the source shall operate the control device in accordance with manufacturer's specifications.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The Compliance Determination Requirements applicable to this modification are as follows:

(a) The source has applicable compliance determination condition as specified below:

Compliance with the VOC emission limitation shall be determined based on the following equation:

VOC emissions = (Input VOC to Solvent Wipe Cleaning for Coating Operations) + [(Input VOC to Printing and Overvarnish Operations * (1 - CE/100)] + [(Input VOC to Inside Spray Operations) * (1 - CE/100)]

Where: CE = Percent Overall Control Efficiency of the thermal oxidizer, RTO-1, as determined from the latest stack test.

TSD for Minor Source Modification No.: 181-25614-00022 TSD for Significant Permit Modification No.: 181-25621-00022

Page 9 of 25

There are no new testing requirements resulting from this condition. The Permittee conducted performance testing of the thermal oxidizer on July 19, 2007. The Permittee shall conduct the next performance test to verify VOC control efficiency (as the product of destruction efficiency and capture efficiency) before July 19, 2012.

The compliance monitoring requirements applicable to this modification are as follows:

- (b) The inside spray machine, ISM-4 has applicable compliance monitoring conditions as specified below and further addressed by Response to Appeal Item 2 in the Proposed Changes Due to Appeal Cause No. 06-A-J-3830 section of this Technical Support Document:
 - (1) The following monitoring condition shall apply if baghouse filters are used to control particulate emissions:

Monthly cleaning of the baghouse filters shall be performed per manufacturer's recommendation and semi-annual inspections shall be performed for the presence of overspray near the baghouse. When there is a noticeable change in overspray emissions, or when evidence of overspray emissions is 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.

- (2) The following monitoring conditions shall apply if dry filters are used to control particulate emissions:
 - (A) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating stacks while one or more of the spray lines are in operation. If a condition exists which should result in a response step, 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.
 - (B) Monthly inspections shall be performed of the coating emissions from the stacks and the presence of overspray nearby the filters. When there is a noticeable change in overspray emissions, or when evidence of overspray emissions is 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.
- (3) The following monitoring conditions shall apply if water pans are used to control particulate emissions:
 - (A) Daily inspections shall be performed to verify that the water level of the water pans meet the manufacturer's recommended level. To monitor the performance of the water pans, the water level of the pans shall be maintained weekly at a level where surface agitation indicates impact of the air flow. Water shall be kept free of solids and floating material that reduces the capture efficiency of the water pan. In addition, weekly observations shall be made of the overspray from the surface coating stacks while one or more of the spray lines are in operation. Section C Response to Excursions or Exceedances shall be followed whenever a

Page 10 of 25 TSD for Minor Source Modification No.: 181-25614-00022 TSD for Significant Permit Modification No.: 181-25621-00022

condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

- (B) Monthly inspections shall be performed of the coating emissions from the stacks and the presence of overspray on the nearby ground. Section C Response to Excursions or Exceedances for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. Section C Response to Excursions or Exceedances shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Response to Excursions or Exceedances, shall be considered a deviation in this permit.
- (4) Particulate control methods other than baghouse filtration, dry filters, or water pans for controlling particulate emissions from the four (4) inside spray machine lines (ISM-1 through ISM-4) are subject to approval by IDEM, OAQ, Permits Branch to determine if additional monitoring conditions are required.
- (5) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.
- (c) The thermal oxidizer, RTO-1 shall have the compliance monitoring conditions as specified in permit Condition D.1.8 and further addressed by Response to Appeal Item 3 in the Proposed Changes Due to Appeal Cause No. 06-A-J-3830 section of this Technical Support Document.

These monitoring conditions are necessary because the baghouse must operate properly to ensure compliance with 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) and the thermal oxidizer must operate properly to ensure compliance with 326 IAC 8-2-3 (Can Coating Operations) and 40 CFR Part 64 (CAM).

Proposed Changes Due to Modification

The changes listed below have been made to Part 70 Operating Permit Renewal No. 181-17684-00022. Deleted language appears as strikethroughs and new language appears in **bold**:

Page 11 of 25 TSD for Minor Source Modification No.: 181-25614-00022 TSD for Significant Permit Modification No.: 181-25621-00022

Revisions:

1. The legal name of the Permittee is Ball Metal Beverage Container Corp. Any references to Ball Metal Beverage Container Corporporation have been changed.

- 2. The General Source Phone Number in A.1 was corrected.
- 3. Further descriptive information was added to the Source Status in A.1.
- 4. The descriptions of the lithographic printing presses in A.2(a) and D.1(a) were revised to separate the units to provide more descriptive information for the existing units (PTR-1, PTR-2, and PTR-3) as well as to add descriptive information for the proposed unit, PTR-4. The heat input capacities of the drying ovens for PTR-1, PTR-2, and PTR-3 were changed to 4 MMBTU/hr per information provided by the Permittee.
- 5. The thermal oxidizer identifier was changed from TO-1 to RTO-1 in A.2(b) and D.1(b), as it was referred to in the application.
- 6. The descriptions of the inside spray machine lines in A.2(c) and D.1(c) were revised to separate the units to provide more descriptive information for the existing units (ISM-1, ISM-2, and ISM-3) as well as to add descriptive information for the proposed unit, ISM-4.
- 7. The descriptions of the end making line in A.2(d) and D.1(d) were removed as requested in the application.
- 8. The descriptions for the bottleneck forming line in A.2(e) and D.1(e) were removed because this is an insignificant activity that is not specifically regulated.
- 9. The descriptions of the degreasing operation in A.3(a) and D.2(a) were revised to reflect the maximum usage for this unit as described in the application. The potential emissions from this unit still meet the exemption levels of 326 IAC 2-7-1(21)(A) and 326 IAC 2-1.1-3(e)(1).
- 10. The last statement in Condition C.3 Open Burning was removed because this condition is now federally enforceable.
- 11. Condition D.1.1 was revised to add new units PTR-4 and ISM-4, which are also subject to 326 IAC 8-2-3(b). In addition, the references to 40 CFR 60.492 and 326 IAC 12 were removed because these refer to the requirements of the Standards of Performance for the Beverage Can Surface Coating Industry, which is discussed in Conditions D.11 and D.12.
- 12. Condition D.1.2 was revised to account for the VOC emissions from the new units, PTR-4 and ISM-4. The PSD avoidance limit was revised based on source-wide emissions to limit VOC from the entire source to less than 250 tons per twelve (12) consecutive month period. The requirement of specific control efficiencies was removed from this condition as these may change. The equation used to determine VOC emissions was moved to the Compliance Determination Requirements section of D.1.
- 13. Condition D.1.3, which limited potential VOC emissions from the end making line to avoid 326 IAC 8-1-6, was removed because this unit was removed. Subsequent conditions have been renumbered, references to Condition D.1.3 have been removed, and references to renumbered conditions have been revised.
- 14. Condition D.1.4 (now D.1.3) was revised to give the Permittee operational flexibility for how particulate is controlled as provided for in 326 IAC 6-3-2(d). The Monitoring Condition D.1.8 (now D.1.7) has been revised to reflect this as shown under Response to Appeal Item 2.
- 15. Condition D.1.6 (now D.1.5) Volatile Organic Compounds (VOC) was revised to indicate

Page 12 of 25 TSD for Minor Source Modification No.: 181-25614-00022 TSD for Significant Permit Modification No.: 181-25621-00022

that VOC content of coatings may also be determined by manufacturer VOC certifications or VOC certificates of analysis.

- 16. Condition D.1.7 (now D.1.6) Testing Requirements was revised to specify the date by which the next performance test must be conducted to determine the overall control efficiency of the thermal oxidizer.
- 17. D.1.10(a)(6) (now D.1.9(a)(6)) was removed from Record Keeping Requirements because it is duplicative of the requirement in paragraph (a)(5) of this condition.
- 18. Conditions D.1.12 and D.1.13 (now D.1.11 and D.1.12) have been revised to reflect that the new units, PTR-4 and ISM-4 are also subject to 40 CFR 60, Subpart WW.
- 19. The Part 70 Quarterly Report to demonstrate compliance with Condition D.1.2 was revised to include the new emissions units, PTR-4 and ISM-4 and to update the emissions limit.
- 20. The Part 70 Quarterly Report to demonstrate compliance with the 326 IAC 8-1-6 avoidance limit for the end making line was removed since this unit has been removed.
- 21. The Permittee has requested to use "accounting" months and quarters for record keeping and reporting instead of calendar months and quarters in order to be consistent with corporate administrative record keeping and reporting practices. The accounting year and calendar year remain January 1 December 31, however, "accounting" months vary from calendar months and vary from year to year.

IDEM, OAQ Compliance will allow for Ball Metal Beverage Container Corp. to use "accounting" months and quarters for record keeping and reporting purposes with regards to its Part 70 Operating Permit. The specific dates of record keeping and reporting must be entered on all record keeping and reporting forms to ensure that all dates have been covered. While IDEM, OAQ Compliance will allow for the time periods covered in record keeping and reporting forms to be based on "accounting" months and quarters, the reports must still be submitted to IDEM, OAQ Compliance within thirty (30) days after the end of the calendar quarter.

Condition D.11 (now D.10) - Reporting Requirements has been revised to indicate that reports are due within thirty (30) days of the calendar quarter. The Part 70 Quarterly Report and the Quarterly Deviation and Compliance Monitoring Report have been revised to ask for specific reporting dates and to indicate that the reports must be submitted within thirty (30) days of the end of the calendar quarter.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary aluminum based beverage can manufacturing and coating plant.

Source Address: 501 North Sixth Street, Monticello, IN 47960 Mailing Address: 501 North Sixth Street, Monticello, IN 47960

General Source Phone Number: 765-584-6101-574-583-9418

SIC Code: 3411 County Location: White

Source Location Status: Attainment for all criteria pollutants
Source Status: Part 70 **Operating** Permit Program
Minor Source, under PSD Rules;

Minor Source, under Section 112 of the Clean Air Act

Not 1 of 28 Source Categories

Page 13 of 25 TSD for Minor Source Modification No.: 181-25614-00022 TSD for Significant Permit Modification No.: 181-25621-00022

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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

- (a) Three (3) Four (4) lithographic printing presses for printing and overvarnish.
 - (1) Two (2) constructed in 1993, and identified as PTR-1, and PTR-2-and PTR-3, each with a maximum capacity of 150,000 138,000 twelve (12) ounce cans per hour, with three two (2) natural gas-fired drying ovens (PO-1, and PO-3), each rated at 3.72 4 MMBtu/hr, and exhausting to the thermal oxidizer, RTO-1.;
 - (2) One (1) constructed in 1993, identified as PTR-3, with a maximum capacity of 138,000 twelve (12) ounce cans per hour or 114,000 sixteen (16) ounce cans per hour, with one (1) natural gas-fired drying oven (PO-3), rated at 4 MMBtu/hr, and exhausting to the thermal oxidizer, RTO-1; and
 - (3) One (1) approved for construction in 2008, identified as PTR-4, with a maximum capacity of 114,000 sixteen (16) ounce cans per hour or 102,000 twenty-four (24) ounce cans per hour, with one (1) natural gas-fired drying oven (PO-4), rated at 2.7 MMBtu/hr, and exhausting to the thermal oxidizer, RTO-1.
- (b) One (1) natural gas-fired regenerative thermal oxidizer, constructed in 1988 and identified as **R**TO-1, rated at 16.0 MMBtu/hr, exhausting to stack TO-1.
- (c) Three (3) Four (4) inside spray machine lines,:
 - (1) Two (2) constructed in 1993, and identified as ISM-1, and ISM-2-and ISM-3, each consisting of six machines, each using airless application systems with a baghouse for particulate filtering so that no overspray is visibly detectable at the exhaust, each with a coating capacity of 150,000 138,000 twelve (12) ounce cans per hour, with three two (2) natural gas-fired drying ovens (ISO-1, and ISO-2 and ISO-3), each rated at 6.0 MMBtu/hr, and each exhausting to the thermal oxidizer, RTO-1-:
 - (2) One (1) constructed in 1993, identified as ISM-3, consisting of six machines, each using airless application systems with filtering so that no overspray is visibly detectable at the exhaust, with a coating capacity of 138,000 twelve (12) ounce cans per hour or 114,000 sixteen (16) ounce cans per hour, with one (1) natural gas-fired drying oven (ISO-3), rated at 6.0 MMBtu/hr, and exhausting to the thermal oxidizer, RTO-1; and
 - (3) One (1) approved for construction in 2008, identified as ISM-4, with a coating capacity of 114,000 sixteen (16) ounce cans per hour or 102,000 twenty-four (24) ounce cans per hour, using airless application systems with filtering so that no overspray is visibly detectable at the exhaust, with natural gas drying oven (ISO-4), with two (2) 0.8 MMBtu/hr burners and one (1) 1.6 MMBtu/hr burner, and exhausting to the thermal oxidizer, RTO-1.
- (d) One (1) end making line, constructed in 1992 and identified as FE 36, with a maximum capacity of 540,000 ends per hour, with no controls and exhausting to atmosphere.
- (e) One (1) bottle neck forming line, constructed in 2007, consisting of metal working, processing hot water, closed loop heating and cooling, six (6) ovens with natural gas burners of less than 10 MMBtu, (with a total of 24.1 MMBtu).

Page 14 of 25 TSD for Minor Source Modification No.: 181-25614-00022 TSD for Significant Permit Modification No.: 181-25621-00022

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

(a) Degreasing operations that do not exceed 145, identified as CPW-01, with a maximum usage of 220 gallons per twelve (12) consecutive months period for cold cleaner parts washing, except if subject to 326 IAC 20-6 [326 IAC 8-3-2];

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. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

SECTION D.1

* * * * *

++++

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (a) Three (3) Four (4) lithographic printing presses for printing and overvarnish,:
 - (1) Two (2) constructed in 1993, identified as PTR-1, and PTR-2-and PTR-3, each with a maximum capacity of 150,000 138,000 twelve (12) ounce cans per hour, with three two (2) natural gas-fired drying ovens (PO-1, and PO-2-and PO-3), each rated at 3.72 4 MMBtu/hr, and exhausting to the thermal oxidizer, RTO-1.;
 - (2) One (1) constructed in 1993, identified as PTR-3, with a maximum capacity of 138,000 twelve (12) ounce cans per hour or 114,000 sixteen (16) ounce cans per hour, with one (1) natural gas-fired drying oven (PO-3), rated at 4 MMBtu/hr, and exhausting to the thermal oxidizer, RTO-1; and
 - (3) One (1) approved for construction in 2008, identified as PTR-4, with a maximum capacity of 114,000 sixteen (16) ounce cans per hour or 102,000 twenty-four (24) ounce cans per hour, with one (1) natural gas-fired drying oven (PO-4), rated at 2.7 MMBtu/hr, and exhausting to the thermal oxidizer, RTO-1.
- (b) One (1) natural gas-fired regenerative thermal oxidizer, constructed in 1988 and identified as RTO-1, rated at 16.0 MMBtu/hr, exhausting to stack TO-1.
- (c) Three (3) Four (4) inside spray machine lines;:
 - (1) Two (2) constructed in 1993, identified as ISM-1, and ISM-2-and ISM-3, each consisting of six machines, each using airless application systems with a baghouse for particulate filtering so that no overspray is visibly detectable at the exhaust, each with a coating capacity of 450,000 138,000 twelve (12) ounce cans per hour, with three two (2) natural gas-fired drying ovens (ISO-1,and ISO-2 and ISO-3), each rated at 6.0 MMBtu/hr, and each exhausting to the thermal oxidizer, RTO-1.;
 - (2) One (1) constructed in 1993, identified as ISM-3, consisting of six machines, each using airless application systems with filtering so that no overspray is visibly detectable at the exhaust, with a coating capacity of 138,000 twelve (12) ounce cans per hour or 114,000 sixteen (16) ounce cans per hour, with one (1) natural gas-fired drying oven (ISO-3), rated at 6.0 MMBtu/hr, and

Ball Metal Beverage Container Corp. Monticello, Indiana

Page 15 of 25 TSD for Minor Source Modification No.: 181-25614-00022 Permit Reviewer: Laura Spriggs TSD for Significant Permit Modification No.: 181-25621-00022

exhausting to the thermal oxidizer, RTO-1; and

- (3) One (1) approved for construction in 2008, identified as ISM-4, with a coating capacity of 114,000 sixteen (16) ounce cans per hour or 102,000 twenty-four (24) ounce cans per hour, using airless application systems filtering so that no overspray is visibly detectable at the exhaust, with natural gas drying oven (ISO-4), with two (2) 0.8 MMBtu/hr burners and one (1) 1.6 MMBtu/hr burner, and exhausting to the thermal oxidizer, RTO-1.
- One (1) end making line, constructed in 1992 and identified as FE 36, with a maximum capacity of 540,000 ends per hour, with no controls and exhausting to atmosphere.
- One (1) bottle neck forming line, constructed in 2007, consisting of metal working, processing hot water, closed loop heating and cooling, six (6) ovens with natural gas burners of less than 10 MMBtu, (with a total of 24.1 MMBtu).

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

Volatile Organic Compounds (VOC) [326 IAC 8-2-3][40 CFR 60.492] [326 IAC 12]

Pursuant to 326 IAC 8-2-3(b), (Can Coating Operations), the operator of three (3) four (4) overvarnish lines, PTR-1 through 3-PTR-4, and three (3) four (4) inside spray machine lines, ISM-1 through 3 ISM-4, shall not cause, allow or permit the discharge into the atmosphere of any volatile organic compounds in excess of the following:

D.1.2 PSD Minor Limit [326 IAC 2-2]

- Pursuant to CP 181-5079-00022, issued on June 12, 1996 and revised by MSM 181-25614-00022, the use of VOC, including coatings, dilution solvents, and cleaning solvents at three (3) the four (4) lithographic printing presses and overvarnish lines (PTR-1 through 3 PTR-4) and three (3) the four (4) inside spray machine lines (ISM-1 through 3 ISM-4) shall be limited such that the potential to emit VOC shall be less than 223.3 240.2 tons per twelve (12) consecutive month period, after controls, with compliance determined at the end of each month.
- The overall control efficiencies shall be 51.5 % for three (3) printing presses and overvarnish and 73.5 % for three (3) inside spray machine lines. Compliance with (a) shall be determined based on the following equation:

VOC emissions = (Input VOC to solvent cleaning operation) + (Input VOC to printing and overvarnish) x (1-%Control Efficiency)) + (Input VOC to inside spray x (1 - %Control Efficiency)

This usage limit is required to limit the potential to emit of VOC from the entire source to less than 250 tons per 12 consecutive month period. Compliance with this limit will render 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

Compliance with this limit, combined with the potential to emit VOC from other emission units at the source, shall limit the VOC from the entire source to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-2 not applicable.

Ball Metal Beverage Container Corp. Monticello, Indiana

Monticello, Indiana TSD for Minor Source Modification No.: 181-25614-00022
Permit Reviewer: Laura Spriggs TSD for Significant Permit Modification No.: 181-25621-00022

D.1.3 Volatile Organic Compounds (VOC) [326 IAC 8-1-6][326 IAC 2-2]

Pursuant to CP 181-5079-00022, issued on June 12, 1996, the VOC content delivered to end making line shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period with compliance determined at the end of each month. Therefore, the best available control technology (BACT) requirement in 326 IAC 8-1-6 does not apply.

Page 16 of 25

This usage limit is required to limit the potential to emit of VOC from the entire source to less than 250 tons per 12 consecutive month period. Compliance with this limit will render 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

* * * * *

D.1.43 Particulate [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), particulate from the inside spray machines operations shall be controlled by a baghouse a dry particulate filter, waterwash, or an equivalent control device and the Permittee shall operate the control device in accordance with manufacturer's specifications.

* * *

D.1.65 Volatile Organic Compounds (VOC) [326 IAC 8-1-4] [326 IAC 8-1-2(a)] [40 CFR 60.493]

- (a) Compliance with the VOC content limitations contained in Conditions D.1.1-(a), and D.1.2 and D.1.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets, VOC certifications, or VOC certificates of analysis. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.
- (b) Compliance with the VOC emission limitation in Condition D.1.2 shall be determined based on the following equation:

VOC emissions = (Input VOC to Solvent Wipe Cleaning for Coating Operations) + [(Input VOC to Printing and Overvarnish Operations * (1 - CE/100)] + [(Input VOC to Inside Spray Operations) * (1 - CE/100)]

Where:

CE = Percent Overall Control Efficiency of the thermal oxidizer, RTO-1, as determined from the latest stack test.

D.1.**76** Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Before July 19, 2012 Within one hundred and eighty (180) days after issuance of this permit, the Permittee shall conduct a performance test to verify VOC control efficiency (as the product of destruction efficiency and capture efficiency) required by condition D.1.2 for the thermal oxidizer utilizing methods as approved by the Commissioner. The destruction efficiency test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

* * * * *

D.1.109 Record Keeping Requirements

(a) To document compliance with Conditions D.1.1-(a), (b), and D.1.2, and D.1.3, the Permittee shall maintain records in accordance with (1) through (65) below. Records maintained for (1) through (65) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.1.1-(a), (b), and D.1.2, and D.1.3. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

Page 17 of 25 TSD for Minor Source Modification No.: 181-25614-00022 TSD for Significant Permit Modification No.: 181-25621-00022

* * * * *

- (4) The cleanup solvent usage for coating operations for each month; and
- (5) The total VOC usage for each month; and.
- (6) The weight of VOCs emitted for each compliance period;

* * * * *

- (b) To document compliance with Condition D.1. 87, the Permittee shall maintain a log of daily external inspections and semi-annual inspections.
- (c) To document compliance with Condition D.1.98, the Permittee shall maintain a strip chart of thermal oxidizer temperatures.

* * * * *

D.1.140 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.2-and D.1.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the **calendar** quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-1.1-1(1).

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

D.1.121 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the three (3) four (4) lithographic printing presses (PTR-1 through PTR-4) for overvarnish and the three (3) four (4) inside spray machine lines (ISM-1 through ISM-4) except as otherwise specified in 40 CFR Part 60, Subpart WW.

* * * * *

D.1.132 Standards of Performance for the Beverage Can Surface Coating Industry Requirements [40 CFR Part 60, Subpart WW] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart WW, the Permittee shall comply with the provisions of 40 CFR 60, Subpart WW, Standards of Performance for the Beverage Can Surface Coating Industry for the three (3) four (4) lithographic printing presses (PTR-1 through PTR-4) for overvarnish and the three (3) four (4) inside spray machine lines (ISM-1 through ISM-4) as specified as follows.

SECTION D.2 FACILITY OPERATIONS CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Insignificant Activities consisting of:

(a) Degreasing operations that do not exceed 145, identified as CPW-01, with a maximum usage of 220 gallons per twelve (12) consecutive months period for cold cleaner parts washing, except if subject to 326 IAC 20-6.;

* * * *

Ball Metal Beverage Container Corp. Monticello, Indiana

Permit Reviewer: Laura Spriggs

Page 18 of 25 TSD for Minor Source Modification No.: 181-25614-00022 TSD for Significant Permit Modification No.: 181-25621-00022

Part 70 Quarterly Report

Source Name:	Ball Metal Beverage Container Corporation.
Source Address:	501 North Sixth Monticello Indiana 47960
Mailing Address:	501 North Sixth Monticello Indiana 47960
Part 70 Permit No.:	T181-17684-00022

Facility: Three (3) The four (4) lithographic printing presses and overvarnish lines (PTR-1

through 3 PTR-4) and three (3) the four (4) inside spray machine lines (ISM-1

through 3 ISM-4)

Parameter: **VOC Emissions**

Limit: Use of VOC, including coatings, dilution solvents, and cleaning solvents shall

be limited such that the potential to emit VOC shall be less than 240.2 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. The VOC emissions after controls shall be limited to less than 223.3 tons per 12 consecutive month period, after controls, with compliance determined at

the end of each month, using the following formula:

VOC emissions = (Input VOC to solvent) + (Input VOC to printing and overvarnish x (1-%Control Efficiency)) + (Input VOC to inside spray x (1 - %Control Efficiency) **VOC emissions = (Input VOC to Solvent Wipe Cleaning for Coating Operations)** + [(Input VOC to Printing and Overvarnish Operations * (1 - CE/100)] + [(Input VOC to Inside Spray Operations) * (1 - CE/100)]

Where: **CE = Percent Overall Control Efficiency of the thermal** oxidizer, RTO-1, as determined from the latest stack test.

YEAR:

	Column 1	Column 2	Column 1 + Column 2
Month (Specify Dates)	This Month	Previous 11 Months	12 Month Total
Month 1:			
From:			
То:			
Month 2:			
From:			
То:			
Month 3:			
From:			
То:			

■ No deviation occurred in this quarter.

Submitted by: Title / Position: Signature: Date:

Ball Metal Beverage Container Corp. Monticello, Indiana

TSD for Minor Source Modification No.: 181-25614-00022 TSD for Significant Permit Modification No.: 181-25621-00022 Permit Reviewer: Laura Spriggs

Phone:

Attach a signed certification to complete this report and submit within thirty (30) days of the end of the calendar quarter.

Page 19 of 25

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Ball Metal Beverage Container Corporation Source Address: 501 North Sixth Monticello Indiana 47960 Mailing Address: 501 North Sixth Monticello Indiana 47960

Part 70 Permit No.: T181-17684-00022 Facility: End making line, FE-36.

Parameter: **VOC Usage**

Limit: The usage of VOC shall be limited to less than 25 tons per 12 consecutive month

period, with compliance determined at the end of each month.

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
WOTH	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.
Deviation/s occurred in this quarter. Deviation has been reported on:
Submitted by: Title / Position: Signature: Date: Phone:
FHUHC.

Page 20 of 25 TSD for Minor Source Modification No.: 181-25614-00022 TSD for Significant Permit Modification No.: 181-25621-00022

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Source Address: Mailing Address: Part 70 Permit No.:	Ball Metal Beverage Co 501 North Sixth Montice 501 North Sixth Montice T181-17684-00022			
	Months Dates:	_ to	Year:	
* * * * *				
Attach a signed cer	rtification to complete thi	s report and subm calendar quarter.	it within thirty (30) days	of the end of the

Proposed Changes Due to Appeal Cause No. 06-A-J-3830

Ball Metal Beverage Container Corp. filed a petition for administrative review of the Part 70 Operating Permit T181-17684-00022, issued on November 15, 2006, which was received by the OAQ on December 5, 2006. The petition for review was filed with the Office of Environmental Adjudication (OEA) under Cause Number 06-A-J-3830. The issue of the petition for administrative review and the response as approved by IDEM, Office of Legal Counsel (OLC), OAQ, and the source are described below.

The changes listed below have been made to Part 70 Operating Permit Renewal No. 181-17684-00022. Deleted language appears as strikethroughs and new language appears in **bold**:

Appeal Item 1:

Permit Condition C.16(a) is contrary to law and beyond IDEM's authority. It attempts to regulate Ball Metal Beverage Container Corp. beginning in 2004, almost three years before the permit was issued. Ball Metal Beverage Container Corp. suggests the following change to the permit condition:

- C.16 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)] [326 IAC 2-6]
 - (a) In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), starting in 2004 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
 - (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
 - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management

Ball Metal Beverage Container Corp. TSD for Minor Source Modification No.: 181-25614-00022 Monticello, Indiana Permit Reviewer: Laura Spriggs TSD for Significant Permit Modification No.: 181-25621-00022

> Technical Support and Modeling Section, Office of Air Quality 100 North Senate Avenue MC 61-50 IGCN 1003 Indianapolis, Indiana 46204-2251

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Page 21 of 25

(b) The emission statement 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.

Response to Appeal Item 1:

IDEM, OAQ agrees to make the above change. The permit has been revised as follows:

- C.16 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)] [326 IAC 2-6]
 - In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), starting in (a) 2004 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

Appeal Item 2:

Permit Condition D.1.8(a) - Monitoring is not supported by the facts that the facility has not had any particulate exceedances, so that daily external inspections of the baghouse are not warranted. Further, the condition fails to take into account safety issues and requires inspections that may occur during unsafe conditions, such as during events of snow or lightning. Ball Metal Beverage Container Corp. requests that Permit Condition D.1.8(a) be deleted from the permit.

Permit Condition D.1.8(b) is unduly burdensome. It requires the facility to be shut down monthly to clean ductwork. Ball Metal Beverage Container Corp. requests that Permit D.1.8(b) should be deleted from the permit.

Response to Appeal Item 2:

Monitoring conditions are necessary to demonstrate compliance with 326 IAC 6-3-2 (Particulate Emissions Limitations for Manufacturing Processes). However, IDEM, OAQ agrees that the monitoring requirements in Condition D.1.8 - Monitoring (now Condition D.1.7) are not appropriate for the type of control device used on the spray coating lines. The baghouse described in the permit is a trap filter used to keep particulate from being emitted from the surface coating lines. The Permittee has also requested flexibility for the approach to controlling particulate emissions pursuant to 326 IAC 6-3-2(d). Monitoring conditions have been established for different types of particulate control. The permit has been revised as follows:

D.1.87 Monitoring

- Daily external inspections shall be performed to verify the placement, integrity and particle (a) loading of the baghouse. If a condition exists which should result in a response step, 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.
- (a)(b) Monthly ductwork cleaning and semi-annual inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The following monitoring condition shall apply if baghouse filters are used

Ball Metal Beverage Container Corp.

Monticello, Indiana

Permit Reviewer: Laura Spriggs

Page 22 of 25

TSD for Minor Source Modification No.: 181-25614-00022

TSD for Significant Permit Modification No.: 181-25621-00022

to control particulate emissions:

Monthly cleaning of the baghouse filters shall be performed per manufacturer's recommendation and semi-annual inspections shall be performed for the presence of overspray near the baghouse. When there is a noticeable change in overspray emissions, or when evidence of overspray emissions is 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.

- (b) The following monitoring conditions shall apply if dry filters are used to control particulate emissions:
 - (1) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating stacks while one or more of the spray lines are in operation. If a condition exists which should result in a response step, 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.
 - (2) Monthly inspections shall be performed of the coating emissions from the stacks and the presence of overspray nearby the filters. When there is a noticeable change in overspray emissions, or when evidence of overspray emissions is 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.
- (c) The following monitoring conditions shall apply if water pans are used to control particulate emissions:
 - (1) Daily inspections shall be performed to verify that the water level of the water pans meet the manufacturer's recommended level. To monitor the performance of the water pans, the water level of the pans shall be maintained weekly at a level where surface agitation indicates impact of the air flow. Water shall be kept free of solids and floating material that reduces the capture efficiency of the water pan. In addition, weekly observations shall be made of the overspray from the surface coating stacks while one or more of the spray lines are in operation. Section C Response to Excursions or Exceedances shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Response to Excursions or Exceedances, shall be considered a deviation from this permit.
 - (2) Monthly inspections shall be performed of the coating emissions from the stacks and the presence of overspray on the nearby ground. Section C Response to Excursions or Exceedances for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. Section C Response to Excursions or Exceedances shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Response to Excursions or Exceedances, shall be considered a deviation in this permit.

Page 23 of 25 TSD for Minor Source Modification No.: 181-25614-00022 TSD for Significant Permit Modification No.: 181-25621-00022

(d) Particulate control methods other than baghouse filtration, dry filters, or water pans for controlling particulate emissions from the four (4) inside spray machine lines (ISM-1 through ISM-4) are subject to approval by IDEM, OAQ, Permits Branch to determine if additional monitoring conditions are required.

* * *

D.1.109 Record Keeping Requirements

* * *

- (b) To document compliance with Condition D.1.87, the Permittee shall maintain a log of particulate control method employed and the following: daily external inspections and semi-annual inspections.
 - (1) When baghouse filtration is used for particulate control, the Permittee shall maintain a log of semi-annual inspections.
 - (2) When dry filters are used for particulate control, the Permittee shall maintain a log of weekly overspray observations and daily and monthly inspections.
 - (3) When water pans are used for particulate control, the Permittee shall maintain a log of weekly overspray observations, weekly observations of the water level in the pans, and daily and monthly inspections.

* * *

Appeal Item 3:

Condition D.1.9 - Thermal Oxidizer Temperature does not allow the Permittee to rely on its data acquisition system for monitoring purposes, instead of a continuous monitoring strip chart. Condition D.1.9(a) should be amended to allow the Permittee to rely on its data acquisition system with the continuous monitoring strip chart as a back up.

Response to Appeal Item 3:

IDEM, OAQ agrees to change Condition D.1.9 (now Condition D.1.8) to reflect the current condition being used for thermal oxidizer temperature. The permit has been revised as follows:

D.1.98 Thermal Oxidizer Temperature [40 CFR 64]

A continuous monitoring strip chart system shall be calibrated, maintained, and operated (a) on the thermal oxidizer (RTO-1) for measuring operating temperature. For the purpose of this condition, continuous means no less than once per fifteen (15) minutes. The output of this strip chart system shall be recorded as the oxidizer operating temperature. The 3-hour average oxidizer temperature shall be determined once per fifteen (15) minutes either as an output of the data acquisition system or by other means. From the date of issuance of this permit until approved stack test results are available, the Permittee shall operate the thermal oxidizer at or above the 3-hour average temperature of 1300 °F whenever the oxidizer is in operation. continuously when the temperature of thermal oxidizer is maintained at or above 1300 °F. If the temperature falls below 1300-6 F, the 3-hr average temperature must be recorded using data obtained from the strip chart until the temperature reaches 1300° F or above. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C Response to Excursions or Exceedances whenever the 3-hr average temperature of thermal oxidizer is below 1300°F.

Page 24 of 25 TSD for Minor Source Modification No.: 181-25614-00022 TSD for Significant Permit Modification No.: 181-25621-00022

- (b) The Permittee shall determine the 3-hrhour average temperature from the most recent valid stack test that demonstrates compliance with limits in eConditions D.1.2, as approved by IDEM.
- (c) On and after the date the approved stack test results are available, the Permittee shall operate the thermal oxidizer at or above the 3-hrhour average temperature as observed during the compliant stack test.
- (d) The Permittee shall perform weekly inspections of the control equipment structure including ductwork.

Compliance with these requirements satisfies Compliance Assurance Monitoring (CAM) requirements.

D.1.409 Record Keeping Requirements

(c) To document compliance with Condition D.1.8, the Permittee shall maintain a strip chart record of the 3-hour average thermal oxidizer temperatures.

Appeal Item 4:

Condition D.1.10(a)(2)(A) - Record Keeping Requirements is unduly burdensome and will result in copious amounts of wasted paper.

Response to Appeal Item 4:

IDEM, OAQ agrees to clarify Condition D.1.10 (now D.1.9) as follows:

D.1.409 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.1.1 and D.1.2. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
 - (1) The VOC content of each coating material and solvent used.
 - (2) The amount of coating material and solvent used less water on monthly basis.
 - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. **Records kept may be in an electronic format.**

Appeal Item 5:

Quarterly Reporting is required by the permit, but the term is not defined whether quarterly reporting is based on a calendar year or fiscal time period. For example, see the following condition:

D.1.11 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.2 and D.1.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-1.1-1(1).

Page 25 of 25 TSD for Minor Source Modification No.: 181-25614-00022 TSD for Significant Permit Modification No.: 181-25621-00022

Response to Appeal Item 5:

Quarterly reporting is based on a calendar year. This definition is included in paragraph (e) of Condition C.18 in the Source Operation Conditions section:

C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

* * *

(e) 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.

* * *

No changes are being made to the permit as a result of this item.

Appeal Item 6:

Ball Metal Beverage Container Corp. requests that HAP limits be included in the permit to specifically show that this source is a minor source of HAP. Please include in the permit HAP limits of less than 10 tons per year of a single HAP and less than 25 tons per year of combined HAP.

Response to Appeal Item 6:

HAP limits are not necessary because the unrestricted potential to emit of single and combined HAPs is less than 10 and 25 tons per year, respectively. To clarify the status of the source, IDEM, OAQ added language to the Source Status in A.1 of the permit to further describe that the source is a Minor Source under Section 112 of the Clean Air Act. This permit revision is reflected in the Proposed Changes Due to Modification section.

Appeal Item 7:

Ball Metal Beverage Container Corp. requests that the monitoring condition in the permit include the exception to run the thermal oxidizer during period of preventive maintenance, as was included in the previous permit:

D.1.9 Monitoring

(a) The regenerative thermal oxidizer and the fans moving the exhaust fumes from the can coating operation to the thermal oxidizer shall all be in operation sufficiently when one or more of the can coating facilities is operated, except during periods of preventive maintenance (PM), provided that the VOC limits described in D.1.1 and reporting requirements described in D.1.9 are satisfied.

* * *

Response to Appeal Item 7:

The permit does not include any conditions that require the use of the thermal oxidizer when the can coating facilities are in operation. The permit provides operational flexibility for the Permittee as long as the Permittee complies with the VOC limits specified in Conditions D.1.1 and D.1.2. No changes have been made to the permit as a result of this appeal item.

Conclusion and Recommendation

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. 181-25614-00022 and Significant Permit Modification No. 181-25621-00022. The staff recommend to the Commissioner that this Part 70 Minor Source and Significant Permit Modification be approved.

Appendix A: Emissions Calculations Summary of Unlimited and Limited PTE

Company Name: Ball Metal Beverage Container Corp.
Address City IN Zip: 501 North Sixth Street, Monticello, IN 47960

MSM No.: 181-25614-00022 SPM No.: 181-25621-00022 Reviewer: Laura Spriggs Date: February 4, 2008

Unlimited PTE Due to This Modification

		Criteria Pollutants							
	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)			
New Emission Units									
PTR-4: Printing ¹					15.67				
PTR-4: Overvarnish and Rim Coat ²					118.88				
ISM-4: Inside Spray ²	23.43	23.43	-		222.45				
New Insignificant Activities				-					
PO-4: Printer Oven ³	0.022	0.090	0.007	1.183	0.065	0.993			
ISO-4: Inside Spray Oven ³	0.027	0.107	0.008	1.402	0.077	1.177			
W-03: Washer Drying Oven	0.013	0.053	0.004	0.701	0.039	0.589			
B06: Hot Water Boiler ³	0.042	0.166	0.013	2.190	0.120	1.840			
Ovens w/ total of 24.1 MMBtu/hr3	0.201	0.802	0.063	10.556	0.581	8.867			
Mup-01-02: Makeup Air Natural Gas ³	0.104	0.416	0.033	5.475	0.301	4.599			
ID system					< 2.74				
UV-04: UV Bottom Coater					<1				
Total for New Units	23.83	25.06	0.13	21.51	361.92	18.06			
Modified Units (Net Increase in P	TE)								
CPW-01: Cold Cleaner Parts Washer ⁴					0.25				
Total for Modification	23.83	25.06	0.13	21.51	362.17	18.06			

		HAPs (tons/yr)									
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Lead	Cadmium	Chromium	Manganese	Nickel	Total
PTR-4: Printing ¹			0.10								0.10
PTR-4: Overvarnish and Rim Coat ²			0.54	-							0.54
ISM-4: Inside Spray ²			0.15	1	-						0.15
PO-4: Printer Oven ³	2.48E-05	1.42E-05	8.87E-04	2.13E-02	4.02E-05	5.91E-06	1.30E-05	1.66E-05	4.49E-06	2.48E-05	0.02
ISO-4: Inside Spray Oven ³	2.94E-05	1.68E-05	1.05E-03	2.52E-02	4.77E-05	7.01E-06	1.54E-05	1.96E-05	5.33E-06	2.94E-05	0.03
W-03: Washer Drying Oven	1.47E-05	8.41E-06	5.26E-04	1.26E-02	2.38E-05	3.50E-06	7.71E-06	9.81E-06	2.66E-06	1.47E-05	0.01
B06: Hot Water Boiler ³	4.60E-05	2.63E-05	1.64E-03	3.94E-02	7.45E-05	1.10E-05	2.41E-05	3.07E-05	8.32E-06	4.60E-05	0.04
Ovens w/ total of 24.1 MMBtu/hr3	2.22E-04	1.27E-04	7.92E-03	1.90E-01	3.59E-04	5.28E-05	1.16E-04	1.48E-04	4.01E-05	2.22E-04	0.20
Mup-01-02: Makeup Air Natural Gas ³	1.15E-04	6.57E-05	4.11E-03	9.86E-02	1.86E-04	2.74E-05	6.02E-05	7.67E-05	2.08E-05	1.15E-04	0.10
ID system				-							0.00
UV-04: UV Bottom Coater											0.00
Total	0.0005	0.0003	0.8097	0.3871	0.0007	0.0001	0.0002	0.0003	0.0001	0.0005	1.20

¹See page 2 of TSD Appendix A for Calculations

Limited PTE of Entire Source

Emission Unit	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)
PTR-1 - PTR-4: Overvarnish						
PTR-1 - PTR-4: Rim Coat						
PTR-1 - PTR-4: Printing					240.2	
ISM-1 - ISM-4: Inside Spray	0.72	0.72				
Solvent Wipe Cleaning						
RTO-1	0.13	0.53	0.04	7.01	0.39	5.89
Other Natural Gas Units	1.18	4.73	0.37	62.22	3.42	52.27
Other Insignificant Activities	4.83	4.83			4.95	
Total	6.87	10.81	0.42	69.23	249.0	58.15

^{*}VOC Limit for Overvarnish, Rim Coat, Printing, Inside Spray, and Solvent Wipe Cleaning = 249 - PTE of other emission units at the source to limit the VOC from the entire source to less than 250 tons per 12 consecutive month period and render 326 IAC 2-2 not applicable

²See page 3 of TSD Appendix A for Calculations

³See page 4 of TSD Appendix A for Calculations

⁴See page 5 of TSD Appendix A for Calculations

^{*}PM/PM10 Limited Emissions for Inside Spray is based on the required use of baghouse during equipment operation, assuming 99% control.

^{*}PM/PM10 Limited Emissions for Other Insignificant Activities is based on the 326 IAC 6-3-2 limits.

^{*}VOC PTE for Other Insignificant Activities is PTE from Degreasing Operations (tons/yr) + 4.23 tons/yr (Applicant estimate of other VOC PTE)

Appendix A: Emissions Calculations Printing Operations

Company Name: Ball Metal Beverage Container Corp.

Address City IN Zip: 501 North Sixth Street, Monticello, IN 47960

MSM No.: 181-25614-00022 SPM No.: 181-25621-00022 Reviewer: Laura Spriggs Date: February 4, 2008

Ink Name Press ID	Container Size	Max Line Speed (cans per hour)	Dry Coating Weight (lb dry film/can)	VOC Content (lb VOC/lb lnk)	Wet Coating Weight (lb Ink/can)	Flash Off %	Maximum Ink Usage (lb ink/hr)	PTE VOC (lb/hr)		Formaldehyde Content (lb formaldehyde /lb ink)	PTE Formaldehyde (tons/yr)
PTR-1	12 oz.	138,000	0.000132275	0.16	0.0001573	100%	21.70	3.45	15.10	0.001	0.095
PTR-2	12 oz.	138,000	0.000132275	0.16	0.0001573	100%	21.70	3.45	15.10	0.001	0.095
PTR-3 (Scenario 1)	12 oz.	138,000	0.000132275	0.16	0.0001573	100%	21.70	3.45	15.10	0.001	0.095
PTR-3 (Scenario 2)	16 oz.	114,000	0.000169753	0.16	0.0002018	100%	23.01	3.66	16.01	0.001	0.101
PTR-4 (Scenario 1)	16 oz.	114,000		0.16	0.0001540	100%	17.56	2.79	12.22	0.001	0.077
PTR-4 (Scenario 2)	24 oz.	102,000		0.16	0.0002207	100%	22.51	3.58	15.67	0.001	0.099
Total Unlimited PTE N	New Units							3.58	15.67		0.099
Total Unlimited PTE for	or All Printir	ng						14.13	61.89		0.39

New Units

PTR-3 can operate at either 138,000 12-oz. cans per hour or 114,000 16-oz. cans per hour.

PTR-4 can operate at either 114,000 16-oz. cans per hour or 102,000 24-oz. cans per hour.

METHODOLOGY

*Max Line Speed Based on maximum throughput of cans per hour as provided with applicant calculations. Note: The maximum line speeds listed were submitted by the applicant in this application and differ from the maximum line speeds assumed for Part 70 Operating Permit Renewal No. 181-17684-00022.

*For PTR-1, PTR-2, and PTR-3, the Dry Coating Weight is given based on the known dry film weight per can. The amount of wet ink per can is determined based on the dry coating weight and maximum VOC content in the ink.

*VOC Content is based on the maximum VOC content according to the applicant (INX International Ink Co., GEN0015).

*Wet Coating Weight: For PTR-1, PTR-2, and PTR-3, Wet Coating Weight (lb Ink/can) = Dry Coating Weight (lb dry film/can) / (1 - VOC Content)

*Wet Coating Weight: For PTR-4, Wet Coating Weight (lb Ink/can) is based on estimate from applicant.

*Heat set offset printing has an assumed flash off of 80%: Other printers have a flash off of 100%

*Maximum Ink Usage (lb Ink/hr) = Maximum Line Speed (cans/hr) * Wet Coating Weight (lb Ink/can)

*PTE VOC (lb/hr) = VOC Content (lb VOC/lb ink) * Flash Off % * Maximum Ink Usage (lb Ink/hr)

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

*PTE Formaldehyde (tons/yr) = Formaldehyde Content (lb formaldehyde/lb ink) * Maximum Ink Usage (lb ink/hr) * (8760 hr / yr) * (1 ton / 2000 lb)

*Total Unlimited PTE for new units (tons/yr) = Worst Case PTE for new units (tons/yr)

Appendix A: Emissions Calculations **Coating Operations**

Company Name: Ball Metal Beverage Container Corp. Address City IN Zip: 501 North Sixth Street, Monticello, IN 47960

> MSM No.: 181-25614-00022 SPM No.: 181-25621-00022 Reviewer: Laura Spriggs Date: February 4, 2008

Emissions Unit	Material (Coating ID)	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non- Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (cans/hour)	Pounds VOC per gallon of coating less water		Potential VOC	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)			Formaldehyde (lb/lb coating)	Formaldehyde Emissions (tons/yr)
Inside Spray																			
ISM-1 (12-oz cans)	640C692	8.45	79.50%	64.9%	14.6%	65.6%	16.14%	0.00020	138000	3.59	1.23	33.54	804.98	146.91	15.47	7.64	92.5%	0.0001	0.10
ISM-2 (12-oz cans)	640C692	8.45	79.50%	64.9%	14.6%	65.6%	16.14%	0.00020	138000	3.59	1.23	33.54	804.98	146.91	15.47	7.64	92.5%	0.0001	0.10
ISM-3 (12-oz cans)																			
OR	640C692	8.45	79.50%	64.9%	14.6%	65.6%	16.14%	0.00020	138000	3.59	1.23	33.54	804.98	146.91	15.47	7.64	92.5%	0.0001	0.10
ISM-3 (16-oz cans)	640C692	8.45	79.50%	64.9%	14.6%	65.6%	16.14%	0.00028	114000	3.59	1.23	39.06	937.45	171.08	18.02	7.64	92.5%	0.0001	0.12
ISM-4 (16-oz cans)																			
OR	640C692	8.45	79.50%	64.9%	14.6%	65.6%	16.14%	0.00030	114000	3.59	1.23	42.33	1015.95	185.41	19.53	7.64	92.5%	0.0001	0.13
ISM-4 (24-oz cans)	640C692	8.45	79.50%	64.9%	14.6%	65.6%	16.14%	0.00040	102000	3.59	1.23	50.79	1218.90	222.45	23.43	7.64	92.5%	0.0001	0.15
Total Unlimited PTE	New Units													222.45	23.43				0.15
Total Unlimited PTE	All Inside Spray		·				<u> </u>	·					·	687.35	72.38			·	0.47

Overvarnish																		
PTR-1 (12-oz cans)	Valspar 2228005	8.67	63.70%	48.6%	15.1%	50.1%	not given	0.00007	138000	2.62	1.86	18.01	432.22	78.88	0.00	100%	0.001	0.37
PTR-2 (12-oz cans)	Valspar 2228005	8.67	63.70%	48.6%	15.1%	50.1%	not given	0.00007	138000	2.62	1.86	18.01	432.22	78.88	0.00	100%	0.001	0.37
PTR-3 (12-oz cans)																		
OR	Valspar 2228005	8.67	63.70%	48.6%	15.1%	50.1%	not given	0.00007	138000	2.62	1.86	18.01	432.22	78.88	0.00	100%	0.001	0.37
PTR-3 (16-oz cans)	Valspar 2228005	8.67	63.70%	48.6%	15.1%	50.1%	not given	0.00011	114000	2.62	1.86	22.32	535.58	97.74	0.00	100%	0.001	0.45
PTR-4 (16-oz cans)																		
OR	Valspar 2228005	8.67	63.70%	48.6%	15.1%	50.1%	not given	0.00011	114000	2.62	1.86	22.32	535.58	97.74	0.00	100%	0.001	0.45
PTR-4 (24-oz cans)	Valspar 2228005	8.67	63.70%	48.6%	15.1%	50.1%	not given	0.00014	102000	2.62	1.86	26.62	638.93	116.61	0.00	100%	0.001	0.54
Total Unlimited PTE I	New Units													116.61	0.00			0.54
Total Unlimited PTE	All Overvarnish													372.11	0.00			1.73

Rim Coat																	
PTR-1 (12-oz cans)	PPG 3655	9.0	48.50%	33.6%	14.9%	36.4%	45.30%	0.000003	138000	2.11	1.34	0.62	14.79	2.70	0.00	100%	
PTR-2 (12-oz cans)	PPG 3655	9.0	48.50%	33.6%	14.9%	36.4%	45.30%	0.000003	138000	2.11	1.34	0.62	14.79	2.70	0.00	100%	
PTR-3 (12-oz cans)																	
OR	PPG 3655	9.0	48.50%	33.6%	14.9%	36.4%	45.30%	0.000003	138000	2.11	1.34	0.62	14.79	2.70	0.00	100%	
PTR-3 (16-oz cans)	PPG 3655	9.0	48.50%	33.6%	14.9%	36.4%	45.30%	0.000003	114000	2.11	1.34	0.51	12.22	2.23	0.00	100%	
PTR-4 (16-oz cans)																	
OR	PPG 3655	9.0	48.50%	33.6%	14.9%	36.4%	45.30%	0.000003	114000	2.11	1.34	0.51	12.22	2.23	0.00	100%	
PTR-4 (24-oz cans)	PPG 3655	9.0	48.50%	33.6%	14.9%	36.4%	45.30%	0.000004	102000	2.11	1.34	0.52	12.49	2.28	0.00	100%	
Total Unlimited PTE N	ew Units													2.28	0.00		0.00
Total Unlimited PTE Al	II Rim Coat													10.38	0.00		0.00

								Gal/hr								
Solvent Wipe																
Cleaning	Isopropanol	6.59	100.00%	0.0%	100.0%	0.0%	0.00%	0.38	6.59	6.59	2.48	59.57	10.87	0.00	100%	

New Units

ISM-3 and PTR-3 can coat either 12-oz. cans at 138,000 cans per hour or 16-oz. cans at 114,000 cans per hour. ISM-4 and PTR-4 can coat either 16-oz. cans at 114,000 cans per hour or 24-oz. cans at 102,000 cans per hour.

Inside Spray Machine Lines (ISM)

Applicant submitted that the lines use either 640CX2134 or 640C692. Coating 640C692 represents the worst case assumption for all pollutants, so it is used for calculations.

Gal of Mat. (gal/unit) for ISM-1, ISM-2, and ISM-3 is based on usage information of known dry film coating weight per can = dry film weight (mg/can) * 1.075 (to account for overspray) * (1 lb / 453600 mg) / [(1 - Wt.% Volatiles) * Coating Density (lb/gal)]

Gal of Mat. (gal/unit) for ISM-4 is based on estimates of dry film coating weight per can = dry film weight (mg/can) * 1.075 (to account for overspray) * (1 lb / 453600 mg) / [(1 - Wt.% Volatiles) * Coating Density (lb/gal)]

Overvarnish (Used on PTR Lines)

Applicant submitted that the lines could use either PPG3665, PPG3805801, or Valspar 2228005 retort. Overvarnish Valspar 2228005 represents the worst case assumption for all pollutants, so it is used for calculations.

Applicant submitted that rim coat is either Watson Standard WS 9805005 UV rim coat or PPG 3655 non-UV rim coat. The PPG 3655 represents the worst case assumption for all pollutants, so it is used for calculations.

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Formaldehyde Emissions (tons/yr) = Formaldehyde (lb/lb coating) * Gal of Material (gal/unit) * Maximum (cans/hr) * Coating Density (lb/gal) * (8760 hrs/yr) * (1 ton/2000 lbs)

Total Unlimited PTE for new units (tons/yr) = Worst Case PTE for new units (tons/yr)

Appendix A: Emissions Calculations New Natural Gas Combustion Emissions Units (Less than 100 MMBtu/hr) Due to This Modification

Company Name: Ball Metal Beverage Container Corp.
Address City IN Zip: 501 North Sixth Street, Monticello, IN 47960

MSM No.: 181-25614-00022 SPM No.: 181-25621-00022 Reviewer: Laura Spriggs Date: February 4, 2008

		Ī			Criteria I	Pollutants		
			PM*	PM10*	SO2	NOx	VOC	CO
E	mission Facto	or in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0
						**see below		
	Heat Input	Potential						
Emissions Unit	Capacity	Throughput			Potential Emis	ssions (tons/yr)	
	(MMBtu/hr)	(MMCF/yr)						
Line 4 Printer Oven: PO-4	2.7	23.652	0.022	0.090	0.007	1.183	0.065	0.993
Line 4 Inside Spray Oven: ISO-4	3.2	28.032	0.027	0.107	0.008	1.402	0.077	1.177
Line 4 Washer Oven: W-3	1.6	14.016	0.013	0.053	0.004	0.701	0.039	0.589
Hot Water Boiler (this application)	5	43.800	0.042	0.166	0.013	2.190	0.120	1.840
Insignificant Ovens (this application)	24.1	211.116	0.201	0.802	0.063	10.556	0.581	8.867
Makeup Air Units: MA-#1-2	12.5	109.500	0.104	0.416	0.033	5.475	0.301	4.599
Total			0.41	1.63	0.13	21.51	1.18	18.06

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

^{**}Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

				HA	Ps - Organics		
			Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
E	mission Facto	or in lb/MMCF	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
	Heat Input	Potential		•	•		
Emissions Unit	Capacity	Throughput		Potentia	I Emissions (tons	/yr)	
	(MMBtu/hr)	(MMCF/yr)					
Printer Oven: PO-4	2.7	23.652	2.5E-05	1.4E-05	8.9E-04	2.1E-02	4.0E-05
Inside Spray Oven: ISO-4	3.2	28.032	2.9E-05	1.7E-05	1.1E-03	2.5E-02	4.8E-05
Line 4 Washer Oven: W-3	1.6	14.016	1.5E-05	8.4E-06	5.3E-04	1.3E-02	2.4E-05
Hot Water Boiler (this application)	5	43.800	4.6E-05	2.6E-05	1.6E-03	3.9E-02	7.4E-05
Insignificant Ovens (this application)	24.1	211.116	2.2E-04	1.3E-04	7.9E-03	1.9E-01	3.6E-04
Makeup Air Units: MA-#1-2	12.5	109.500	1.1E-04	6.6E-05	4.1E-03	9.9E-02	1.9E-04
Total	•		4.5E-04	2.6E-04	1.6E-02	3.9E-01	7.3E-04

				F	IAPs - Metals			Ī
			Lead	Cadmium	Chromium	Manganese	Nickel	Total HAPs
E	mission Fact	or in lb/MMCF	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	(Organics+Metals)
	Heat Input	Potential						
Emissions Unit	Capacity	Throughput			Potential Emis	ssions (tons/yr))	
	(MMBtu/hr)	(MMCF/yr)						
Printer Oven: PO-4	2.7	23.652	5.9E-06	1.3E-05	1.7E-05	4.5E-06	2.5E-05	2.2E-02
Inside Spray Oven: ISO-4	3.2	28.032	7.0E-06	1.5E-05	2.0E-05	5.3E-06	2.9E-05	2.6E-02
Line 4 Washer Oven: W-3	1.6	14.016	3.5E-06	7.7E-06	9.8E-06	2.7E-06	1.5E-05	1.3E-02
Hot Water Boiler (this application)	5	43.800	1.1E-05	2.4E-05	3.1E-05	8.3E-06	4.6E-05	4.1E-02
Insignificant Ovens (this application)	24.1	211.116	5.3E-05	1.2E-04	1.5E-04	4.0E-05	2.2E-04	2.0E-01
Makeup Air Units: MA-#1-2	12.5	109.500	2.7E-05	6.0E-05	7.7E-05	2.1E-05	1.1E-04	1.0E-01
Total			1.1E-04	2.4E-04	3.0E-04	8.2E-05	4.5E-04	4.1E-01

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

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

 $\mathsf{MMCF} = 1,000,000$ Cubic Feet of Gas

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

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (Supplement D 3/98)

Potential Emission (tons/yr) = Throughput (MMCF/yr) * Emission Factor (lb/MMCF) * (1 ton/2,000 lb)

Appendix A: Emissions Calculations

Modified Unit: Degreasing Operations

Company Name: Ball Metal Beverage Container Corp.

Address City IN Zip: 501 North Sixth Street, Monticello, IN 47960

MSM No.: 181-25614-00022 SPM No.: 181-25621-00022 Reviewer: Laura Spriggs Date: February 4, 2008

Modified Degreasing Operations

PTE Before Modification

Emissions Unit	Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics		Volume % Non- Volatiles (solids)		Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour		Potential VOC tons per year
CPW-01: Cold Cleaner Parts Washer	142 Solvent	6.59	100.00%	0.0%	100.0%	0.0%	0.00%	145.00	6.59	6.59	0.11	2.62	0.48

PTE After Modification

T TE Arter Modificati	011												
Emissions Unit	Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics		Volume % Non- Volatiles (solids)		Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour		Potential VOC tons per year
CPW-01: Cold Cleaner Parts													
Washer	142 Solvent	6.59	100.00%	0.0%	100.0%	0.0%	0.00%	220.00	6.59	6.59	0.17	3.97	0.72

Net Increase (tons/yr): 0.25

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Net Increase (tons/yr) = Potential VOC (tons/yr) After Modification - Potential VOC (tons/yr) Before Modification

Appendix A: Emissions Calculations Existing Natural Gas Combustion Emissions Units (Less than 100 MMBtu/hr)

Company Name: Ball Metal Beverage Container Corp. Address City IN Zip: 501 North Sixth Street, Monticello, IN 47960

MSM No.: 181-25614-00022 SPM No.: 181-25621-00022 Reviewer: Laura Spriggs Date: February 4, 2008

		Г			Poll	utant		
		Ť	PM*	PM10*	SO2	NOx	VOC	CO
E	mission Facto	or in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0
						**see below		
Emissions Unit	Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)			Potential Emi	ssions (tons/yr)	١	
Thermal Oxidizer: RTO-1	16	140.160	0.133	0.533	0.042	7.008	0.385	5.887
Lines 1-3 Printer Ovens: PO-1, PO-2, PO-3	12	105.120	0.100	0.399	0.032	5.256	0.289	4.415
Lines 1-3 Washer Ovens: W-1, W-2	9	78.840	0.075	0.300	0.024	3.942	0.217	3.311
Lines 1-3 Inside Spray Ovens: ISO-1, ISO-2, ISO-3	18	157.680	0.150	0.599	0.047	7.884	0.434	6.623
Bottle Line Dry Off Oven	1.6	14.016	0.013	0.053	0.004	0.701	0.039	0.589
Hot Water Boilers	15.693	137.471	0.131	0.522	0.041	6.874	0.378	5.774
Hot Water Fire Tube Boiler	0.27	2.365	0.002	0.009	0.001	0.118	0.007	0.099
Hot Water Heater	0.132	1.156	0.001	0.004	0.000	0.058	0.003	0.049
Make-Up Air Units	24.746	216.775	0.206	0.824	0.065	10.839	0.596	9.105
Building Space Heating	10.77	94.345	0.090	0.359	0.028	4.717	0.259	3.962
Office Areas	0.745	6.526	0.006	0.025	0.002	0.326	0.018	0.274
Total	•		0.91	3.63	0.29	47.72	2.62	40.09

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

^{**}Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

				HA	APs - Organics		
			Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
	Emission Fact	or in lb/MMCF	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Emissions Unit	Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)		Potentia	I Emissions (tons	s/yr)	
Thermal Oxidizer: RTO-1	16	140.160	1.5E-04	8.4E-05	5.3E-03	1.3E-01	2.4E-04
Lines 1-3 Printer Ovens: PO-1, PO-2, PO-3	12	105.120	1.1E-04	6.3E-05	3.9E-03	9.5E-02	1.8E-04
Lines 1-3 Washer Ovens: W-1, W-2	9	78.840	8.3E-05	4.7E-05	3.0E-03	7.1E-02	1.3E-04
Lines 1-3 Inside Spray Ovens: ISO-1, ISO-2, ISO-3	18	157.680	1.7E-04	9.5E-05	5.9E-03	1.4E-01	2.7E-04
Bottle Line Dry Off Oven	1.6	14.016	1.5E-05	8.4E-06	5.3E-04	1.3E-02	2.4E-05
Hot Water Boilers	15.693	137.471	1.4E-04	8.2E-05	5.2E-03	1.2E-01	2.3E-04
Hot Water Fire Tube Boiler	0.27	2.365	2.5E-06	1.4E-06	8.9E-05	2.1E-03	4.0E-06
Hot Water Heater	0.132	1.156	1.2E-06	6.9E-07	4.3E-05	1.0E-03	2.0E-06
Make-Up Air Units	24.746	216.775	2.3E-04	1.3E-04	8.1E-03	2.0E-01	3.7E-04
Building Space Heating	10.77	94.345	9.9E-05	5.7E-05	3.5E-03	8.5E-02	1.6E-04
Office Areas	0.745	6.526	6.9E-06	3.9E-06	2.4E-04	5.9E-03	1.1E-05
Total			1.0E-03	5.7E-04	3.6E-02	8.6E-01	1.6E-03

			HAPs - Metals					1
			Lead	Cadmium	Chromium	Manganese	Nickel	Total HAPs
Emission Factor in lb/MMCF			5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	(Organics+Metals)
Emissions Unit	Heat Input	Potential	Potential Emissions (tons/yr)					
	Capacity	Throughput						
	(MMBtu/hr)	(MMCF/yr)						
Thermal Oxidizer: RTO-1	16	140.160	3.5E-05	7.7E-05	9.8E-05	2.7E-05	1.5E-04	1.3E-01
Lines 1-3 Printer Ovens: PO-1, PO-2, PO-3	12	105.120	2.6E-05	5.8E-05	7.4E-05	2.0E-05	1.1E-04	9.9E-02
Lines 1-3 Washer Ovens: W-1, W-2	9	78.840	2.0E-05	4.3E-05	5.5E-05	1.5E-05	8.3E-05	7.4E-02
Lines 1-3 Inside Spray Ovens: ISO-1, ISO-2, ISO-3	18	157.680	3.9E-05	8.7E-05	1.1E-04	3.0E-05	1.7E-04	1.5E-01
Bottle Line Dry Off Oven	1.6	14.016	3.5E-06	7.7E-06	9.8E-06	2.7E-06	1.5E-05	1.3E-02
Hot Water Boilers	15.693	137.471	3.4E-05	7.6E-05	9.6E-05	2.6E-05	1.4E-04	1.3E-01
Hot Water Fire Tube Boiler	0.27	2.365	5.9E-07	1.3E-06	1.7E-06	4.5E-07	2.5E-06	2.2E-03
Hot Water Heater	0.132	1.156	2.9E-07	6.4E-07	8.1E-07	2.2E-07	1.2E-06	1.1E-03
Make-Up Air Units	24.746	216.775	5.4E-05	1.2E-04	1.5E-04	4.1E-05	2.3E-04	2.0E-01
Building Space Heating	10.77	94.345	2.4E-05	5.2E-05	6.6E-05	1.8E-05	9.9E-05	8.9E-02
Office Areas	0.745	6.526	1.6E-06	3.6E-06	4.6E-06	1.2E-06	6.9E-06	6.2E-03
Total			2.4E-04	5.2E-04	6.7E-04	1.8E-04	1.0E-03	9.0E-01

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

MethodologyAll emission factors are based on normal firing. MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas