

West Virginia Department of Environmental Protection  
*Division of Air Quality*

*Joe Manchin III*  
Governor

*Timmermeyer*

*Stephanie R.*  
Cabinet Secretary

# Permit to Operate



*Pursuant to*  
**Title V**  
of the Clean Air Act

*Issued to:*  
**Ball Metal Food Container Corporation**  
R30-00900027-2007 (Part 1 of 2)

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*John A. Benedict*  
Director

*Issued: March 28, 2007 • Effective: April 11, 2007*  
*Expiration: March 28, 2012 • Renewal Application Due: September 28, 2011*

Permit Number: **R30-00900027-2007 (Part 1 of 2)**  
Permittee: **Ball Metal Food Container Corporation**  
Mailing Address: **3010 Birch Drive, Weirton, West Virginia 26062**

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*This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.*

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Facility Location:	Weirton, Brooke County, West Virginia
Mailing Address:	Same as Permittee Mailing Address above
Telephone Number:	304-797-0062
Type of Business Entity:	Corporation
Facility Description:	The plant receives coils of tin-plated steel which it cuts into sheets and coats with a protective varnish. The sheets are cured in an oven and either transferred to the end department to be pressed into ends or shipped off site to be made into food can bodies. The plant has four (4) coating lines and <del>five (5)</del> <a href="#">six (6)</a> end lines. Three (3) of the coaters/ovens are controlled by one (1) thermal oxidizer. The fourth coater/oven is controlled by its own thermal oxidizer. Four of the end lines use solvent-based end compound. <del>The fifth</del> <a href="#">Two</a> uses water-based compound and has no VOC emissions.
SIC Codes:	3411
UTM Coordinates:	531.9 km Easting • 4,470.8 km Northing • Zone 17

Permit Writer: Denton B. McDerment

*Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.*

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*Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.*

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**ATTACHMENT A – Permanent Total Enclosure Report dated ~~July 7, 2000~~ [January 3, 2007](#)**

## 1.0 Emission Units and Active R13, R14, and R19 Permits

### 1.1 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed / Modified	Design Capacity	Control Device
C-1	1S	#1 Wagner Sheet Coater	1995	6,000 sheets/hr	TO-1
C-2	2S	#2 Wagner Sheet Coater	1990	6,000 sheets/hr	TO-1
C-3	3S	#3 Wagner Sheet Coater w/ UV	1990	6,000 sheets/hr	TO-1
C-4	4S	#4 Crabtree Sheet Coater Series 1200	1997	7,800 sheets/hr	TO-2
MD-1	2E	Grace 800 End Liner	1991	85,800 ends/hr	None
MD-5	3E	Grace 800 End Liner	1997	75,000 ends/hr	None
MD-3	4E	Grace 800 End Liner	2007 <sup>(1)</sup>	85,800 ends/hr	None
MD-4	5E	Grace 800 End Liner	1996	85,800 ends/hr	None
MD-2	<i>See Note 2</i>	Grace 800 End Liner	1997	85,800 ends/hr	None

#### Control Devices

TO-1	1E	<del>Corpak Air Preheater F147</del> <a href="#">MEGTEC CLEANSWITCH Regenerative Thermal Oxidizer (Model Number: CSII-200-HT)</a>	<del>1989</del> <a href="#">2009</a>	<del>17</del> <a href="#">4.0</a> MMBtu/hr	None
TO-2	6E	Catalytic Products SR-6000 Thermal Oxidizer	1997	6.8 MMBtu/hr	None

- (1) MD-3 was constructed, installed, modified, and ceased operation in years 1990, 1991, 1997, and 2005, respectively. MD-3 ~~will~~ resumed operation in 2007.
- (2) Emissions from End Liner MD-2 are uncaptured and the unit does not have a stack venting to the atmosphere outside the building.

### 1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-2111A	April 10, 2001
R13-1458 <del>BD</del>	<del>September 20, 2001</del> <a href="#">April 30, 2010</a>
R13-1546	December 22, 1992

## 2.0 General Conditions

### 2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

### 2.2. Acronyms

<b>CAAA</b>	Clean Air Act Amendments	<b>NSPS</b>	New Source
<b>CBI</b>	Confidential Business Information		Performance Standards
<b>CEM</b>	Continuous Emission Monitor	<b>PM</b>	Particulate Matter
<b>CES</b>	Certified Emission Statement	<b>PM<sub>10</sub></b>	Particulate Matter less than 10µm in diameter
<b>C.F.R. or CFR</b>	Code of Federal Regulations		
<b>CO</b>	Carbon Monoxide	<b>pph</b>	Pounds per Hour
<b>C.S.R. or CSR</b>	Codes of State Rules	<b>ppm</b>	Parts per Million
<b>DAQ</b>	Division of Air Quality	<b>PSD</b>	Prevention of Significant Deterioration
<b>DEP</b>	Department of Environmental Protection	<b>psi</b>	Pounds per Square Inch
<b>FOIA</b>	Freedom of Information Act	<b>SIC</b>	Standard Industrial Classification
<b>HAP</b>	Hazardous Air Pollutant		
<b>HON</b>	Hazardous Organic NESHAP	<b>SIP</b>	State Implementation Plan
<b>HP</b>	Horsepower		
<b>lbs/hr or lb/hr</b>	Pounds per Hour	<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>LDAR</b>	Leak Detection and Repair	<b>TAP</b>	Toxic Air Pollutant
<b>M</b>	Thousand	<b>TPY</b>	Tons per Year
<b>MACT</b>	Maximum Achievable Control Technology	<b>TRS</b>	Total Reduced Sulfur
		<b>TSP</b>	Total Suspended Particulate
<b>MM</b>	Million		
<b>MMBtu/hr or mmbtu/hr</b>	Million British Thermal Units per Hour	<b>USEPA</b>	United States Environmental Protection Agency
<b>MMCF/hr or mmcf/hr</b>	Million Cubic Feet Burned per Hour	<b>UTM</b>	Universal Transverse Mercator
<b>NA</b>	Not Applicable		
<b>NAAQS</b>	National Ambient Air Quality Standards	<b>VEE</b>	Visual Emissions Evaluation
<b>NESHAPS</b>	National Emissions Standards for Hazardous Air Pollutants	<b>VOC</b>	Volatile Organic Compounds
<b>NO<sub>x</sub></b>	Nitrogen Oxides		

### **2.3. Permit Expiration and Renewal**

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.  
**[45CSR§30-5.1.b.]**
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.  
**[45CSR§30-4.1.a.3.]**
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.  
**[45CSR§30-6.3.b.]**
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.  
**[45CSR§30-6.3.c.]**

### **2.4. Permit Actions**

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.  
**[45CSR§30-5.1.f.3.]**

### **2.5. Reopening for Cause**

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
- a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.
  - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
  - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
  - d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

**[45CSR§30-6.6.a.]**

## **2.6. Administrative Permit Amendments**

- 2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.  
**[45CSR§30-6.4.]**

## **2.7. Minor Permit Modifications**

- 2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.  
**[45CSR§30-6.5.a.]**

## **2.8. Significant Permit Modification**

- 2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.  
**[45CSR§30-6.5.b.]**

## **2.9. Emissions Trading**

- 2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.  
**[45CSR§30-5.1.h.]**

## **2.10. Off-Permit Changes**

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:
- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
  - b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
  - c. The change shall not qualify for the permit shield.
  - d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
  - e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

**[45CSR§30-5.9.]**

## **2.11. Operational Flexibility**

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

**[45CSR§30-5.8]**

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

**[45CSR§30-5.8.a.]**

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

**[45CSR§30-5.8.c.]**

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

**[45CSR§30-2.39]**

## **2.12. Reasonably Anticipated Operating Scenarios**

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.
- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
  - b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
  - c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

## **2.13. Duty to Comply**

- 2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

## **2.14. Inspection and Entry**

- 2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:
- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution Control equipment), practices, or operations regulated or required under the permit;
  - d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

## **2.15. Schedule of Compliance**

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:
- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
  - b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

**[45CSR§30-5.3.d.]**

## **2.16. Need to Halt or Reduce Activity not a Defense**

- 2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

**[45CSR§30-5.1.f.2.]**

## **2.17. Emergency**

- 2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

**[45CSR§30-5.7.a.]**

- 2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.

**[45CSR§30-5.7.b.]**

- 2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The permitted facility was at the time being properly operated;
- c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

- d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

- 2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

[45CSR§30-5.7.d.]

- 2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

[45CSR§30-5.7.e.]

## **2.18. Federally-Enforceable Requirements**

- 2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.

[45CSR§30-5.2.a.]

- 2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

## **2.19. Duty to Provide Information**

- 2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

[45CSR§30-5.1.f.5.]

## **2.20. Duty to Supplement and Correct Information**

- 2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

[45CSR§30-4.2.]

## **2.21. Permit Shield**

- 2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically

identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.

**[45CSR§30-5.6.a.]**

2.21.2. Nothing in this permit shall alter or affect the following:

- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
- b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

**[45CSR§30-5.6.c.]**

## **2.22. Credible Evidence**

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

**[45CSR§30-5.3.e.3.B. and 45CSR38]**

## **2.23. Severability**

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

**[45CSR§30-5.1.e.]**

## **2.24. Property Rights**

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

**[45CSR§30-5.1.f.4]**

## **2.25. Acid Deposition Control**

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
- b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

- c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

**[45CSR§30-5.1.d.]**

- 2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.

**[45CSR§30-5.1.a.2.]**

### 3.0 Facility-Wide Requirements

#### 3.1 Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.  
**[45CSR§6-3.1.]**
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.  
**[45CSR§6-3.2.]**
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). A copy of this notice is required to be sent to the USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health.  
**[40 C.F.R. 61 and 45CSR15]**
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.  
**[45CSR§4-3.1 State-Enforceable only.]**
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.  
**[45CSR§11-5.2]**
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.  
**[W.Va. Code § 22-5-4(a)(14)]**
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 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 C.F.R. § 82.158.

- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

**[40 C.F.R. 82, Subpart F]**

- 3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

**[40 C.F.R. 68]**

- 3.1.9. The use of coatings or solvents containing different hazardous volatile constituents different from those submitted in Permit Application R13-1458 shall be approved by the Director prior to use or substitution. Furthermore, the use of any coatings or solvents containing hazardous air pollutants and/or toxic air pollutants not previously identified in Permit Applications R13-2111, R13-2111A, or in any supplemental submittal thereto, shall not be used without the prior approval of the Director.

**[45CSR§30-12.7; 45CSR13, ~~R13-1458, A.9., and R13-2111, A.7.~~]**

- 3.1.10. ~~Total plant wide VOC emission rates from all sources at this facility shall not exceed 233.42 tons per year of volatile organic compounds (223.0 tons per year from sources as permitted in R13-1458 and 10.42 tons per year from the C-4 coating line permitted in R13-2111A, condition A.4.).~~

Annual VOC emissions from sources located in Building 33 (point and fugitive) shall not exceed 233.42 tons of volatile organic compounds per year.

**[45CSR13, R13-2111, A.6., and R13-1458, ~~A.10.~~ 3.1.7.]**

- 3.1.11. The permitted facility shall be operated in accordance with information filed in Permit Applications R13-1458, R13-1458A, R13-1458B, ~~R13-1458C, R13-1458D,~~ R13-2111, R13-2111A, and any amendments thereto. The Director may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.

**[45CSR13, R13-1458, ~~C.3.2.5.1., and R13-2111, C.3.~~]**

- 3.1.12. **Work Practice Plan** – The permittee must develop and implement a work practice plan to minimize organic HAP emissions from the storage, mixing, and conveying of coatings, thinners, and cleaning materials used in, and waste materials generated by, the coating operations. The work practice plan must be implemented by the compliance date set forth in permit condition 3.1.14. The permittee must generate documentation that the work practice plan is being implemented on a continuous basis. The plan must specify practices and procedures to ensure that, at a minimum, the elements specified in the following paragraphs of this permit condition are implemented.

- i. All organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be stored in closed containers.
- ii. Spills of organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be minimized.
- iii. Organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be conveyed from one location to another in closed containers or pipes.
- iv. Mixing vessels which contain organic-HAP-containing coatings and other materials must be closed except when adding to, removing, or mixing the contents.

- v. Emissions of organic HAP must be minimized during cleaning of storage, mixing, and conveying equipment.

**[40 C.F.R. §§ 63.3493(b), 63.3512(j)(8), 63.3540(b)(2), 63.3541(c), 63.3542(e), and 45CSR34]**

- 3.1.13. **Startup, Shutdown, and Malfunction Plan** – The permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 C.F.R. § 63.6(e)(3). The plan must address startup, shutdown, and corrective actions in the event of a malfunction of the emission capture system or the add-on control device. The plan must also address any coating operation equipment that may cause increased emissions or that would affect capture efficiency if the process equipment malfunctions, such as conveyors that move parts among enclosures.

**[40 C.F.R. §§ 63.3500(c), 63.3542(h), and 45CSR34]**

- 3.1.14. **Compliance Date for 40 C.F.R. 63, Subpart KKKK** – Excluding the End Liners (Em. Units MD-1, MD-3, MD-4, and MD-5), the permittee shall be in compliance with 40 C.F.R. 63, Subpart KKKK, no later than the applicable regulatory compliance date of November 13, 2006. The compliance date begins the initial compliance period during which the permittee must conduct the initial compliance demonstration described in §63.3540 for sheet coaters C-1, C-2, C-3 and C-4 and thermal oxidizers TO-1 and TO-2. The initial compliance period will end on November 30, 2007.

The End Liners (Em. Units MD-1, MD-3, MD-4, and MD-5) shall be in compliance with 40 C.F.R. 63, Subpart KKKK, no later than the approved alternative compliance date August 23, 2007. The compliance date begins the initial compliance period during which the permittee must conduct the initial compliance demonstration described in §63.3520 for End Liners MD-1, MD-3, MD-4, and MD-5. The initial compliance period for the End Liners will end on August 31, 2008.

**[40 C.F.R. §§ 63.3483(b), and 63.3540(b)(3), and 45CSR34]**

## **3.2. Monitoring Requirements**

- 3.2.1. Reserved.

## **3.3. Testing Requirements**

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:
  - a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

- b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

**[WV Code § 22-5-4(a)(15) and 45CSR13, R13-2111, B.5.]**

- 3.3.2. Test results shall be submitted to the Director no more than sixty (60) days after the date the testing takes place.  
**[45CSR13, R13-2111, B.5.]**

### **3.4. Recordkeeping Requirements**

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
  - a. The date, place as defined in this permit and time of sampling or measurements;
  - b. The date(s) analyses were performed;
  - c. The company or entity that performed the analyses;
  - d. The analytical techniques or methods used;
  - e. The results of the analyses; and
  - f. The operating conditions existing at the time of sampling or measurement.

**[45CSR§30-5.1.c.2.A.; [45CSR13, R13-1458, 4.4.1](#)]**

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

**[45CSR§30-5.1.c.2.B.]**

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.  
**[45CSR§30-5.1.c. State-Enforceable only.]**

3.4.4. **General Recordkeeping for 40 C.F.R. Part 63 Subpart KKKK** – All records must be kept in form suitable and ready for expeditious review, according to 40 C.F.R. §63.10(b)(1). Where appropriate, the records may be maintained as electronic spreadsheets or as a database. All records must be kept for five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records must be kept on site for at least two (2) years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records may be kept off site for the remaining three (3) years.  
**[40 C.F.R. §§ 63.3513(a), (b), and (c), and 45CSR34]**

3.4.5. **Record of Maintenance of Air Pollution Control Equipment.** For the RTO (TO-1), the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures. [45CSR13, R13-1458, 4.4.2]

3.4.6. **Record of Malfunctions of Air Pollution Control Equipment.** For the RTO (TO-1), the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

**[45CSR13, R13-1458, 4.4.3]**

3.4.7. The permittee shall maintain on site a MSDS or manufacture's product technical data sheet that identify the VOC content of each coating applied by any emission unit located in Building 33 within the previous 12 months. Such information of any coating that is no longer being applied by any emission unit located in Building shall be maintained in accordance with Condition 3.4.2. of this permit.  
**[45CSR13, R13-1458, 4.4.4]**

### **3.5. Reporting Requirements**

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that,

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

**[45CSR§§30-4.4. and 5.1.c.3.D.]**

- 3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W. Va. Code § 22-5-10 and 45CSR31.

**[45CSR§30-5.1.c.3.E.]**

- 3.5.3. [Except in the case of the electronic submittal requirement in 3.5.5.a](#)All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

**If to the DAQ:**

Director  
WVDEP  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
Phone: 304/926-0475  
FAX: 304/926-0478

**If to the US EPA:**

Associate Director  
Office of Enforcement and Permits Review  
(3AP12)  
U. S. Environmental Protection Agency  
Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

- 3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.

**[45CSR§30-8.]**

- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. [The annual certification submitted to USEPA shall be forwarded by e-mail only to: R3\\_APD\\_Permits@epa.gov.](#) The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.

**[45CSR§30-5.3.e.]**

- 3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.

**[45CSR§30-5.1.c.3.A.]**

- 3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

- 3.5.8. **Deviations.**

- a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.
2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

**[45CSR§30-5.1.c.3.C.]**

- b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

**[45CSR§30-5.1.c.3.B.]**

- 3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

**[45CSR§30-4.3.h.1.B.]**

- 3.5.10. **Notification of Compliance Status for 40 C.F.R. 63 Subpart KKKK.** The permittee must submit the Notification of Compliance Status required by 40 C.F.R. §63.9(h), for all equipment subject to 40 C.F.R. 63 Subpart KKKK, except the End Liners, no later than December 30, 2007, which is 30 calendar days following the end of the initial compliance period specified in permit condition 3.1.14.

The permittee must submit the Notification of Compliance Status required by 40 C.F.R. §63.9(h), for the End Liners (Em. Unit IDs MD-1, MD-3, MD-4, MD-5), no later than September 30, 2008, which is 30 calendar days following the end of the initial compliance period specified in permit condition 3.1.14. As part of the Notification of Compliance Status for the End Liners only (which use the *compliant material option*), the permittee must submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period the permittee used no coatings for which the organic HAP content exceeded the applicable emission limit in permit condition 5.1.4., and the permittee used no thinners that contained organic HAP, determined according to 40 C.F.R. §63.3521(a).

Each Notification of Compliance Status must contain the information specified in 40 C.F.R. §§ 63.3510(c)(1) through (9), and in 40 C.F.R. §63.9(h). The permittee must maintain records of each notification, and documentation supporting the notification.

**[40 C.F.R. §§ 63.3510(c), 63.3512(a), 63.3521(e), and 45CSR34]**

- 3.5.11. **Reporting for 40 C.F.R. 63, Subpart KKKK.** The permittee must submit semiannual compliance reports for each affected source according to the requirements of 40 C.F.R. § 63.3511.
- a. The first semiannual compliance report must cover the first semiannual reporting period which begins the day after the end of the initial compliance period (described in § 63.3520 for the End Liners; § 63.3540 for the #1, #2, #3 and #4 Sheet Coaters and Thermal Oxidizers TO-1 and TO-2) and ends on June 30 or December 31, whichever occurs first following the end of the initial compliance period.
  - b. Each subsequent semiannual compliance report must cover the subsequent semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. The semiannual compliance report shall be included with the semiannual monitoring report required by permit condition 3.5.6.
  - c. The semiannual compliance report must contain the information specified:
    - i. Company name and address.
    - ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
    - iii. Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.
    - iv. Identification of the compliance option or options specified in 40 C.F.R. § 63.3491 that you used on each coating operation during the reporting period. If you switched between compliance options during the reporting period, you must report the beginning and ending dates you used each option.
    - v. The calculation results for each rolling 12-month organic HAP emission rate during the 6-month reporting period if either the emission rate without add-on controls or the emission rate with add-on controls compliance option (§ 63.3491(b) or (c)) was used.
  - d. If there were no deviations from permit conditions 3.1.12., 4.1.1., 4.1.2., 5.1.4., ~~6.1.3., 6.1.15., and 6.1.16~~ [6.1.4. and 6.1.16](#), the semiannual compliance report must include a statement that there were no deviations from the emission limitations, operating limits, and work practice plan during the reporting period. Since the *add-on controls option* is used, if there were no periods during which the continuous parameter monitoring system (CPMS) was out of control as specified in 40 C.F.R. §63.8(c)(7), the semiannual compliance report must include a statement that there were no periods during which the CPMS were out of control during the reporting period.
  - e. If there were deviations from the permit condition 5.1.4. while using the *compliant material option* for the End Liners (MD-1, MD-3, MD-4, MD-5), the semiannual compliance report must contain the information in 40 C.F.R. §§ 63.3511(a)(5)(i) through (iv).
  - f. If there were deviations from the permit conditions 3.1.12, 4.1.2., ~~6.1.3., 6.1.15., or 6.1.16~~ [6.1.4. and 6.1.16](#) while using the *add-on controls option* for the #1, #2, #3, and #4 Sheet Coaters (C-1, C-2, C-3, C-4) and ~~Corpak-MEGTEC~~ and Catalytic Products thermal oxidizers, TO-1 and TO-2, respectively, the semiannual compliance report must contain the information in 40 C.F.R. §§ 63.3511(a)(7)(i) through (xiv). This includes periods of startup, shutdown, and malfunction during which deviations occurred.
  - g. The permittee must submit reports of performance test results for emission capture systems and add-on control devices no later than 60 days after completing the tests as specified in 40 C.F.R. § 63.10(d)(2).

- h. For the Sheet Coaters (Em. Units C-1, C-2, C-3, C-4), the associated emissions capture systems, and thermal oxidizers (TO-1, TO-2), the permittee must submit applicable reports specified in paragraphs 40 C.F.R. §§ 63.3511(c)(1) and (2) for all startups, shutdowns, or malfunctions during the semiannual reporting period.

[[40 C.F.R. §§ 63.3511\(a\), \(b\), and \(c\); 45CSR13, R13-1458, 4.5.1; and 45CSR34](#)]

### 3.6. Compliance Plan

- 3.6.1. There is no facility-wide compliance plan since the permittee certified compliance in with all applicable requirements in the renewal application. Refer to 5.6.1. for the compliance plan for the End Liners.

### 3.7. Permit Shield

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.
  - a. **40 C.F.R. 60, Subpart TT - Standards of Performance for Metal Coil Surface Coating** – The fact sheet for permit R30-00900027-1995 states that, “*This facility cuts the metal coils prior to coating, and as such, is not applicable to Subpart TT. However, since Ball is similar to Subpart TT type facilities and has approximately the same capture and destruction rates, there were conditions in the R13 permit that required emission tests to be done in accordance with methods set forth in NSPS Subpart TT.*” The facility is not directly subject to Subpart TT, but is subject to certain requirement of Subpart TT that are incorporated by reference into applicable permit conditions. But permit R13-1458, condition [B-1, 4.2.1.](#) references Subpart TT, and the required performance testing methodologies that are specifically set forth by R13-1458 are those found in paragraphs §60.463 and §60.466 of Subpart TT.
  - b. ~~[45CSR13, R13-1458, A.11.](#) – The lithographic single color printer was not installed, and the permittee has stated there is no intention of installing. Therefore, the requirement is not applicable.~~

## 4.0 Source-Specific Requirements [Sheet Coaters and Ovens, Emission Point ID(s) 1S, 2S, 3S, 4S]

### 4.1. Limitations and Standards

- 4.1.1. The permittee shall maintain a 100% VOC capture efficiency for the metal sheet coating line (C-4) enclosure. The enclosure shall be maintained and operated as a Permanent Total Enclosure (PTE) as evaluated against EPA Method 204 and presented in the “PERMANENT TOTAL ENCLOSURE VERIFICATION” report dated ~~July 7, 2000~~ [January 3, 2007](#) (Attachment A of this permit). In accordance with the PTE verification, all access doors and windows must be closed at all times during the operation of the coating line (C-4).  
**[45CSR13, R13-2111, A.3.]**
- 4.1.2. The permittee shall use coatings and thinners used in the coating operations and the emission reductions achieved by the emission capture system and thermal oxidizers to limit the organic HAP emission rate to be less than 0.26 lbs HAP/gal solids, calculated as a rolling 12-month emission rate and determined on a monthly basis.  
**[40 C.F.R. § 63.3490(b), and 45CSR34]**

### 4.2. Monitoring Requirements

- 4.2.1. Initial and Continuous Compliance with Emission Limits – The permittee shall follow the procedures in 40 C.F.R. §§ 63.3541(e) through (n) to demonstrate initial and continuous compliance with the emission limit set forth in permit condition 4.1.2.  
**[40 C.F.R. §§ 63.3541(d), 63.3542(a), and 45CSR34]**
- 4.2.2. For emission units C-1, C-2, C-3, the permittee shall keep and maintain the following records in accordance with 3.4.2. of this permit:
- a. The monthly and summarized annual usage of each coating and solvent and the VOC content of each compound and solvent;
  - b. Hours of operation of each sheet coating line during the month;
  - c. The monthly and summarized annual usage of each cleaning solvent and VOC emissions from cleaning solvent usage;
  - d. Average pounds per hour of VOC emitted from each sheet coating line, must identify fugitive point source VOCs emissions.

**[45CSR13, R13-1458, 4.2.3.1]**

### 4.3. Testing Requirements

- 4.3.1. Reserved.

### 4.4. Recordkeeping Requirements

- 4.4.1. The permittee shall maintain records of the coating operations which used each compliance option (add-on control option for C-1, C-2, C-3, and C-4) and the time periods (beginning and ending dates and times) for that option. For add-on control option, the permittee must maintain records of the calculations specified in paragraphs 40 C.F.R. §§ 63.3512(c)(4)(i) through (v).  
**[40 C.F.R. §§ 63.3512(c)(1) and (c)(4), and 45CSR34]**

- 4.4.2. The permittee shall maintain records of the name and volume of each coating and thinner used during each compliance period for emission units C-1, C-2, C-3, and C-4.  
**[40 C.F.R. § 63.3512(d), and 45CSR34]**
- 4.4.3. The permittee shall maintain records of the mass fraction of organic HAP for each coating and thinner used during each compliance period for emission units C-1, C-2, C-3, and C-4.  
**[40 C.F.R. § 63.3512(e), and 45CSR34]**
- 4.4.4. The permittee shall maintain records of the volume fraction of coating solids for each coating used during each compliance period for emission units C-1, C-2, C-3, and C-4.  
**[40 C.F.R. § 63.3512(f), and 45CSR34]**
- 4.4.5. The permittee shall maintain records of the density for each coating and thinner used during each compliance period for emission units C-1, C-2, C-3, and C-4.  
**[40 C.F.R. § 63.3512(g), and 45CSR34]**

#### **4.5. Reporting Requirements**

- 4.5.1. Annual reports shall be certified by the plant manager or corporate officer, and submitted to the Director on or before March 15 of each year for the previous calendar year as part of the semiannual monitoring report required by permit condition 3.5.6. The report shall contain the following information for each of the sheet coating lines:
  - a) The monthly and summarized annual usage of each coating and solvent and the VOC content of each compound and solvent.
  - b) Number of hours per month during which the incinerator has any down-time and the reason for the incinerator down-time when the sheet coating line C-4 is in service. Such operation shall not occur without approval of a variance by the Director as required.
  - c) Hours of operation of each sheet coating line during the month.
  - d) The monthly and summarized annual usage of each cleaning solvent and VOC emissions from cleaning solvent usage
  - e) Tons per month and yearly totals of VOC emitted from each of the sheet coating lines.
  - f) Average pounds per hour of VOC emitted from each sheet coating line.
  - g) Amount of natural gas burned per month in the incinerator associated with sheet coating line C-4.

**[~~45CSR13, R13-1458, B.2., and 45CSR13, R13-2111, A.8.;~~ 45CSR§30-5.1.c.]**

#### **4.6. Compliance Plan**

- 4.6.1. There is no compliance plan since the permittee certified compliance in with all applicable requirements in the renewal application.

## 5.0 Source-Specific Requirements [End Liners, Emission Unit ID(s) MD-1, MD-2, MD-3, MD-4, MD-5]

### 5.1 Limitations and Standards

- 5.1.1. Maximum air emission rates from emission point 2E (the MD-1 end making press and liner) shall not exceed 9.30 pounds per hour of volatile organic compounds.  
**[45CSR13, R13-1458, [A-2. 4.1.1.](#)]**
- 5.1.2. Maximum air emission rates from emission point 3E (the MD-5 end making press and liner) shall not exceed 9.30 pounds per hour of volatile organic compounds.  
**[45CSR13, R13-1458, [A-3. 4.1.2](#)]**
- 5.1.3. Maximum air emission rates from emission point 5E (the MD-4 end making press and liner) shall not exceed 10.84 pounds per hour of volatile organic compounds.  
**[45CSR13, R13-1458, [A-5. 4.1.4](#)]**
- 5.1.4. The permittee shall use no end compound for which the organic HAP content, determined using Equation 1 of 40 C.F.R. §63.3521, exceeds the applicable emission limit in 40 C.F.R. §63.3490 (0.00 lbs HAP/gal solids, for nonaseptic end seal compounds) and use no thinner that contains organic HAP, determined according to 40 C.F.R. §63.3521(a).  
**[40 C.F.R. §§ 63.3490(b), 63.3521, and 63.3522(a), and 45CSR34]**
- 5.1.5. Maximum emissions to the atmosphere from MD-2 (end seal lining machine) shall not exceed the following:

Pollutant	Emission Rate (lb/hr)
Ammonia	0.08
Volatile Organic Compounds	0 (zero)

**[45CSR13, R13-1546, (A)(1)]**

- 5.1.6. The use of any materials at MD-2 which contain volatile organic compounds shall be a violation of this permit.  
**[45CSR13, R13-1546, (A)(2)]**
- 5.1.7. Maximum air emission rates from emission point 4E (the MD-3 end making press and liner) shall not exceed 10.23 pounds per hour of volatile organic compounds.  
**[45CSR13, R13-1458, [A-4. 4.1.3.](#)]**
- 5.1.8. Total air emission rates from the end press area (emission points 2E, 3E, 4E, and 5E) shall not exceed 35.36 pounds per hour of volatile organic compounds.  
**[45CSR13, R13-1458, [A-6. 4.1.5.](#)]**

### 5.2 Monitoring Requirements

- 5.2.1. Reserved.

### 5.3. Testing Requirements

- 5.3.1. Reserved.

### 5.4. Recordkeeping Requirements

- 5.4.1. Compliance with Provisions 5.1.1., 5.1.2., 5.1.3., 5.1.4., 5.1.5., 5.1.6., 5.1.7., and 5.1.8. of this permit shall be demonstrated by recording during each calendar month the identity, quantity, and VOC content of all end sealing compounds and solvents used at or on the permitted can end liner machines, and the number of hours the liner machines are operated. Monthly VOC emissions shall be determined by summing the products of the usage of each compound/solvent times the VOC content of each compound solvent. Average hourly VOC emissions from the permitted machines shall be determined by dividing the total VOC emissions during each calendar month by the actual hours of operation of the end liner machines during the month. This information shall be reported and certified by the plant manager or corporate officer, and submitted to the Director on or before March 15 of each year for the previous calendar year as part of the semiannual monitoring report required by permit condition 3.5.6.

**[45CSR13, R13-1458, ~~B-4. 4.2.2.~~, and 45CSR§30-5.1.c.]**

- 5.4.2. The permittee must maintain a current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating and thinner and the volume fraction of coating solids for each coating. If the permittee conducts testing to determine mass fraction of organic HAP, density, or volume fraction of coating solids, the permittee must keep a copy of the complete test report. If you use information provided by the manufacturer or supplier of the material that was based on testing, the permittee must keep the summary sheet of results provided by the manufacturer or supplier. The permittee is not required to obtain the test report or other supporting documentation from the manufacturer or supplier.

**[40 C.F.R. § 63.3512(b), and 45CSR34]**

- 5.4.3. For each compliance period, the permittee shall maintain records of the coating operations which used each compliance option (compliant material option for MD-1, MD-3, MD-4, and MD-5) and the time periods (beginning and ending dates and times) for that option. For the compliant material option, the permittee must maintain records of the calculation of the HAP content for each coating, using Equation 1 of 40 C.F.R. § 63.3521.

**[40 C.F.R. §§ 63.3512(c)(1) and (c)(2), and 45CSR34]**

### 5.5. Reporting Requirements

- 5.5.1. As part of demonstrating continuous compliance the semiannual report must identify the coating operation(s) using the *compliant material option* and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period. The use of any coating or thinner that does not meet the emission limit in permit condition 5.1.4. is a deviation from the emission limitations that must be reported in the semiannual compliance report and contain the information in 40 C.F.R. §§ 63.3511(a)(5)(i) through (iv).

**[40 C.F.R. §§ 63.3511(a)(5), 63.3522(b) and (c), and 45CSR34]**

- 5.5.2. See permit conditions 3.5.10. and 3.5.11.

## **5.6. Compliance Plan**

5.6.1. Reserved.

## 6.0 Source-Specific Requirements [Thermal Incinerators, Emission Point ID(s) 1E, 6E]

### 6.1. Limitations and Standards

- 6.1.1. The following conditions shall remain in effect until the Air Preheater F147 is replaced with the RTO (TO-1). On start-up of RTO identified as TO-1, this condition is voided.
- a. Maximum air emission rates from emission point 1E (the basecoater incinerator) shall not exceed 27.19 pounds per hour of volatile organic compounds.
  - b. The permittee shall maintain an overall VOC reduction efficiency of 85.5% for the Air Preheater F147 thermal incinerator. Reduction efficiency is defined as the product of the fraction of total VOCs emitted by the sheet coating line which enters the incinerator multiplied by the incinerator's VOC destruction efficiency.
  - c. The minimum operating temperature in the incinerator combustion chamber shall be maintained at 1400°F.

[45CSR13, R13-1458, 4.1.6.]

- 6.1.2. ~~6.1.1. Maximum air~~ Emissions rates from emission point 1E (the basecoater incinerator) shall not exceed ~~27.19 pounds per hour of volatile organic compounds~~ the following types and amounts of pollutants:

<u>Pollutant</u>	<u>Pounds per Hour</u>	<u>Tons per Year</u>
<u>PM/PM<sub>10</sub>/PM<sub>2.5</sub></u>	<u>0.03</u>	<u>0.13</u>
<u>NO<sub>x</sub></u>	<u>0.40</u>	<u>1.75</u>
<u>CO</u>	<u>0.34</u>	<u>1.47</u>
<u>VOC</u>	<u>8.20</u>	<u>35.92</u>

[45CSR13, R13-1458, A-1. 4.1.7.a.]

- 6.1.3. ~~6.1.2.~~ The permittee shall maintain ~~an overall a minimum~~ VOC ~~reduction destruction~~ efficiency of ~~85.5% 98%~~ for the ~~Corpak Air Preheater F147 thermal incinerator~~ MEGTEC Cleanswitch<sup>®</sup> regenerative Thermal Oxidizer (RTO).

[45CSR13, R13-1458, A-7. 4.1.7.c]

- 6.1.4. ~~6.1.3.~~ The minimum operating temperature in the incinerator combustion chambers of both TO-1 and TO-2 shall be maintained ~~at 1,400°F.~~ as follows:
- a. The minimum operating temperature in the combustion chamber of the RTO (TO-1) shall be maintained at 1600°F until the operating temperature can be established during the most recent performance testing that demonstrated compliance with the destruction efficiency requirement in condition 6.1.3. of this permit. Compliance with the minimum temperature requirement of this condition shall be based on a three-hour average.

b. The minimum operating temperature in the incinerator combustion chamber of TO-2 shall be maintained at 1400°F.

[45CSR13, R13-1458, ~~A.8. 4.1.7.d.~~; 45CSR13, R13-2111, A.1.; 40 C.F.R. §§ 63.3492(b), 63.3542(c), and 45CSR34]

6.1.5. ~~6.1.4.~~ The Catalytic Products incinerator shall not use more than 1,258,320 ACF/hr (1.1 x 10<sup>10</sup> ACF/yr) of natural gas, as determined by the monthly gas usage and monthly hours of operation.  
[45CSR13, R13-2111, A.2.]

6.1.6. ~~6.1.5.~~ Emissions from the Catalytic Products incinerator, vented through emission point ID 6E, shall not exceed the following types and amounts of pollutants:

Pollutant	Pounds per Hour	Tons per Year
Carbon Monoxide	0.571	2.502
Nitrogen Oxides	0.680	2.978
Particulate Matter (PM)	0.175	0.767
Particulate Matter < 10 microns (PM <sub>10</sub> )	0.082	0.359
Sulfur Dioxide	0.004	0.018
Volatile Organic Compounds	2.378	10.416

[45CSR13, R13-2111, A.4.]

6.1.7. ~~6.1.6.~~ The permittee shall maintain a minimum VOC destruction efficiency of 99% for the Crabtree Series 1200 sheet coating line and associated oven with a 6.8 million BTU/hr, natural gas fired, Catalytic Products incinerator.  
[45CSR13, R13-2111, A.5.]

6.1.8. ~~6.1.7.~~ **Emission of Visible Particulate Matter** – No person shall cause, suffer, allow or permit emission of smoke into the atmosphere from any incinerator which is twenty (20%) percent opacity or greater.  
[45CSR13, R13-2111, B.1., and R13-1458, 4.1.7.b.; 45CSR§6-4.3.]

6.1.9. ~~6.1.8.~~ The provisions of 45CSR§6-4.3. shall not apply to smoke which is less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per start-up.  
[45CSR13, R13-2111, B.1., and R13-1458, 4.1.7.b.; 45CSR§6-4.4.]

6.1.10. ~~6.1.9.~~ No person shall cause, suffer, allow or permit the emission of particles of unburned or partially burned refuse or ash from any incinerator which are large enough to be individually distinguished in the open air.  
[45CSR13, R13-2111, B.1., and 45CSR§6-4.5.]

6.1.11. ~~6.1.10.~~ Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.  
[45CSR13, R13-2111, B.1., and 45CSR§6-4.6.]

- 6.1.12. ~~6.1.11.~~ At such reasonable times as the Director may designate, the operator of any incinerator shall be required to conduct or have conducted stack tests to determine the particulate matter loading, by using 40 CFR Part 60, Appendix A, Method 5 or other equivalent EPA approved method approved by the Director, in exhaust gases. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or the Director's authorized representative, may at the Director's option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices.  
**[45CSR13, R13-2111, B.1., and 45CSR§6-7.1.]**
- 6.1.13. ~~6.1.12.~~ The Director, or the Director's duly authorized representative, may conduct such other tests as the Director may deem necessary to evaluate air pollution emissions other than those noted in 45CSR§6-7.1.  
**[45CSR13, R13-2111, B.1., and 45CSR§6-7.2.]**
- 6.1.14. ~~6.1.13.~~ Due to unavoidable malfunction of equipment, emissions exceeding those provided for in 45CSR6 may be permitted by the Director for periods not to exceed five (5) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.  
**[45CSR13, R13-2111, B.1., and 45CSR§6-8.2.]**
- 6.1.15. ~~6.1.14.~~ No person shall cause, suffer, allow or permit particulate matter to be discharged from ~~the Corpak Air Preheater F147 thermal incinerator~~ Emission Point 1E into the open air in excess of 1,146 lbs/hr.  
**[45CSR§6-4.1.]**
- ~~6.1.15. The negative pressure differential at the inlet of TO-1 shall not be less than 0.09 inches of water column relative to atmospheric pressure.  
[40 C.F.R. §§ 63.3492(b), 63.3542(e), 63.3546(g), and 45CSR34]~~
- 6.1.16. The differential pressure across the permanent total enclosure (PTE) capture devices of C-1, C-2, C-3, and C-4 shall not be less than 0.007 inches of water relative to atmospheric pressure.  
**[40 C.F.R. §§ 63.3492(b), 63.3542(c), and 45CSR34]**
- ~~6.1.17. The temperature measuring and recording system as required in 6.2.1. shall be installed and calibrated within 30 days after start-up of the RTO identified as TO-1.  
[45CSR13, R13-1458, 4.1.7.f.]~~
- ~~6.1.18. The permittee shall develop and implement a valve inspection plan that documents the steps taken to minimize the amount of leakage during the regenerative process. This plan can include, but is not limited to, routine inspection of key parameters of the valve operating system (e.g. solenoid valve operation, air pressure, hydraulic pressure); visual inspection of the valves during internal inspection; and/or actual testing of the emission stream for leakage. Such plan shall be developed and implemented within 60 days after startup of the RTO (TO-1).  
[40CFR§63.3546(c); 45CSR13, R13-1458, 4.1.7.g.]~~
- ~~6.1.19. This RTO (TO-1) shall be operated at all times when the any one of the sheet coaters (C-1, C-2, and C-3) is in operation.  
[45CSR13, R13-1458, 4.1.7.h.]~~

6.1.20. The permittee shall install, operate and maintain a emissions capture system consisting of permanent total enclosures (PTEs) which meet the requirements of EPA Method 204. Said PTEs shall capture emissions from each of the sheet coaters (C-1, C-2, C-3) and route said emissions to TO-1. Such system shall be operated and maintained in accordance with 40 CFR 63.3492.

[45CSR13, R13-1458, 4.1.8.]

6.1.21. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment for the RTO (TO-1) and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR§13-5.11., R13-1458, 4.1.9.]

## **6.2. Monitoring Requirements**

~~6.2.1. **Combustion Temperature in TO-1 and TO-2**—The permittee shall install, calibrate, operate and maintain a device that continuously records the combustion temperature (limit set by permit condition 6.1.3.) of any effluent gases incinerated. The permittee shall also record all periods (during actual coating operations) in excess of 3 hours during which the average temperature in the incinerator remains more than 28 °C (50 °F) below the temperature set forth in permit condition 6.1.3. A period meeting these aforementioned temperature and time criteria shall be deemed an excursion for purposes of 40 C.F.R. Part 64, thus initiating an inspection and evaluation, corrective action, recordkeeping and reporting requirement (permit conditions 6.4.1., 6.4.3., and 6.5.1.). All records shall be retained on-site for a period of at least five (5) years and shall be made available to the Director or his duly authorized representative upon request. The monitoring device shall have an accuracy of ± 2.5 °C or ± 0.75 percent of the temperature being measured expressed in degrees Celsius, and shall be recalibrated as necessary in accordance with permit condition 6.3.5.~~

~~Compliance with this device accuracy limit ensures compliance with less stringent limit in 40 C.F.R. § 63.3547(e)(3)(ii) and the limit under permit condition 6.2.10.e.~~

~~[45CSR13, R13-2111, A.9.; 45CSR13, R13-1458, B.3.; 40 C.F.R. §§ 64.3(a)(1), 64.3(a)(2), 64.3(a)(3)(i), 64.3(b)(3), 64.6(c)(1), and 64.6(c)(2); and 45CSR34]~~

**Combustion Temperature in TO-1 and TO-2** – The permittee shall do the following:

a. The permittee shall install, calibrate, operate and maintain a device that continuously records the combustion temperature (limit set by permit condition 6.1.4.) of any effluent gases incinerated. Compliance with the continuous temperature recording requirement of R13-2111 ensures compliance with the less stringent recording requirement of R13-1458.

[45CSR13, R13-2111, A.9.; R13-1458, 4.1.7.e.; 40 C.F.R. §§ 64.3(a)(1) and 64.6(c)(1)]

b. The permittee shall also record all periods (during actual coating operations) in excess of 3 hours during which the average temperature in the incinerator remains more than 28 °C (50 °F) below the temperature set forth in permit condition 6.1.4.

[45CSR13, R13-2111, A.9.]

- c. A period meeting the temperature and time criteria in 6.2.1.b. shall be deemed an excursion for purposes of 40 C.F.R. Part 64, thus initiating an inspection and evaluation, corrective action, recordkeeping and reporting requirement (permit conditions 6.4.1., 6.4.3., and 6.5.1.).  
[40 C.F.R. § 64.6(c)(2)]
- d. All records shall be retained on-site for a period of at least five (5) years and shall be made available to the Director or his duly authorized representative upon request.  
[45CSR13, R13-2111, A.9.]
- e. The monitoring device shall have an accuracy of ± 0.75 percent of the temperature being measured expressed in degrees Celsius, and shall be recalibrated as necessary in accordance with permit condition 6.3.5. Compliance with this device accuracy limit ensures compliance with less stringent limits in 40 C.F.R. Part 63 and R13-1458.  
[40 C.F.R. § 63.3547(c)(3)(ii); 45CSR13, R13-2111, A.9.; and R13-1458, 4.1.7.e.]

[40 C.F.R. §§ 64.3(a)(1), 64.3(a)(2), 64.3(a)(3)(i), 64.3(b)(3), 64.6(c)(1); and 45CSR34]

- 6.2.2. **Differential Pressure in C-1, C-2, and C-3**— The permittee shall install, calibrate, maintain, and continuously operate a monitoring device for the continuous measurement of the pressure loss at the permanent total enclosures (PTEs) of C-1, C-2, and C-3, which directs emissions to thermal oxidizer TO-1. The pressure drop will be measured at the capture hood for coaters C-1, C-2, and C-3. An excursion shall be defined as recorded differential pressure readings less than the acceptable minimum pressure drop of 90% of the limit in permit condition 6.1.16 (which product is equal to 0.0063 inches of water column) for a period of time in excess of 30 minutes. Excursions initiate an inspection and evaluation, corrective action, recordkeeping and reporting requirement (permit conditions 6.4.1., 6.4.3., and 6.5.1.). The monitoring device accuracy is to be certified by the manufacturer and recalibrated as necessary in accordance with permit condition 6.3.6. The monitoring system shall continually sense the indicator and function in accordance with permit condition 6.2.9. This is Indicator 2 of 2 under the proposed 40 C.F.R. 64 plan.

~~**Differential Pressure across TO-1**—The permittee shall install, calibrate, maintain, and continuously operate a monitoring device for the continuous measurement of the pressure loss through thermal oxidizer TO-1. The pressure drop will be measured at the inlet to the thermal oxidizer. An excursion shall be defined as recorded differential pressure readings less than the acceptable minimum pressure drop of 90% of the limit in permit condition 6.1.15 6.1.16 (which product is equal to 0.081 inches of water column) for a period of time in excess of 30 minutes. Excursions initiate an inspection and evaluation, corrective action, recordkeeping and reporting requirement (permit conditions 6.4.1., 6.4.3., and 6.5.1.). The monitoring device accuracy is to be certified by the manufacturer and recalibrated as necessary in accordance with permit condition 6.3.6. The monitoring system shall continually sense the indicator, collect data, and record data in accordance with permit condition 6.2.9. This is Indicator 2 of 2 under the proposed 40 C.F.R. 64 plan.~~

[40 C.F.R. §§ 64.3(a), 64.3(b), 64.6(c)(1)(i), and 64.6(c)(2)]

- 6.2.3. **Differential Pressure across TO-2 in C-4**— The permittee shall install, calibrate, maintain, and continuously operate a monitoring device for the continuous measurement of the pressure loss at the permanent total enclosure (PTE) of C-4, which directs emissions to thermal oxidizer TO-2. The pressure drop will be measured at the capture hood for coater C-4. An excursion shall be defined as recorded differential pressure readings less than the acceptable minimum pressure drop of 90% of the limit in permit condition 6.1.16 (which product is equal to 0.0063 inches of water column) for a period of time in excess of 30 minutes. Excursions initiate an inspection and evaluation, corrective action, recordkeeping and reporting requirement (permit conditions 6.4.1., 6.4.3., and 6.5.1.). The monitoring device accuracy is to be certified by the manufacturer and recalibrated as

necessary in accordance with permit condition 6.3.6. The monitoring system shall continually sense the indicator and function in accordance with permit condition 6.2.9. This is Indicator 2 of 2 under the proposed 40 C.F.R. 64 plan.

[40 C.F.R. §§ 64.3(a), 64.3(b), 64.6(c)(1)(i), and 64.6(c)(2)]

- 6.2.4. The permittee shall perform periodic visual verification of recorded data of the combustion chamber temperature ~~and inlet duct pressure~~ of both thermal oxidizers TO-1 and TO-2 ~~and the PTE pressures of C-1, C-2, C-3 and C-4~~. Periodic visual verification shall ensure proper recordkeeping by checking if there are any periods when data was not acquired or other problems in the monitoring and recording of data. Periodic visual verification shall be performed once per calendar month, and no later than six (6) weeks after the previous verification.

[40 C.F.R. §64.3(b)(2); 45CSR§30-5.1.c.]

- 6.2.5. At least weekly, visual emission checks of each emission point subject to an opacity limit shall be conducted. For the purpose of these checks, excess visible emissions are to include visible fugitive dust emissions that leave the plant site boundaries. These checks shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the unit has visible emissions using procedures outlined in 40 C.F.R. 60, Appendix A, Method 22. If sources of visible emissions are identified during the survey, or at any other time, the permittee shall conduct a 40 C.F.R. 60, Appendix A, Method 9 evaluation within twenty-four (24) hours. A Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the units are operated at normal operating conditions. A record of each visible emission check required above shall be maintained on site for a period of no less than five (5) years. Said record shall include, but not be limited to, the date, time, name of emission unit, the applicable visible emissions requirement, the results of the check, what action(s), if any, was/were taken, and the name of the observer.

[45CSR§30-5.1.c.]

- 6.2.6. **Commencement of operation.** The permittee shall conduct the monitoring required under 40 C.F.R. 64 upon issuance of this permit that includes such monitoring.

[40 C.F.R. § 64.7(a)]

- 6.2.7. **Proper Maintenance** – At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[40 C.F.R. § 64.7(b)]

- 6.2.8. **Continued Operation** – Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 C.F.R. 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

[40 C.F.R. § 64.7(c)]

- 6.2.9. **Continuous Parameter Monitoring System** – The permittee must install, operate, and maintain each continuous parameter monitoring system (CPMS) for each thermal oxidizer (combustion chamber temperature) and emission capture system (differential pressure) according to the following criteria:
- The data collection frequency shall be at least one (1) data point read every twenty (20) seconds by a continuous electronic recorder. Forty-five (45) consecutive data points shall be averaged to generate one (1) recorded datum every complete 15-minute cycle, equivalent to four (4) data points equally spaced over one (1) hour.
  - The permittee must determine the average of all recorded readings for each successive 3-hour period of the emission capture system and add-on control device operation.
  - The permittee must record the results of each inspection, calibration, and validation check of the CPMS.
  - The permittee must maintain the CPMS at all times and have available necessary parts for routine repairs of the monitoring equipment.
  - The permittee must operate the CPMS and collect emission capture system and add-on control device parameter data at all times that a controlled coating operation is operating, except during monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, if applicable, calibration checks and required zero and span adjustments).
  - The permittee must not use emission capture system or add-on control device parameter data recorded during monitoring malfunctions, associated repairs, out of control periods, or required quality assurance or control activities when calculating data averages. You must use all the data collected during all other periods in calculating the data averages for determining compliance with the emission capture system and add-on control device operating limits.

[40 C.F.R. § 63.3547(a); 45CSR34; 40 C.F.R. §§ 64.3(b)(4)]

- 6.2.10. The permittee must install the gas temperature monitors for TO-1 and TO-2 according to the following parameters:
- The gas temperature sensor must be installed in the firebox of the thermal oxidizer or in the duct immediately downstream of the firebox before any substantial heat exchange occurs.
  - The gas temperature sensor must be installed in a position that provides a representative temperature.
  - ~~The gas temperature sensor must have a minimum accuracy of  $\pm 1.2$  degrees Celsius or  $\pm 1$  percent of the temperature value in degrees Celsius, whichever is larger. Compliance with the more stringent accuracy requirement in permit condition 6.2.1. will ensure compliance with this permit condition 6.2.10.c. The gas temperature sensor must have the minimum accuracy specified in Condition 6.2.1.~~
  - The gas temperature sensors must be calibrated annually. The scheduled calibration shall be performed within twelve (12) months of the date of the previous scheduled calibration, but no earlier than six (6) months from the date of the previous scheduled calibration. This condition does not prevent the permittee from calibrating the device(s) at any time (not part of normal annual schedule) necessary to demonstrate ongoing reliability and compliance of the device.

[40 C.F.R. § 63.3547(c); 45CSR34; 40 C.F.R. §§ 64.3(b)(1)-(3) and 64.6(c)(1)(iii); 45CSR§30-12.7.]

- 6.2.11. **Documentation of Need for Improved Monitoring** – After approval of monitoring under 40 C.F.R. 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

**[40 C.F.R. § 64.7(e)]**

- 6.2.12. **Quality Improvement Plan (QIP)** – Based on the results of a determination made under permit condition 6.4.1.(2), the Administrator or the Director may require the permittee to develop and implement a QIP. Consistent with 40 C.F.R. §64.6(c)(3), the permittee is limited to an accumulation of exceedances or excursions no greater than nine (9) during a reporting period, prior to requiring the implementation of a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 C.F.R. §§ 64.8(b) through (e). Refer to permit condition 6.5.1.(2)(iii). for reporting required when a QIP is implemented.

**[40 C.F.R. § 64.8]**

6.2.13. For control device TO-1, the permittee shall monitor the following parameters and maintain records of such data in accordance with Condition 3.4.2. of this permit.

- a. Monitor the temperature of the combustion chamber in 15 minute intervals; and
- b. The data collected as required in item a. of this condition shall be used to determine the average for each successive 3-hour period of the temperature.

**[40 C.F.R. §§ 63.3547(a)(1) and (2); 45CSR13, R13-1458, 4.2.4.]**

6.2.14. The permittee shall monitor the bypass line pursuant to 40 CFR 63.3547(b).  
[45CSR13, R13-1458, 4.2.5.]

### **6.3. Testing Requirements**

- 6.3.1. Compliance with Provisions 6.1.1. ~~through and 6.1.2.~~ 6.1.3. of this permit shall be determined in accordance with the performance test methodologies set forth under Subpart TT - "Standards of Performance for Metal Coil Surface Coating" under Part 60 to Title 40 of the Code of Federal Regulations, in particular, Paragraphs §60.463 (a), (b), (c)(2)(i) and §60.466, except that VOC emissions do not have to be expressed in terms of mass of VOC per unit volume of coating solids. Specifically, the capture efficiency and destruction efficiency of the incinerators shall be calculated using §60.463(c)(2).

**[45CSR13, R13-1458, ~~B.1.~~ 4.2.1., and 45CSR§30-5.1.c.]**

- 6.3.2. The owner or operator of the affected facility shall construct the VOC emission reduction system so that all volumetric flow rates and total VOC emissions can be accurately determined by the applicable test methods and procedures of 40CFR60, Appendix A.

**[45CSR13, R13-2111, B.2., and 45CSR§30-5.1.c.]**

~~6.3.3. [Reserved] 6.3.3. The owner or operator of the affected facility shall construct a temporary enclosure around the coating applicator and flashoff area during any performance test for the purpose of evaluating the capture efficiency of the system. The enclosure must be maintained at a negative pressure to ensure that all VOC emissions are measurable.~~

**[45CSR13, R13-2111, B.3., and 45CSR§30-5.1.c.]**

- 6.3.4. Tests to determine compliance with the emission limitations set forth in Specific Requirements 4.1.1. and 6.1.5. of this permit shall be conducted in accordance with the methods as set forth in 40 CFR 60, Appendix A. The Director may require a different test method or approve an alternative method in light of any technology advancements that may occur. Specifically, Reference Method 25 shall be used, both for measuring the VOC concentration in each gas stream entering and leaving the control device (incinerator) and for measuring the

VOC concentration in each gas stream emitted directly to the atmosphere; Method 1 for sample and velocity traverses; Method 2 for velocity and volumetric flow rate; Method 3 for gas analysis; and Method 4 for stack gas moisture. For Method 25, the sampling time for each of three runs is to be at least 60 minutes, and the minimum sampling volume is to be at least 0.003 dry standard cubic meter (DSCM); however, shorter sampling times or smaller volumes, when necessitated by process variables or other factors, may be approved by the administrator.

**[45CSR13, R13-2111, B.4.]**

- 6.3.5. The permittee shall annually calibrate the temperature measuring devices (thermocouple) used to monitor and record the combustion chamber temperature of both thermal oxidizers TO-1 and TO-2. The calibration shall be performed within twelve (12) months of the date of the previous calibration, but no earlier than six (6) months from the date of the previous calibration. This requirement does not prevent the permittee from calibrating if necessary on a more frequent basis as needed.

**[40 C.F.R. §64.3(b)(3), and §64.6(c)(1)(iii)]**

- 6.3.6. The permittee shall annually calibrate the pressure measuring devices used to monitor and record the pressure in the C-1, C-2, C-3, and C-4 PTEs. ~~inlet duct pressure of both thermal oxidizers TO-1 and TO-2.~~ The calibration shall be performed within twelve (12) months of the date of the previous calibration, but no earlier than six (6) months from the date of the previous calibration. The pressure measuring devices shall have a minimum accuracy of 0.01 inches of water. This requirement does not prevent the permittee from calibrating if necessary on a more frequent basis as needed.

**[40 C.F.R. §64.3(b)(3), and §64.6(c)(1)(iii)]**

- 6.3.7. For the propose of determining initial compliance with the VOC emission limit in Condition 6.1.2, minimum destruction efficiency of Condition 6.1.3, and establishing parameters and/or operating ranges for the RTO (TO-1) and associated capture systems for Sheet Coaters C-1, C-2, and C-3, the permittee shall conduct performance testing after installing and calibrating the temperature and static pressure devices but no later than 180 days after start-up of the RTO. Such testing shall be conducted in accordance with the following:

- a. The respective sheet coater shall be operated at a production rate of no less than 90 sheets per minute during each test run. The actual production rate during each test shall be recorded and included in the test report;
- b. Demonstrating compliance with the parametric operating system requirements of 40CFR§63.3547.
- c. Demonstrating the destruction efficiency (DE) of the RTO shall be conducted in accordance with test methods and procedures specified in 40CFR§§63.3543 and 63.3545;  
**[40CFR§63.3541(h)]**
- d. Establishing the operating temperature of the RTO shall be conducted by measuring and recording the temperature in the combustion chamber at least once every 15 minutes during each test run. Such collected data (measured temperatures) during the testing demonstration shall be used to calculate the average combustion temperature.  
**[40CFR§§63.3546(a)(1) and (a)(2)]**
- e. Such testing shall be conducted in accordance with Condition 3.3.1. of this permit.

**[45CSR13, R13-1458, 4.3.1.]**

- 6.3.8. For the purpose of demonstrating compliance with the visible emission limit of Conditions 6.1.8. and 6.1.9. of this permit, the permittee shall determine the visible emissions from RTO concurrently while conducting the

required testing in Condition 6.3.7. Such testing shall be conducted in accordance with U.S. EPA Test Method 22 and Condition 3.3.1. of this permit. If visible emissions are observed during the aforementioned Method 22 testing, Method 9 testing shall be immediately implemented. Records of such testing shall be included in the submittal as required in Condition 3.5.11. and maintained in accordance with Condition 3.4.2. of this permit. [45CSR§6-7.2; 45CSR13, R13-1458, 4.3.2.]

6.3.9. The permittee shall conduct the testing as required in Conditions 6.3.7. and 6.3.8. whenever the permittee elects to establish new operating limits for the capture system and/or the RTO or upon request of the Director or U.S. EPA Administrator, or once every ten years for the purpose of verifying the compliance. [45CSR13, R13-1458, 4.3.3.]

## 6.4. Recordkeeping Requirements

### 6.4.1. Response to Excursions or Exceedances

- (1) Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the 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. 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). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or 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.
- (2) 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, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 C.F.R. § 64.7(d)]

6.4.2. The permittee shall maintain records required to show continuous compliance with the incinerator combustion chamber temperature (permit condition ~~6.1.3. 6.1.4.) and negative pressure differential at the inlet of TO-1 (permit condition 6.1.15.)~~ and the differential pressure across the permanent total enclosure capture device of coater ~~C-1, C-2, and C-3 which lead to TO-1 and~~ C-4, which leads to TO-2 (permit condition ~~6.1.15. 6.1.16.~~). The permittee shall also record all periods (during actual coating operations) in excess of 30 minutes during which the average differential pressure ~~at any coater hood in any PTE~~ is less than the respective pressure limit set forth in permit conditions ~~6.1.15. and~~ 6.1.16.

[40 C.F.R. § 63.3512(j)(3); 45CSR34; 40 C.F.R. §64.6(c)(2)]

### 6.4.3. General recordkeeping requirements for 40 C.F.R. 64 (CAM)

The permittee shall comply with the recordkeeping requirements specified in permit conditions 3.4.1. and 3.4.2. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. §64.8 (permit condition 6.2.12.) and any activities undertaken to implement a quality improvement plan, and other supporting information required to be

maintained under 40 C.F.R. 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

**[40 C.F.R. § 64.9(b)]**

## **6.5. Reporting Requirements**

### **6.5.1. General reporting requirements for 40 C.F.R. 64 (CAM)**

- (1) On and after the date specified in 40 C.F.R. §64.7(a) by which the permittee must use monitoring that meets the requirements of 40 C.F.R. 64, the permittee shall submit monitoring reports to the DAQ in accordance with permit condition 3.5.6.
- (2) A report for monitoring under 40 C.F.R. 64 shall include, at a minimum, the information required under permit condition 3.5.8. and the following information, as applicable:
  - (i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
  - (ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
  - (iii) A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. §64.8. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

**[40 C.F.R. § 64.9(a)]**

[6.5.2. The permittee shall monitor and report any emissions associated with a bypass line pursuant to 40 CFR 63.3511\(a\).](#)  
[\[45CSR13, R13-1458, 4.5.2.\]](#)

## **6.6. Compliance Plan**

- 6.6.1. There is no compliance plan since the permittee certified compliance in with all applicable requirements in the renewal application.

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**EPA METHOD 204.2.1**  
**PERMANENT TOTAL ENCLOSURE**  
**VERIFICATION OF THE EPA FIVE-POINT CRITERIA FOR**  
**THE ASSUMPTION OF 100% CAPTURE EFFICIENCY**  
**FOR COATING LINE C-4**  
**at**  
**BALL METAL FOOD CONTAINER CORP.**

**Plant #33**  
**3010 Birch Drive**  
**Weirton, West Virginia**

**by**

**Richard C. Sharp**

**Manager of Testing Services**

**SHARP ENVIRONMENTAL SERVICES, INC.**

**Date: January 3, 2007**

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**4.1.1**

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## SECTION 1: OBJECTIVE

On January 9, 1995, the Office of Air Quality Planning and Standards of the U.S. Environmental Protection Agency located in Research Triangle Park, North Carolina issued a document entitled, "Guidelines for Determining Capture Efficiency." The purpose of this document was to provide technical guidance primarily to U.S. Environmental Protection Agency (EPA) Regional offices regarding capture efficiency testing and secondly, to be used by state agencies, local agencies, owners, and operators of stationary sources required to determine capture efficiency (CE).

Among the recommended CE test methods, the EPA lists five accepted protocols of which the most favored as indicated by the EPA is the Permanent Total Enclosure (PTE) where theoretically, all emissions from a process are enclosed, contained, and directed to a control device. If the enclosure can meet a Five Point Criteria documented in the Code of Federal Regulations, 40 CFR 51, Appendix M, Method 204.2.1, the capture efficiency for the source may be assumed to be 100 percent and need not be measured. This document lists the Five Point Criteria and applies each of these to the existing enclosure surrounding Coater Line C-4 at the Ball Corporation, Inc. facility located at 3010 Birch Drive, Weirton, West Virginia. Reference drawings of this enclosure are included.

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Ball Corporation

JANUARY 5, 2007

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## SECTION 2: CRITERIA OF A PERMANENT TOTAL ENCLOSURE (Reference Drawing 0182-1)

### Meeting the Five-Point Criteria for 100% Capture Efficiency

1. Any natural draft opening (NDO) shall be at least four equivalent diameters from each volatile organic compound (VOC) emitting point.

The enclosure has a total of two notable NDOs. NDO #1 allows access for raw materials into the enclosure to feed the coater. This NDO measures 34" x 46". The NDO measures 30" from the emitting point which is the coater roll.

$$ED = \left( \frac{4 \times \text{area}}{\pi} \right)^{0.5} = \left( \frac{4 \times 0.75 \times 49}{\pi} \right)^{0.5} = 8.63'$$

The emitting point is the Coater roll which measures 30" from this NDO. The distance measured as equivalent diameters would be 4.52.

$$\left( \frac{30}{8.63} = 4.52 \right)$$

NDO #1 exceeds four equivalent diameters and, therefore, meets the requirement.

The exit end of the oven also meets the criterion. The exit end as NDO #2 measures approximately 51" x 52". The equivalent diameters for these dimensions would be 4.84'. The exit end NDO of the long oven (over 100' long) would, at a minimum, be no less than 20 diameters from the coater roll thereby easily exceeding the requirements of no less than four equivalent diameters.

2. The total of all NDOs shall not exceed five percent of the surface area of the enclosure's four walls, floor and ceiling.

The surface area of the coater enclosure is as follows:

$$\text{Approximately: } (3.5' \times 22.5' \times 2) + (3.5' \times 5.1' \times 2) + (22.5' \times 5.1' \times 2) = 422.7 \text{ ft}^2$$

The surface area of the oven is as follows:

$$(130' \times 6' \times 2) + (11' \times 130' \times 2) + (11' \times 6' \times 2) = 4652 \text{ ft}^2$$

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JANUARY 5, 2007

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Total PTE Surface Area = 4975 ft<sup>2</sup>

The NDO surface area is as follows:

$$\text{NDO \#1} = (3/4' \times 46'')/144 = 0.24 \text{ ft}^2$$
$$\text{NDO \#2} = (51' \times 52'')/144 = 18.42 \text{ ft}^2$$

TOTAL NDO surface area = 18.66ft<sup>2</sup>

Area percent of NDO's to surface area:

$$18.66/4975 \times 100 = 0.38\%$$

This requirement has been readily met with the NDO area totals less than 1% of the PTE area.

3. The average facial velocity of air through all NDOs shall be at least 200 fpm into the enclosure or the pressure drop across the enclosure must be at least 0.007 inch H<sub>2</sub>O

The exhaust from the enclosure results from the one coater hood and the one oven exhaust.

Pressure measurements during the testing activities measured -0.007 to -0.008" inches H<sub>2</sub>O consistently. The instrument used was a calibrated Dwyer Series 475 Mark III Digital Manometer, 0-1" H<sub>2</sub>O range.

During the same test periods, the testing technician measured the Coater 6° exhaust duct pressure at -1.3" to -1.8" wc (reference section 6.2.1) compared to the datalogger measurements of approximately -0.8" to -1.0"wc (reference section 5.1.0).

NDO #2 is at the exit end of the the oven. The oven is considered a structural component of the PTE, thereby the exit end of the oven would be considered an NDO which, by definition normally would be required to demonstrate a minimum indraft velocity of 200 fpm or -0.007" H<sub>2</sub>O. However, referencing the EPA Document #68-0204379 dated September 5, 1990, the exit end of the oven, because of its peculiar engineered airflow pattern, must simply demonstrate a negative indraft velocity. Using this criterion, the ovens' exit opening, considered as a component of a PTE, were evaluated as meeting the requirements if the exit end demonstrated a negative indraft condition.

Because of the heat at the exit end, it was not possible to measure the velocity

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or pressure, however, a string attached to a rod inserted into the oven was drawn inward at the oven exit opening thereby exhibiting a negative indraft condition.

4. All access doors and windows, that areas of which are not included in Items 2 and 3, shall be closed during routine operation of this process.

All access openings shown on the drawing 0182-1 are normally closed to ensure proper positioning during operation. The operators have been instructed to keep these openings closed except for infrequent adjustments or maintenance.

It is the intent that the access will normally be closed, therefore, meeting the criteria.

5. All VOC emissions must be captured and contained for discharge through a control device.

All exhausts from the oven and the enclosure discharge to a control device designated as the OSI Thermal Oxidizer for Line C-4.

Since all exhausts from the enclosure are directed to the thermal oxidizer, this requirement has been met.

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JANUARY 5, 2007

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### SECTION 3: CONCLUSION

The preceding discussion clearly demonstrates that the PTE enclosing Coating Line C-4 complies with all five criteria of the capture guidelines for permanent total enclosures. Having determined this qualification according to the EPA, it may be assumed that the capture efficiency of this PTE is 100%.

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*Ball Corporation*

JANUARY 5, 20067

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