

Fact Sheet



For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-00900027-2012**
Application Received: **September 12, 2011**
Plant Identification Number: **03-054-009-00027**
Permittee: **Ball Metal Food Container Corp.**
Mailing Address: **3010 Birch Drive, Weirton, WV 26062**

Revised: NA

Physical Location: Weirton, Brooke County, West Virginia
UTM Coordinates: 531.9 km Easting • 4,470.8 km Northing • Zone 17
Directions: From downtown Weirton, south on Rt.2 to Freedom Way. Right on Freedom Way to Birch Drive. On Birch Drive approximately 1 mile. Facility is on the right side of road in Weirton Steel complex in Half Moon Park.

Facility Description

The plant receives coils of tin-plated steel which it cuts into sheets and coats with inks and protective varnishes. The sheets are cured in natural gas-fired ovens and either transferred to the end department to be pressed into ends or shipped off site to be made into food can bodies. The facility is characterized by SIC Code 3411, and NAICS Code 332431.

The facility consists of two buildings: No. 33 and No. 720. The combined operation includes (i) a coating department with eleven (11) sheet coating lines; (ii) a lithography department with six (6) printing/sheet coating lines; and (iii) an end department with six (6) end making lines (two of which, MD-2 and MD-6, apply water-based end compound and have no VOC emissions). All eleven coating lines are controlled by permanent total enclosures (Method 204 PTEs) and four (4) different thermal oxidizers. Five of the six lithography lines (PC-3 through PC-7) are controlled by capture hoods and one of the thermal oxidizers. The sixth lithography line (PC-8) has no control device, but uses only ultraviolet coatings and has comparatively minimal emissions. The end making lines have no control device.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2010 Actual Emissions ¹
Carbon Monoxide (CO)	58.0	11.54
Nitrogen Oxides (NO _x)	69.0	13.74
Particulate Matter (PM ₁₀)	5.2	1.04
Total Particulate Matter (TSP)	5.2	1.04
Sulfur Dioxide (SO ₂)	0.4	0.08
Volatile Organic Compounds (VOC)	1,170.4	155.02 ²

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2010 Actual Emissions
Glycol ethers	> 10	6.82
Xylene	> 10	2.52
Methyl Isobutyl Ketone	< 10	1.98
Ethyl Benzene	< 10	0.43
Isophorone	< 10	0.23
Cumene	< 10	0.19
Naphthalene	< 10	0.09
Benzene	< 10	Not available
Toluene	< 10	0.03
Formaldehyde	< 10	0.02
Vinyl Acetate	< 10	Not available
Cresols	< 10	Not available
Aggregate HAPs	343 ³	12.31

¹ Actual emissions are from the 2011 Certified Emissions Statement Invoice, and represent actual emissions from January 1, 2010 through December 31, 2010.

² Actual VOC emissions include 12.31 tons of VOC-HAPs.

³ According to an email dated 4/3/2012 from Mr. John Munsch, EHS Department, Ball Corporation.

Title V Program Applicability Basis

This facility has the potential to emit 1,170.4 tpy of VOCs; over 10 tpy of glycol ethers; over 10 tpy of xylene; and 343 tpy of aggregate HAPs. Due to this facility's potential to emit over over 100 tpy of criteria pollutant, over 10 tons per year of a single HAP, and over 25 tpy of aggregate HAPs, Ball Metal Food Container Corporation is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR6 45CSR7 45CSR11 45CSR13 WV Code § 22-5-4 (a) (14) 45CSR30 45CSR34 40 C.F.R. Part 61 40 C.F.R. Part 63, Subpart KKKK 40 C.F.R. Part 64 40 C.F.R. Part 82, Subpart F	Open burning prohibited. Prevention and Control of Particulate Matter Standby plans for emergency episodes. Permits to Construct/Modify The Secretary can request any pertinent information such as annual emission inventory reporting. Operating permit requirement. Emission standards for HAPs Asbestos inspection and removal Surface Coating of Metal Cans MACT Compliance Assurance Monitoring Ozone depleting substances
State Only:	45CSR4	No objectionable odors.

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit <i>(if any)</i>
R13-2111A	April 10, 2001	
R13-1458D	April 30, 2010	
R13-1546	December 22, 1992	
R13-2295D	July 23, 2009	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

General Remarks

- Unless otherwise specified herein, the language “current permit” refers to the current versions of the operating permit, which are:
 - R30-00900027-2007, Part 1 of 2 (MM01); and
 - R30-00900027-2008, Part 2 of 2.

The current Part 1 of 2 permit contains requirements for sources in Building No. 33, with the exception of the LTG-1 line that resides in Building No. 33 but is currently permitted in the Part 2 of 2 permit.

The current Part 2 of 2 permit contains requirements for sources in Building No. 720. As mentioned above, it also contains requirements for the LTG-1 line that resides in Building No. 33.

- The renewal application states that the permittee is requesting the two parts of its current Title V permit be combined into a single permit. Therefore, the requirements of both permit parts will be written as one renewal permit document. The sources are grouped and identified by building number. Emission point IDs typically have a building number prefix. In combining these permit parts, some issues that must be managed are:
 - In the current Part 1 permit, general requirements of 40 C.F.R. Part 64 are included in the permit section for the equipment to which they apply. For example, the requirements for proper maintenance (§64.7(b)) and continued operation (§64.7(c)) are in permit section 6.2. for the thermal oxidizers TO-1 and TO-2. But in the current Part 2 permit, these same requirements are in the facility-wide permit section 3.2. Considering that this renewal is combining both permit parts into one permit document, and that CAM applies to multiple sources (but not all) at the facilities, these general CAM requirements will be written in facility-wide section 3.0. CAM does not apply to the End Liners (permit section 5.0) and the Planeta Press PC-8 (permit section 9.0). Rather than listing all sources to which CAM applies, these sources which are exempt will be noted after the citation of each of the “general” CAM requirements in permit section 3.0. However, if a general CAM requirement is already written specifically for sources (e.g., 3.2.9.), then the exemption language is unnecessary. The CAM requirements that are specific to certain control devices or capture systems will be retained in their respective permit sections.
 - The respective building number prefixes have been added to the emission point IDs in the following renewal permit conditions:
 - Building No. 33 Prefix: 5.1.1. through 5.1.3., 5.1.7., 5.1.8., 6.1.1., 6.1.5.
 - Building No. 720 Prefix: 8.1.5., 8.3.1.
- The permittee requested in technical correspondence¹ that the requirements for the LTG-1 coater and oven, and LTG thermal oxidizer in Section 5.0 of the Part 2 of 2 permit be relocated to the Part 1 of 2 permit. This request was based on the fact that the LTG sources are located in the same building as all of the equipment in the Part 1 permit, and was also predicated on keeping the permit parts separate. However, the permittee requested combining the parts into one permit, which makes relocating LTG-1 irrelevant. To accommodate the increase in emissions for permit Part 1, the permittee requested modifying the annual VOC limit for the Part 1 sources (condition

¹ Email dated 10/27/2011 from Mr. John Munsch, EHS Department, Ball Corporation.

3.1.10. of the current permit). Considering that such a request is necessarily an increase in the limitations, which are exclusively derived from underlying NSR permits, the requested change cannot be made using only Title V permitting procedures. Therefore, the request to modify the VOC emission limitations cannot be made as part of this renewal permitting action.

The following outlined discussion of underlying permits, rules, and regulations describes the changes made in the operating permit for this renewal permitting action.

I. **Permit R13-1458D.** This permit affects Coaters C-1, C-2, and C-3, with their associated thermal oxidizer TO-1. Also affected are End Liners MD-1, MD-5, MD-3, and MD-4. The current operating permit contains the requirements of R13-1458D; however, several revisions are necessary in the renewal permit, which are:

- a. Condition 4.1.6. (no renewal permit condition) – This requirement remained in effect until the Air Preheater F147 was replaced by the MEGTEC Cleanswitch[®] Regenerative Thermal Oxidizer (RTO) identified as TO-1. The condition specifically states that it will be voided and condition 4.1.7. will become effective on start-up of TO-1. Since the MEGTEC RTO has been installed and is operating, condition 4.1.6. of R13-1458D is void and will therefore not be included in the renewal operating permit.
- b. Condition 4.1.7.a. (renewal permit condition 6.1.1.) – The parenthetical language “the basecoater incinerator” is changed to refer to “MEGTEC Cleanswitch[®] Regenerative Thermal Oxidizer (RTO) identified as TO-1”. This change in the operating permit is a more accurate representation of the underlying permit.
- c. Condition 4.5.2. (renewal permit condition 6.5.1.) – This requirement applies within the scope of the NSR permit, which includes C-1, C-2, C-3, and their associated control device TO-1. To avoid application of this NSR permit requirement to TO-2 (which is also in Section 5.0 of the renewal permit), the applicability to TO-1 has been noted in parenthesis after the citation of authority. Note that this does not relieve the permittee from complying with any applicable MACT requirement to monitor a bypass line associated with TO-2. The purpose of this addition is to clarify the applicability of the NSR permit requirement.

II. **Permit R13-2111A.** This permit affects Coater C-4, with its thermal oxidizer TO-2. R13-2111A is currently in effect, and is already included in the current operating permit. Applications for R13-2111B and R13-2111C were submitted, but were withdrawn on 9/25/2003 and 5/30/2006, respectively. The following changes are made to the renewal permit with regard to this underlying permit.

- a. Renewal permit condition 3.1.10. will include underlying permit language of R13-2111A, condition A.6. and R13-1458D, condition 3.1.7.
- b. Requirement B.3. has been incorporated into the renewal permit as condition 4.3.1. This requirement applies to coater C-4. This is determined from the fact that B.3. is in context with B.4., which requires testing to demonstrate compliance with limits for coater C-4. Therefore, a parenthetical note is added after the citation of authority to specify the applicability of the condition to C-4.

III. **Permit R13-2295D.** This permit affects all Bldg. No. 720 Emission Units & Control Devices, and Bldg. No. 33 LTG-1 Coater 007-01, LTG-1 Oven 007-02, and LTG Thermal Oxidizer 0003. The current operating permit contains requirements from R13-2295C. The Engineering Evaluation for R13-2295D specifies the changes in the revision of R13-2295C to arrive at R13-2295D. The table below describes the changes and how they are incorporated into the Title V renewal permit.

Revision from R13-2295C to R13-2295D

R13-2295D Requirement	Title V Renewal Condition	Discussion
4.1.4.1.	7.1.2.	The language of the condition did not change. The citation of authority has been changed from “4.1.4.” to “4.1.4.1.”
4.1.4.2.	8.1.5.	The entire requirement has been incorporated into the Title V renewal.
4.1.5.	7.1.4. for LTG1 8.1.2. for C-5 through C-10	<p>The condition is changed per the Engineering Evaluation for R13-2295D:</p> <p>“At all times, the direction of the air flow shall be into the PTE for new sheet coating line LTG-1 and the six (6) new PTEs listed above in Table 4.1.4.2., and the pressure drop across each of the seven (7) enclosures shall be at least 0.007 inch H₂O, as established in Method 204 of 40 CFR part 51, appendix M.”</p> <p>The stricken word “new” does not necessarily indicate that LTG-1 is not a new source as defined in 40 C.F.R. §63.3482(c). The language of this permit condition will match the underlying permit requirement. However, the removal of “new” in the underlying permit does not affect how 40 C.F.R. 63 Subpart KKKK applies. See the discussion below of MACT Subpart KKKK and its applicability to LTG-1.</p> <p>The citations of authority for conditions 7.1.4. and 8.1.2. are revised to include those specific MACT Subpart KKKK sections given in condition 4.1.5. of R13-2295D.</p>

In order to incorporate this NSR permit into a Title V permit which is combining both Buildings 720 and 33, there are some details added to the permit to clarify the applicability of certain requirements. Those changes are:

- a. The facility-wide emissions from natural gas consumption applies only to sources affected by permit R13-2295D. Thus, in renewal condition 3.1.27., such sources are specified following the citation of authority. It was noted that this NSR requirement states that “Compliance with the annual emissions limitations from natural gas consumption only shall be on a calendar year basis.” According to U.S. EPA guidance², calendar year limits are not practically enforceable. Therefore, the language “calendar year basis” will be replaced with “12-month rolling sum”. The authority for this monitoring revision is cited using 45CSR§30-5.1.c.

Some requirements in R13-2295D are no longer applicable, and will therefore not be included in the renewal operating permit. The requirements are given in the table below.

Non-applicable Requirements in R13-2295D

R13-2295D Requirement	Current Title V Condition	Discussion
4.1.2.	5.1.7.	Since LTG-1 is operating, the requirement is necessarily fulfilled. Therefore, it will not be included in the renewal operating permit.

² Title V Permit Writer’s Tip, located at http://www.epa.gov/reg3artd/permitting/t5_compl_enf.htm accessed 2/15/2012.

R13-2295D Requirement	Current Title V Condition	Discussion
4.3.1.	5.3.4.	The requirement is no longer applicable since the testing therein has been completed.

Refer to the non-applicability determinations section of this fact sheet, and the permit shield sections 3.7.2.d. and e.

IV. **45CSR30 – Requirements for Operating Permits.** The following changes are made under the authority of this rule.

- a. Based upon recent U.S. EPA comments on proposed Title V permits, the word “normal” is removed from the following renewal permit conditions:
 - i. Condition 3.2.1. – The third sentence is changed to read “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 40 C.F.R. 60 Appendix A, Method 22.”
 - ii. Condition 6.2.5. – The third sentence is changed to read “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.”
- b. The language pertaining to R13-1458 and the citation of 45CSR§30-12.7. are removed from condition 3.1.9. The portion of the condition pertaining to constituents submitted in permit application R13-1458 was included in permit revision MM01 at the permittee’s request even though the requirement was removed from R13-1458C. These facts were documented in the Fact Sheet for R30-00900027-2007, Part 1 of 2 (MM01). Since the authority is 45CSR§30-12.7. for the R13-1458 language, this portion of the permit condition will be removed. The condition is written to match R13-2111A, A.7. The removal of R13-1458 requirements is made based upon the permittee’s comments on the pre-draft renewal permit.

The authority of 45CSR§30-5.1.c. is cited in condition 10.3.2. to make the monitoring in 8.3.1. the same for 10.3.2. This citation is also added to CAM permit conditions that do not already have the citation in the current permit parts.

V. **40 C.F.R. 63 Subpart KKKK – National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Cans.** The applicable requirements of this regulation were incorporated into the permit as part of the 2007 renewal for the Part 1 of 2 permit, and in 2008 for the Part 2 of 2 permit. Nevertheless, several changes are warranted in this renewal with regard to Subpart KKKK, which are:

- a. Compliance Date. The compliance date for all affected equipment (excluding the End Liners MD-1, MD-3, MD-4, and MD-5) was November 13, 2006. This was specified in permit condition 3.1.14. of the current permit. Since this is past, the condition will not be included in the renewal permit. Similarly, the End Liners (Em. Units MD-1, MD-3, MD-4, and MD-5) were subject to an approved alternative compliance date of August 23, 2007 specified in the same permit condition. Neither will this requirement be included in the renewal. Because of this, the language “The work practice plan must be implemented by the compliance date set forth in permit condition 3.1.14.” in condition 3.1.12. is not included in this renewal.

b. Compliance Options. The permittee requested in technical correspondence³ to have all available compliance options specified in the Title V permit. The options specified in Subpart KKKK are:

- i. *Compliant material option* in §63.3491(a);
- ii. *Emission rate without add-on controls option* in §63.3491(b);
- iii. *Emission rate with add-on controls option* in §63.3491(c); and
- iv. *Control efficiency/outlet concentration option* in §63.3491(d).

However, not all options may be applied to every emission unit at the facility. For example, neither the *Emission rate with add-on controls option* nor the *Control efficiency/outlet concentration option* may be used for the End Liners since they are not equipped with air pollution control devices. Therefore, only relevant compliance options for each source or group of sources are given in their respective permit sections.

If only one compliance option is applicable, or only one option will be used by the permittee, then only the MACT requirements pertaining to that option would need to be included in the Title V permit. However, in this case of specifying each of the available compliance options in the permit, and considering that the permittee may change among the available options (or potentially still use only one option), then the level of specificity for all requirements for all options must be evaluated to determine what level of detail should be included in the renewal permit and what should be incorporated by reference. Therefore, Subpart KKKK requirements will be evaluated and specifically included in (or excluded from, but incorporated by reference) the permit based upon the following criteria:

- (1) All applicable emission limitations and standards will be included in the permit.
- (2) All available and applicable compliance options for each source or source group will be included in the respective permit sections. Note that the *Emission rate without add-on controls option* in §63.3491(b) will not be included in a permit section for any source or group of sources that are permitted with control devices.⁴ Note, however, that this option will be included for sources that are not equipped with control devices.
- (3) Monitoring, testing, recordkeeping, and reporting requirements that are common among all compliance options, or that are required regardless of the compliance option employed, will be included in the permit.
- (4) All requirements that are specific to the compliance option in use as of the issuance date of this renewal permit will be written in the renewal permit. Requirements for other available compliance options are incorporated into the permit by reference. Monitoring, recordkeeping, and reporting requirements associated with other available compliance options are also incorporated by reference.
- (5) Applicable underlying NSR permit requirements that are taken from or companion to applicable Subpart KKKK requirements will also include a citation of the Subpart KKKK requirement.

³ Email dated 10/27/2011 from Mr. John Munsch, EHS Department, Ball Corporation.

⁴ The permittee concurred in an email dated 4/3/2012 that they do not intend to use, or anticipate using, the *Emission rate without add-on controls option* for any of the sources permitted with air pollution control devices (APCD). Further, sources equipped with APCDs are required to operate the APCD.

The approach detailed in the points above is generally consistent with U.S. EPA’s guidance⁵ on incorporating applicable federal regulations into operating permits. The guidance states that “All emission limits, monitoring, recordkeeping, reporting, compliance determination methods, etc., applicable to all emission units must be clearly incorporated into the permit. The details of these requirements may be IBR’d so long as applicability and compliance obligations are clear...” This guidance further states that “For simplicity and precision, the Title V permit should include only the compliance option selected by the source – if the source has already selected a compliance option...If the source desires flexibility to switch to another compliance option, the permit could IBR an alternative compliance option(s)...but the associated monitoring, recordkeeping, reporting requirements also must be addressed in the permit.” The guidance language “should” allows for writing the other available compliance options in the permit (rather than just IBR), as requested by the permittee. Since the permittee may use the flexibility to change among available options and requested to have the options written in the permit, this request is granted by including the other options while IBR the monitoring, recordkeeping, testing, and reporting associated with the other compliance options not currently in use. A note is added after the compliance options conditions in each permit section specifying which option is currently in use. See conditions 4.1.3., 5.1.4., 7.1.8., 8.1.6., 9.1.3., and 10.1.4.

- c. Incorporation of Requirements into the Renewal Operating Permit. The following discussions analyze (1) the general requirements of Subpart KKKK that must be included in the permit, and (2) the specific requirements of the regulation, and how they apply to the different source types segregated in their respective permit sections. The Subpart KKKK requirements are incorporated into the renewal permit based upon the criteria described above.

General Requirements in Permit Section 3.0 (facility-wide applicability)

These requirements are applicable to all or most of the affected emission sources.

Section	Condition	Comments
§63.3491	3.1.14. †	Opening paragraph sets forth the general requirement to meet the applicable emission limitation for the selected compliance option.
§63.3493(b)	3.1.12.	The work practice plan requirement was revised to include the first clause of the first sentence regarding emission rate with add-on control, or the control efficiency/outlet concentration option. Also, the corresponding citations in §§63.3550 <i>et. seq.</i> were added to the citation of authority to account for the control efficiency/outlet concentration option requirements.
§63.3500(c)	3.1.13.	Written startup, shutdown, and malfunction plan (SSMP).
§63.3500(a)	3.1.15.	This general requirement to comply with the applicable emission limits will be included in the renewal permit.
§63.3500(b)	3.1.16.	This general requirement to maintain affected sources and control equipment will be included in the renewal permit.
§§63.3511(a), (b), and (c)	3.5.10.	The reporting requirements were revised to include the MACT language, and thus be more general. References to specific emission units, or to compliance options, have been removed.
§§63.3512(a) through (j)	3.4.8. †	Recordkeeping in §§63.3512(a) through (j) has been written in the facility-wide section of the permit. Certain requirements apply regardless of the compliance option used, while others are specific to the compliance option. Since the permittee may choose the compliance option, and may change options for the same sources, the permittee will also choose the appropriate recordkeeping requirements in this new permit condition that apply to the compliance option chosen. Therefore, these recordkeeping requirements that were in current permit conditions 4.4.1. through

⁵ Title V Permit Writer’s Tips – Incorporating Applicable Requirements, located at http://www.epa.gov/reg3artd/permitting/t5_jar.htm, accessed May 1, 2012.

Section	Condition	Comments
		4.4.5. and 5.4.2. and 5.4.3. will not be included in renewal permit subsections 4.4. and 5.4.
§§63.3513(a), (b), and (c)	3.4.4.	This condition sets forth the requirements for format and retention of MACT records. The language was carried over from the current permit.

† Indicates a new permit condition that was not in the current permit.

Building No. 33 Sheet Coaters in Permit Section 4.0 (Em. Units: C-1, C-2, C-3, C-4)

When the last renewal permit was issued, the Wagner Coaters C-1, C-2, and C-3 did not have permanent total enclosures (PTEs) as their emission capture device. Thus, the *Control efficiency/outlet concentration option* could not be used (per the regulation) for these Wagner Coaters. However, according to the renewal application (Attachments E), the permittee successfully performed PTE verification and destruction efficiency testing in March 2010 for C-1, C-2, C-3 and their control systems. Therefore, the *Control efficiency/outlet concentration option* can be used for coaters C-1, C-2, and C-3. Since the *Control efficiency/outlet concentration option* may be used, the corresponding emission limitations (95% reduction or 20 ppmvd at control device outlet) are added to permit condition 4.1.2. According to technical correspondence⁶, the permittee is currently using the *Control efficiency/outlet concentration option* (§63.3491(d)) for these coaters to comply with the regulation. The following table describes the changes in current permit conditions, as well as additional conditions added to the permit in order to include all applicable compliance options for the Sheet Coaters.

Section	Condition	Comments
§63.3490(b)	4.1.2.a. †	While the condition number 4.1.2.a. is new for the renewal, the language of 4.1.2.a. is identical to condition 4.1.2. of the current permit. The “a.” has been added since another (optional) emission limitation has been added to condition 4.1.2. as sub-condition 4.1.2.b.
§63.3490(b)	4.1.2.b. †	This new condition sets forth the optional 95% reduction in HAP or 20 ppmvd outlet concentration limitations that correspond to the <i>Control efficiency/outlet concentration option</i> as specified in 40 C.F.R. §63.3491(d).
§§63.3491(a), (c), and (d)	4.1.3. †	This new condition sets forth the compliance options that may be applied to the coaters and their respective emission control systems. In sub-condition 4.1.3.c., the regulation language “or 97 percent or greater for new or reconstructed sources” is not included in the first sentence since the facility’s coaters (C-1, C-2, C-3, and C-4) are part of a collection of an existing affected source under this regulation. The permittee is using the <i>Control efficiency/outlet concentration option</i> in 40 C.F.R. §63.3491(d) as of the issuance date of this renewal operating permit. This has been noted at the end of permit condition 4.1.3. Furthermore, since the permittee is using this option, the applicable requirements of §§63.3550 through 63.3557 to demonstrate compliance will be included in the renewal permit. The other compliance options (4.1.3.a. and b.) will IBR their compliance demonstration requirements.
§63.3552(a)	4.1.6. †	This applicable section specifies the means the demonstrating continuous compliance for the compliance option that the permittee is currently utilizing. By incorporating this regulation language, the specific sections regarding calculations, equations, etc. are effectively incorporated by reference.
§63.3552(b)	6.1.3.	Continuous compliance with the applicable operating limits is

⁶ Email dated 4/3/2012 from Mr. John Munsch, EHS Department, Ball Corporation.

Section	Condition	Comments
	6.1.7.	already covered by permit conditions 6.1.3. and 6.1.7. for combustion chamber temperature and Method 204 PTE pressure drop, respectively.
§63.3552(c)	4.5.2. †	This requirement pertains to the bypass line, and is essentially a reporting requirement.
§63.3552(d)	3.1.12.	This continuous compliance demonstration pertaining to a work practice plan requirement is embodied in 3.1.12.
§63.3552(e)	4.5.3. †	This requirement is for reporting compliance in the semiannual compliance report.
§63.3553	None	Performance testing is complete; therefore, no permit condition is required at this renewal.
§63.3554	4.1.4. †	This requirement sets the criteria for capture system efficiency for the control efficiency/outlet concentration option. Since it is applicable to the current compliance option, it is written in the renewal permit.
§§63.3555 and 63.3556	None	The requirements of these sections pertain to initial performance testing, which has been completed. Therefore, these requirements are not included in the renewal permit.
§63.3557(a)	3.2.6. (3.2.6.g. †)	This condition applies to all thermal oxidizers and emission capture systems at the facility. Condition 3.2.6.g. has been added in order to include applicable requirement §63.3557(a)(7) in the permit.
	6.2.1.e.	§63.3557(a) was cited in this accuracy/quality assurance condition. However, this section is not the authority for this requirement; therefore, §63.3557(a) will not be cited in the renewal permit condition. For the same reason, §63.3547(a) will not be cited either.
	6.2.6.	The citation of §§63.3557(a)(1) and (a)(2) will be retained in condition 6.2.6. because (1) it is the applicable requirement for the elected compliance option; and (2) similar requirement under the emission rate with add-on control option is already cited in the underlying permit R13-1458D, condition 4.2.4. Note that 45CSR34 is added to the citation of authority for this condition.
§63.3557(b)	4.1.5. †	This applicable requirement is included in the renewal permit. Its corresponding reporting requirement is condition 4.5.2.
§63.3557(c)	3.2.9.	These requirements are included in the renewal permit.
§§63.3557(d), (e), and (f)	None	The permittee does not operate carbon adsorbers, condensers, or concentrators; therefore, these requirements are not applicable.

† Indicates a new permit condition that was not in the current permit.

Note that current permit condition 4.2.1. was based solely on use of the Emission Rate With Add-On Controls Option. Since the permittee has other compliance options in addition to this one, and the requirement in current permit condition 4.2.1. will be incorporated by reference into permit condition 4.1.3., the requirement in current condition 4.2.1. will not be carried over to the renewal permit.

Building No. 33 End Liners in Permit Section 5.0 (Em. Units: MD-1, MD-5, MD-3, MD-4, MD-2)

Since there are no control devices associated with the End Liners, the options under §§63.3491(c) and (d) are not included in Section 5.0 of the renewal permit. According to technical correspondence⁷, the permittee is currently using the *Compliant material option* (§63.3491(a)) for the End Liners to comply with the regulation. In particular, the permittee is currently using nonaseptic end compounds⁸. The applicable existing source limit is in Table 2 to Subpart KKKK, and for nonaseptic end lining compounds is 0.00 lbs HAPs/gal solids. The

⁷ Email dated 4/3/2012 from Mr. John Munsch, EHS Department, Ball Corporation.

⁸ Email dated 4/3/2012 from Mr. John Munsch, EHS Department, Ball Corporation.

following table describes the changes in current permit conditions, as well as additional conditions added to the permit in order to include all applicable compliance options for the End Liners.

Section	Condition	Comments
§§63.3490(b), 63.3500(a)(1)	5.1.4.	This condition sets forth the limits for existing End Liner operations. The current condition is specifically written with the nonaseptic end seal coating type. However, the renewal condition specifies all HAP limits that could apply to the End liners depending on which coating type is used. The language from Table 2 to Subpart KKKK is included in the condition and revised only for purposes of coherence.
§§63.3491(a) and (b)	5.1.9. †	This condition sets forth the compliance options that can be utilized for the End Liners.
§§63.3520 and 63.3521	None	The initial compliance demonstration is complete. Therefore, no permit condition is required for these applicable requirements.
§63.3522(a)	5.1.10. †	This applicable section specifies the means the demonstrating continuous compliance for the compliance option that the permittee is currently utilizing. By incorporating this regulation language, the specific sections regarding calculations, equations, etc. are effectively incorporated by reference.
§63.3522(b)	5.5.2. †	The substantive requirement of this section involves reporting deviations. Therefore, it is included in subsection 5.5. The language “this section” is replaced with “40 C.F.R. §63.3522 (condition 5.1.10.)”. The reference within the regulation to “§§63.3510(b)(6) and 63.3511(a)(5)” is partly incorrect. Specifically, §63.3510(b)(6) does not exist. However, and §63.3510(c)(6) does exist, and pertains to reporting deviations in the NOCS. However, since the NOCS has already been submitted, this reference is unnecessary for this renewal permit. Therefore, the reference to §63.3510(b)(6) will not be included.
§63.3522(c)	5.5.3. †	The substantive requirement of this section involves reporting which identifies coating operations for which the permittee used the compliant material option. This applicable requirement is therefore included in the renewal permit.
§63.3522(d)	5.4.2. †	The substantive requirement of this section involves recordkeeping. The requirement points to sections embodied in permit subsection 3.4.

† Indicates a new permit condition that was not in the current permit.

Note that current permit condition 5.5.1. is from §63.3511(a)(5), and is specifically for the compliant material option. This requirement is already covered by permit condition 3.5.10. Therefore, the language in current permit condition 5.5.1. will not be included in the renewal permit. However, the reference condition to 3.5.10. will be retained.

Building No. 33 Regenerative Thermal Oxidizers in Permit Section 6.0 (Em. Units: TO-1, TO-2)

Control device TO-1 controls emissions from Wagner Sheet Coaters C-1, C-2, and C-3. Since the last renewal the permittee has installed a permanent total enclosure (PTE) capture system between TO-1 and the coaters. Coater C-4 is controlled by TO-2, and was already equipped with a Method 204 PTE at the last renewal. Therefore, this section is related to permit section 4.0.

Section	Condition	Comments
§63.3492(b)	6.1.3. (temperature)	This section requires compliance with the applicable operating limits. For TO-1 and TO-2, these are the combustion chamber

Section	Condition	Comments
	6.1.7. (Pressure)	temperature requirements. For the respective Method 204 PTEs, there is the air flow and pressure drop requirements. The current conditions only cited §63.3542(c) under the emission rate with add-on controls option. Since the permittee may also use the control efficiency/outlet concentration option, the parallel citation of §63.3552(b) has been added to the citation.
§63.3512(j)(3)	6.4.1.	The requirements of this condition are carried over from the current permit because it is required under 40 C.F.R. Part 64 (see citation of authority). While it could be considered repetitive of renewal permit condition 3.4.8.(j)(3), it does specify the operating parameters (i.e., RTO combustion chamber temperatures, and Method 204 PTE differential pressures) that must be monitored under certain Subpart KKKK compliance options. Since the condition is more specific than 3.4.8.(j)(3) it will be retained in the renewal permit.
§§63.3546(c) and 63.3556(c)	6.1.8.	The current condition only cited §63.3546(c) under the emission rate with add-on controls option. Since the permittee may also use the control efficiency/outlet concentration option, the parallel citation of §63.3556(c) has been added to the citation. Although the language is directly from R13-1458D, adding the citation does not affect the R13 requirement since the MACT requirement is applicable.
§§63.3547 and 63.3557	6.2.1.e.	The current condition only cited §63.3547 requirements under the emission rate with add-on controls option. Since the permittee may also use the control efficiency/outlet concentration option, the parallel citation of §63.3557 has been added to the citation.
§§63.3547(a) and 63.3557(a)	3.2.6.	The current condition only cited §63.3547(a) requirements under the emission rate with add-on controls option. Since the permittee may also use the control efficiency/outlet concentration option, the parallel citation of §63.3557(a) has been added to the citation.
§§63.3547(c) and 63.3557(c)	3.2.9.	The current condition only cited §63.3547(c) requirements under the emission rate with add-on controls option. Since the permittee may also use the control efficiency/outlet concentration option, the parallel citation of §63.3557(c) has been added to the citation.
§§63.3547(a)(1)-(2) and 63.3557(a)(1)-(2)	6.2.6.	The current condition only cited §63.3547(a)(1) and (2) requirements under the emission rate with add-on controls option. Since the permittee may also use the control efficiency/outlet concentration option, the parallel citation of §63.3557(a)(1) and (2) has been added to the citation. Although the language is directly from R13-1458D, adding the citation does not affect the R13 requirement since the MACT requirement is applicable.

† Indicates a new permit condition that was not in the current permit.

Note that the citations of authority for permit condition 6.3.5. were not modified since the entire condition is taken directly from R13-1458D, condition 4.3.1. Specifically, even though the permittee is currently using the control efficiency/outlet concentration option (§63.3550 *et seq.*) for these sources, the underlying permit requirement gives emission rate with add-on controls option citations (§63.3540 *et seq.*).

Building No. 33 LTG-1 Coater & Oven controlled by Thermal Oxidizer in Permit Section 7.0 (Em. Units: 007-01, 007-02; Control Device ID: 0003)

This source and control device are in the Part 2 of 2 permit that contains the Building 720 equipment. However, the LTG-1 equipment is actually located in Building 33⁹. According to technical correspondence¹⁰, the permittee is currently using the *Control efficiency/outlet concentration option* (§63.3491(d)) for this coater to comply with the regulation.

Section	Condition	Comments
§63.3490(a), 63.3500(a)(2)(i)	7.1.1.	<p>The current permit correctly sets the limits for LTG-1 as a component included in the collection of equipment constituting an existing affected source. According to §63.3482(b), the affected source is the collection of all of the items listed in paragraphs §§63.3482(b)(1) through (4). Thus, an affected source is not a single coater or any other single piece of equipment listed in §§63.3482(b)(1) through (4), but is the collection of all equipment within the facility.</p> <p>Therefore, while LTG-1 was permitted for construction under permit R13-2295C (issued on 4/2/2008), and its construction date is after January 15, 2003, the coater LTG-1 is not itself considered a new source for interpretation and applying MACT Subpart KKKK.</p> <p>The regulation in §63.3482(c) gives the definition of a new affected source by stating “an affected source is a new affected source if you commenced its construction after January 15, 2003 by installing new coating equipment. New coating equipment is equipment used to perform metal can surface coating at a facility where no metal can surface coating was previously performed and the construction is of a completely new metal can surface coating source where previously no metal can surface coating source had existed.”</p> <p>Clearly, metal coating was performed and metal coating equipment existed at the facility prior to the construction LTG-1. Therefore, the affected source is not a new affected source. Furthermore, the permittee stated in a comment (email dated 7/19/2012) that the installation of the LTG-1 line did not exceed the fixed capitol cost to make the facility a reconstructed source (cf. 40 C.F.R. §63.2). Based upon these facts, the affected source (i.e., facility) is existing in accordance with §63.3482(e).</p>
§§63.3491(a), (c), and (d)	7.1.8. †	This new condition sets forth the available compliance options.
§63.3512(j)(3)	7.4.2.	This recordkeeping is for combustion chamber temperature of the thermal oxidizer and differential pressure of the capture device. This MACT requirement is also facility-wide permit condition 3.4.8.(j)(3). However, it will be specifically retained in permit section 7.4. since it is also a requirement under applicable regulation 40 C.F.R. Part 64 for the source in permit section 7.
§63.3492(b)	7.1.3.	Combustion chamber temperature operating limit specified. There is no change to this permit condition.
§63.3492(b)	7.1.4.	Method 204 PTE differential pressure operating limit specified. There is no change to this permit condition.
§63.3500(a)(2)(ii)	7.2.1.	This condition is the combustion chamber temperature monitoring requirement. Since the emission rate with add-on

⁹ Email dated 01/17/2012 from Mr. John Munsch, EHS Department, Ball Corporation.

¹⁰ Email dated 4/3/2012 from Mr. John Munsch, EHS Department, Ball Corporation.

Section	Condition	Comments
§§63.3540(b)(1), 63.3541(b), 63.3542(c), 63.3546(a).		control option may also be used, the citations have been added to this condition.
§§63.3550(b)(1), 63.3551(b), 63.3552(b), 63.3556(a).		
§63.3500(a)(2)(ii) §§63.3540(b)(1), 63.3541(b), 63.3542(c). §§63.3550(b)(1), 63.3551(b), 63.3552(b).	7.2.2.	This condition is the air flow and differential pressure across PTE monitoring requirement. Since the emission rate with add-on control option may also be used, the citations have been added to this condition.
§63.3552(a)	7.1.9. †	This applicable section specifies the means of demonstrating continuous compliance for the compliance option that the permittee is currently utilizing. By incorporating this regulation language, the specific sections regarding calculations, equations, etc. are effectively incorporated by reference.
§63.3552(c)	7.5.1. †	This applicable section is included in the permit since the permittee is currently utilizing the control efficiency/outlet concentration option.
§63.3552(e)	7.5.2. †	This applicable section is included in the permit since the permittee is currently utilizing the control efficiency/outlet concentration option.
§63.3554	7.1.2.	This applicable section is included in the permit since the permittee is currently utilizing the control efficiency/outlet concentration option. This section is combined with applicable requirement 4.1.4.1. of R13-2295D.
§63.3557(b)	7.1.10. †	This applicable section is included in the permit since the permittee is currently utilizing the control efficiency/outlet concentration option.

† Indicates a new permit condition that was not in the current permit.

Building No. 720 Sheet Coaters & Ovens controlled by Thermal Oxidizer in Permit Section 8.0 (Em. Units: 001-01, 001-02, 001-03, 001-04, 001-05, 001-06, 001-07, 001-08, 001-09, 001-10, 001-11, 001-12; Control Device ID: 0001). According to technical correspondence¹¹, the permittee is currently using the *Control efficiency/outlet concentration option* (§63.3491(d)) for these coaters (except No. C-3 Wagner Sheet Coater, Em. Unit ID: 001-05, Em. Pt. ID: 720-1E, designated by Ball Corporation internally as “C-7”, which is discussed below) to comply with the regulation.

According to technical correspondence¹², the coater designated by Ball Corp. as “C-7” has not operated since 2009, and there is no immediate plan by the permittee to operate the coater. Also, a Method 204 permanent total enclosure (PTE) has not been installed on coater C-7, and thus no PTE verification testing has been performed on C-7. Applicable requirement 4.1.4.2. of R13-2295D (renewal condition 8.1.5.) requires a PTE for coater C-7. However, no time line for installation is given in the underlying requirement. Considering that C-7 is not

¹¹ Email dated 4/3/2012 from Mr. John Munsch, EHS Department, Ball Corporation.

¹² Email dated 4/24/2012 from Mr. John Munsch, EHS Department, Ball Corporation.

currently operating, but is still required by the underlying permit to be equipped with a Method 204 PTE, the compliance plan condition 8.6.1. has been written to ensure that C-7 is not operated until the Method 204 PTE is constructed and tested. Note that the permittee has suggested such a permit term; therefore, the citation of authority includes 45CSR§30-12.7. In order to meet compliance plan requirements in 45CSR§30-4.3.h., scheduling and milestone reporting requirements are included in the condition. Also, a provision has been included to incorporate the Method 204 PTE test report into the Title V permit, which is consistent with historical inclusion of the reports for other Method 204 PTEs at the facility.

Section	Condition	Comments
§63.3490(b), 63.3500(a)(2)(i)	8.1.3.	This condition sets forth the two applicable MACT emission limits: 0.26 lb HAPs/gal solids, or 95% HAP reduction. While the MACT gives two limits (either of which may be complied with), requirement 4.1.12. of R13-2295D requires 95% destruction efficiency. So while the permittee may comply with either MACT limitations, it must still meet the 95% reduction requirement of the NSR permit regardless of the MACT limit chosen. Therefore, the requirement of R13-2295D, 4.1.12. is specifically written at the end of the permit condition.
§§63.3492(b), 63.3500(a)(2)(ii), 63.3546(a), 63.3556(a).	8.1.1.	This condition sets the combustion chamber temperature requirement for Control Device 0001. The requirement is carried over to the renewal without change.
§§63.3492(b), 63.3500(a)(2)(ii)	8.1.2.	This condition sets the pressure differential requirement for the Method 204 PTE. The language of the current permit condition is revised to match that in R13-2295D, 4.1.5. The language of R13-2295D is modified to make it specific to the six (6) Method 204 PTEs for the coaters in permit section 8.0. This means that language regarding LTG-1 will not be included in 8.1.2.
§§63.3491(a), (c), and (d)	8.1.6. †	This condition sets forth the compliance options that can be employed for the coaters.
§63.3512(j)(3)	8.4.1.	This recordkeeping is for combustion chamber temperature of the thermal oxidizer and differential pressure of the capture device. This MACT requirement is also facility-wide permit condition 3.4.8.(j)(3). However, it will be specifically retained in permit section 8.4. since it is also a requirement under 40 C.F.R. Part 64 that applies to the emission units in permit section 8.0.
§§63.3492(b), 63.3500(a)(2)(ii) 63.3541(b), 63.3542(c), 63.3551(b), 63.3552(b)	8.2.1.	This condition requires monitoring of combustion chamber temperature for Control Device 0001. The citations for the emission rate with add-on control option are added for the renewal permit condition.
§§63.3492(b), 63.3500(a)(2)(ii) 63.3541(b), 63.3542(c), 63.3551(b), 63.3552(b)	8.2.2.	This condition requires monitoring of air flow and differential pressure across the Method 204 PTE. The citations for the emission rate with add-on control option are added for the renewal permit condition.
§§63.3492(b), 63.3546(c)(2), 63.3556(c)(2)	8.2.3.	This condition requires a valve inspection plan for regenerative thermal oxidizer. According to application Attachment G for this RTO (Control device ID: 0001), it is a regenerative type; therefore, this requirement is applicable.
§63.3552(a)	8.1.7. †	This applicable section specifies the means of demonstrating continuous compliance for the compliance option that the permittee is currently utilizing. By incorporating this regulation language, the specific sections regarding calculations, equations,

Section	Condition	Comments
		etc. are effectively incorporated by reference.
§63.3554	8.1.8. †	This applicable section is included in the permit since the permittee is currently utilizing the control efficiency/outlet concentration option.
§63.3557(b)	8.1.9. †	This applicable section is included in the permit since the permittee is currently utilizing the control efficiency/outlet concentration option.

† Indicates a new permit condition that was not in the current permit.

Building No. 720 Planeta Press & UV Sheet Coater in Permit Section 9.0 (Em. Units: 006-01, 006-02). According to technical correspondence¹³, the permittee is currently using the *Emission rate without add-on controls option* (§63.3491(b)) for these sources to comply with the regulation.

Section	Condition	Comments
§63.3490(b) 63.3500(a)(1)	9.1.1.	This condition sets forth the applicable MACT emission limit of 0.26 lb HAP/gal solids. The citation of authority for this renewal will have the citations of §§63.3531(a) through (h) and §63.3532(a) removed since these are specific to the emission rate without add-on controls option, which is only one of two available compliance options for the Planeta Press. Further, these citations do not actually require the HAP limit, and are therefore not authority for including the limit in the operating permit. The current permit cites §63.3500(a)(2)(i). However, since the emission rate without add-on controls option is being utilized, the citation must instead be §63.3500(a)(1). Therefore, it is corrected in the renewal permit.
§§63.3491(a) and (b)	9.1.3. †	This condition sets forth the compliance options available. Neither of the options that require a control device are included since the Planeta Press is not equipped with a control device.
§63.3532(a)	9.1.4. †	This applicable section specifies the means of demonstrating continuous compliance for the compliance option that the permittee is currently utilizing. By incorporating this regulation language, the specific sections regarding calculations, equations, etc. are effectively incorporated by reference. The requirements of current permit conditions 6.4.1. and 6.4.2. are combined and incorporated into renewal permit condition 9.1.4.
§63.3532(b)	9.5.2.	This applicable section is a reporting requirement specific to the emission rate without add-on controls option, which is the option currently utilized by the permittee. Therefore, this applicable requirement is written in the renewal permit.
§63.3532(c)	9.5.3.	This applicable section is a reporting requirement specific to the emission rate without add-on controls option, which is the option currently utilized by the permittee. Therefore, this applicable requirement is written in the renewal permit.
§63.3532(d)	9.4.2.	This applicable section is a recordkeeping requirement specific to the emission rate without add-on controls option, which is the option currently utilized by the permittee. Therefore, this applicable requirement is written in the renewal permit.

† Indicates a new permit condition that was not in the current permit.

¹³ Email dated 4/3/2012 from Mr. John Munsch, EHS Department, Ball Corporation.

40 C.F.R. §63.3492(a) states that “For any coating operation(s) on which you use the *Compliant material option* or the *Emission rate without add-on controls option*, you are not required to meet any operating limits.” Similarly, §63.3493(a) states “For any coating operation(s) for which you use the *Compliant material option* or the *Emission rate without add-on controls option*, you are not required to meet any work practice standards.” While these sections are applicable to the Planeta Press, they do not require the permittee to do anything. Writing them as permit conditions would not add value to, or serve any purpose for, the renewal permit. Therefore, §63.3492(a) and §63.3493(a) are not included as conditions in the renewal permit.

Building No. 720 Press-Coater-Oven Lines in Permit Section 10.0 (Em. Units: 002-01 through 002-13, and 003-01 through 003-10). According to technical correspondence¹⁴, the permittee is currently using the *Emission rate with add-on controls option* (§63.3491(c)) for these coaters to comply with the regulation.

Section	Condition	Comments
§§63.3490(b), 63.3500(a)(2)(i)	10.1.1.	This condition sets forth the applicable emission limit. Table 3 is not included since the control efficiency/outlet concentration option is not an option for these coaters without a Method 204 PTE.
§63.3491(a) and (c)	10.1.4. †	This condition sets forth the compliance options that can be employed. The control efficiency/outlet concentration option is not listed since the capture hoods are not Method 204 PTEs.
§§63.3492(b), 63.3500(a)(2)(ii)	10.1.2.	This condition sets the pressure differential requirement for the inlet duct to the regenerative thermal oxidizer (ID# 0001).
§63.3542(a)	10.1.7. †	This applicable section specifies the means the demonstrating continuous compliance for the compliance option that the permittee is currently utilizing. By incorporating this regulation language, the specific sections regarding calculations, equations, etc. are effectively incorporated by reference.
§§63.3492(b), 63.3500(a)(2)(ii) 63.3546(a)	10.1.6.	This condition sets the minimum temperature requirement for the regenerative thermal oxidizer (ID# 0001). The underlying requirement is condition 4.1.13. of permit R13-2295D. This requirement also appears in renewal permit condition 8.1.1. because RTO 0001 also controls emissions from the coaters C-5 through C-10, which are equipped with Method 204 PTEs. However, the lines PC-3 through PC-7 are not equipped with Method 204 PTEs. Therefore, it is not correct to cite control efficiency/outlet concentration option requirements such as §63.3556(a) in this permit condition for equipment that does not meet the criteria to qualify for this compliance option. The citation §63.3556(a) will not be included in the renewal permit. However, the underlying permit language that refers to §63.3556(a) will be kept because (1) it is the underlying requirement; and (2) the temperature requirement is established under the control efficiency/outlet concentration option that is applied to the Coaters C-5 through C-10 that are equipped with Method 204 PTEs.
§§63.3492(b), 63.3500(a)(2)(ii) 63.3541(b), 63.3542(c)	10.2.1.	This condition requires monitoring of the differential pressure at the thermal oxidizer inlet.
§§63.3492(b), 63.3500(a)(2)(ii) 63.3541(b),	10.2.2.	This condition requires monitoring of combustion chamber temperature for Control Device 0001. This RTO is a common control device with coaters C-5 through C-10. Thus, condition

¹⁴ Email dated 4/3/2012 from Mr. John Munsch, EHS Department, Ball Corporation.

Section	Condition	Comments
63.3542(c)		10.2.2. refers to the monitoring requirement in 8.2.1. For the renewal, the condition language is modified to reference the monitoring in 8.2.1., and the citations from the MACT are now included since this is a requirement of the regulation for PC-3 through PC-7 controlled by RTO 0001.
§63.3547(b)	10.1.8. †	This applicable section is included in the permit since the permittee is currently utilizing the emission rate with add-on controls option.

† Indicates a new permit condition that was not in the current permit.

Current permit (part 2 of 2) condition 7.2.1. states “Initial and Continuous Compliance with the 40 C.F.R. 63 Subpart KKKK Emission Limit. 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 10.1.1. [40 C.F.R. §§ 63.3541(d), 63.3542(a), and 45CSR34].” This is included by reference in the *Emission rate with add-on controls option* given in renewal condition 10.1.4.; thus, it is unnecessary to repeat this requirement in the monitoring subsection and is not included in the renewal permit.

- d. Operating Parameter Change (renewal permit condition 10.1.2.). The permittee submitted a permit determination (letter dated 12/29/2011) requesting a change in a MACT Subpart KKKK monitoring parameter based upon new test data. In November 2006, VOC capture efficiency tests were conducted on the lines PC-3, PC-4, PC-5, PC-6, and PC-7. The inlet pressure of the RTO was monitored using a pressure transmitter permanently installed in the RTO ductwork. The inlet pressure became the MACT operating parameter which would assure the coater hoods continued to achieve sufficient draw to maintain the tested capture efficiency. The parameter value that was established during the testing was an inlet RTO pressure of -1.7 inches of water column. This value was programmed into the RTO control panel, and a blower at the inlet of the RTO automatically adjusted its speed to maintain the required pressure. In addition to the RTO inlet pressure, the airflow in each of the coater hood ducts was measured using pitot tubes and a hand-held pressure manometer. These measurements were not considered MACT operating parameters. They were measured to assist in the VOC capture efficiency calculations.

In May 2011, the facility hired a contractor to perform routine maintenance on the RTO. The contractor suspected the pressure transmitter in the RTO duct was inaccurate and replaced it with a similar unit. He noted that the RTO blower immediately began running at a much higher speed in order to maintain the programmed inlet pressure of -1.7 inches of water. The contractor recommended that the inlet pressure be reset to -1.0 inches of water to save both energy and wear on the blower.

To verify the contractor’s recommendation, the permittee tested the airflows in each coater hood duct at the lower RTO inlet pressure of -1.0 inches of water. The results confirm the contractor’s observation that the blower had been running at an excessive speed after the pressure transmitter replacement. Even at the reduced inlet pressure of -1.0 inches of water the airflows in each coater hood duct are greater than those monitored during the November 2006 MACT compliance test. The results indicated that, even at lower RTO inlet pressure, the coater hoods are achieving greater capture efficiency than they were during the MACT compliance test. The permittee therefore requested the DAQ allow the facility to change the MACT operating parameter for the lithography lines (PC-3, PC-4, PC-5, PC-6, and PC-7) from an inlet pressure of -1.7 inches of water to -1.0 inches of water.

The permittee stated that the most plausible explanation for the increased air flow at the same pressure reading is that the original pressure transmitter was indeed inaccurate and had been

so since before the November 2006 MACT testing. These units come pre-calibrated from the factory and have no external adjustments. The problem with the transmitter was discovered only after the RTO was shut down for maintenance and the transmitter was found to be giving a pressure reading when instead it should have been reading 0.0 inches of water. The permittee's believes that even though the original transmitter was providing an inaccurate pressure reading, it was providing a consistent reading from November 2006 to May 2011 and the operating conditions of the control equipment were reliably maintained throughout that period.

The permittee's permit determination request became Permit Determination No. PD12-004, and DAQ determined that no permit was required for the requested change, and this action was taken on January 25, 2012. Therefore, the differential pressure is changed from 1.7 inches of water to 1.0 inches of water in permit condition 10.1.2.

The definition of excursion under applicable requirements of 40 C.F.R. Part 64 must be changed in renewal permit condition 10.2.1. The pertinent part of the current permit condition reads:

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 7.1.2. (which product is equal to 1.53 inches of water column) for a period of time in excess of 30 minutes.

The excursion definition in condition 10.2.1. will be 90% of the revised differential pressure, which is $(0.90) \times (1.0 \text{ in. w.c.}) = 0.90 \text{ in. w.c.}$ Also, the reference to current condition 7.1.2. is changed to renewal condition 10.1.2.

- e. The gas temperature monitoring parameter requirements for thermal oxidizers 0001, 0003, TO-1, and TO-2, have been combined into one condition 3.2.9. Since the accuracy requirements are different, condition 3.2.9.c. has been modified to specify the accuracies (which are already specified in the current permit conditions).

VI. **Corrections & Changes Suggested in the Renewal Application.** In Section 22 of the General Application forms, the permittee noted "Obsolete/Incorrect Permit Conditions". The affected renewal permit conditions and the permittee's suggested changes are given in the tables below, along with an explanation as to why and how the suggested change will, or will not, be made.

Current Permit Part 1 of 2

Renewal Condition	Permittee's Suggested Change or Note	Discussion
None	3.5.10. (Obsolete)	This was the NOCS requirement under MACT Subpart KKKK, which has been fulfilled. The requirement is not included in the renewal (cf. Subpart KKKK discussion).
3.6.1.	3.6.1. (2 nd sentence is obsolete)	The sentence was "Refer to 5.6.1. for the compliance plan for the End Liners." Since the end liners have been brought into compliance, this language is obsolete, and is not included in the renewal.
5.1.4.	5.4.1. (0.00 lbs HAPs/gal solids is incorrect. MACT allows 0.1% for OSHA carcinogens and 1.0% for non-carcinogens)	Permit condition 5.4.1. is recordkeeping. The permittee meant condition 5.1.4. which contains the 0.00 lbs HAPs/gal solids limitation. This is the limit for nonaseptic end seal compounds, which the permittee informed DAQ that it would be using on the end liners when the current permit was written. Therefore, it is the correct limitation. This limit did not (and does not) prevent the permittee from using materials that are less

Renewal Condition	Permittee's Suggested Change or Note	Discussion
		<p>than 0.1% for OSHA carcinogens and 1.0% for non-carcinogens and still meet the 0.00 lb HAPs limit. These are simply details within the regulation that were not directly mentioned in the permit condition. However, it was included by reference since current condition 5.1.4. states "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)..." Equation 1 includes a multiplier variable W_c, which is the mass fraction of organic HAP in the coating. The methods of determining mass fraction of organic HAP are given in §63.3521(a). The mentioned threshold percentages are given in both §§63.3521(a)(1)(i) and (a)(4). Thus, this detail was included by reference, and the current limit is not incorrect. All applicable limits have been included in the renewal, and the condition refers to the means of demonstrating compliance with the applicable limit.</p>
None	6.1.1. (Obsolete)	Refer to the discussion above regarding R13-1458D. The requirement will not be included in the renewal.
6.1.4.	6.1.5. (Allowable gas usage is astronomical. Condition is far less restrictive than 6.1.6, which equates to about 6×10^7 ACF/yr.)	The limit is directly from the underlying NSR permit, which cannot be modified under Title V permitting procedures. No change will be made.
6.1.1.	6.1.15. (Unnecessary. Condition is far less restrictive than 6.1.2)	The requirement is necessary because 45CSR§6-4.1. is applicable to the source. However, it should have been streamlined with the NSR permit limit. The renewal permit streamlines the 45CSR6 limitation.
6.3.3.	6.3.4. (Incorrect. References 2 incorrect conditions)	The underlying requirement is R13-2111A, B.4. This refers to its requirements A.3. and A.4. The referenced condition 4.1.1. is correct for A.3. However, the reference to 6.1.5. should have been changed to 6.1.6. under the minor modification MM01. The references will be verified to ensure accuracy.
6.2.10.	6.3.5 (Unnecessary. Duplicate of 6.2.10.d)	Condition 6.3.5. is part of the CAM Plan for VOC emissions; therefore, it is necessary. The requirements of 6.2.10. are from MACT Subpart KKKK, which also serve as part of the CAM Plan for VOC. The two applicable requirements will be combined to remove any redundancy.
6.3.5. 6.3.6.	6.3.7 & 8 (Obsolete. Completed.)	<p>Condition 6.3.7. is to demonstrate initial compliance with the VOC emission limit in condition 6.1.2. Condition 6.3.8. is to demonstrate compliance with the opacity limits of 45CSR§§6-4.3. and 4.4.</p> <p>Even though this testing has been performed once does not mean it is not necessary. In fact, the testing in 6.3.5. and 6.3.6. is required to be performed if the permittee elects to establish new operating limits, "or once every ten years for the purpose of verifying the compliance" in accordance with renewal condition 6.3.7.</p>

Renewal Condition	Permittee's Suggested Change or Note	Discussion
6.5.1.	6.5.1. (Incorrect. MACT exempts facility from CAM)	<p>Therefore, the requirements are not obsolete, and will be retained in the renewal permit.</p> <p>40 C.F.R. §64.2(b)(1)(i) reads “<i>Exempt emission limitations or standards</i>. The requirements of this part shall not apply to any of the following emission limitations or standards: (i) Emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act.” MACT Subpart KKKK meets this criterion, and so pollutant limitations and standards (i.e., for organic HAP) imposed by the MACT are not subject to CAM.</p> <p>40 C.F.R. §64.2(a) states that CAM applies to a pollutant-specific emissions unit (PSEU). The regulation defines a PSEU as “an emissions unit considered separately with respect to each regulated air pollutant.” Each pollutant of the source must be evaluated using the criteria in §§64.2(a)(1) through (3). This means an emissions unit may be subject to CAM for one or more pollutants it emits, but not for another emitted pollutant.</p> <p>It was established in the last renewal (i.e., current permit) that certain of the permittee’s sources are subject to CAM for the pollutant VOC since they meet the criteria §§64.2(a)(1) through (3). Further, the VOC emission limitations are not exempt by §64.2(b). The idea that “MACT exempts facility from CAM” or that “MACT supersedes CAM” (as stated in application Attachments G) is an incorrect conclusion.</p> <p>The perceived problem that should be addressed is redundancy. In this case, the permittee uses essentially the same monitoring under MACT Subpart KKKK to meet the requirements of CAM for VOC. U.S. EPA guidance¹⁵ on CAM states the following:</p> <p>“To the extent that the pollutant-specific emissions units subject to these exempted rules or emissions limitations (or are municipally-owned peaking units) are subject to other rules or emissions limitations even for the same pollutant (e.g., post-1990 40 CFR part 60 NSPS for PM and a SIP limit for PM), the source owner must address the part 64, CAM, requirements for assuring compliance with the non-exempt rules or emissions limitations. That monitoring may be based on the monitoring required for the exempted rule but the permit submittal must include justification that the selected monitoring will be sufficient to satisfy part 64 and provide a reasonable assurance of compliance with the non-exempt rule or emissions limitation.”</p> <p>The above guidance excerpt describes the permittee’s situation. In this case, even though the affected PSEUs are subject to MACT Subpart KKKK for HAP, the</p>

¹⁵ Response 4 in FAQs concerning CAM Rule at <http://www.epa.gov/ttn/emc/cam/camfaq1r1004.pdf> accessed 2/16/2012.

Renewal Condition	Permittee's Suggested Change or Note	Discussion
		permittee must also address assuring compliance with non-exempt (i.e., VOC) emission limitations. The monitoring to assure compliance with the VOC limits may be based on monitoring required for the CAM-exempted rule (which is the current practice in this case). The permittee has addressed CAM applicability for VOC in the renewal before this one, and no changes have been made in the PSEUs to exempt them from CAM. Therefore, all CAM requirements will be carried over to the renewal operating permit.

Current Permit Part 2 of 2

Renewal Condition	Permittee's Suggested Change or Note	Discussion
3.4.10. 3.5.11.	3.4.5 & 3.5.11 (Incorrect. MACT exempts facility from CAM)	Same as discussion and determination above for condition 6.5.1. in the Part 1 of 2 permit.
7.1.2. 7.1.4. 8.1.2. 8.1.5.	4.2.2 (Obsolete. Replaced by 4.1.4.2 & 4.1.5 in R13-2295D)	These changes have been made. See discussion above regarding permit R13-2295D.
8.1.3. 7.1.1. 9.1.1.	4.1.3, 5.1.1, 6.1.1 (Incorrect. The 0.26 can be the average of all the coaters. It is not a requirement of any individual coater.)	<p>The parenthetical list of affected coaters in current condition 4.1.3. does not necessarily mean that the limitation applies to each individual coater. To provide clarity, applicable rule language will replace the current permit language. The renewal condition language “determined according to the requirements” in 40 C.F.R. §63.3521, §63.3531, §63.3541, or §63.3551 (as applicable) incorporates by reference the allowance in the regulation to “average” the coaters.</p> <p>The reference to LTG-1 in current condition 5.1.1. could be interpreted to single out the coater so that it could not be averaged with other coaters of the same subcategory and using the same coating type. However, this is affected by the fact that it was incorrectly determined in the first renewal that LTG-1 is an existing source as defined in MACT Subpart KKKK. It has been demonstrated in the Subpart KKKK discussion above that LTG-1 is a new source for the MACT. Therefore, the limits in current condition 5.1.1. are incorrect, and will be replaced with those for a new source in the renewal permit. Since LTG-1 must meet a different (more stringent) limitation than the other existing coaters, it is a moot point that condition 5.1.1. does not allow for averaging among other coaters.</p> <p>Current condition 6.1.1. appears to single out the Planeta Press PC-8 and not allow for averaging as prescribed by the MACT. To provide clarity, applicable rule language will replace the current permit language. The renewal condition 9.1.1. language “determined according to the requirements in 40 C.F.R. §63.3521, §63.3531” incorporates by reference the allowance to “average” the coaters. Since the Planeta Press is not equipped with a control device, requirements under §63.3540 <i>et. seq.</i> and</p>

Renewal Condition	Permittee's Suggested Change or Note	Discussion
		63.3551 <i>et. seq.</i> do not apply. Therefore, such requirements are not included in the condition.
7.1.1.	5.1.1. (Incorrect. The 95% should be 97% as in 5.1.8.)	Refer to the discussion above concerning 40 C.F.R. 63 Subpart KKKK and renewal condition 7.1.1.
7.1.6.	5.1.6 & 5.1.7 (Obsolete)	The requirement in current condition 5.1.6. is still applicable. Therefore, it will be included in the renewal permit. The requirement of condition 5.1.7. must necessarily be fulfilled since LTG-1 is operating. Therefore, this condition will not be included in the renewal permit.
None	5.3.4 (Obsolete. Completed.)	Since this testing (§63.3550(a)(1)) for LTG-1 had to be completed within 180 days of startup, and has been completed, the condition is no longer necessary and will be excluded from the renewal permit.
None	5.4.5 (Obsolete. Completed.)	This interim recordkeeping requirement (§63.3550(a)(4)) is no longer applicable since the performance testing has been completed. Therefore, the condition will not be included in the renewal permit.
None	7.3.3. (Incorrect. Cond. 4.3.3. doesn't exist.)	The permittee is correct that there is no condition 4.3.3. Since the current permit was not revised during its term, this is not an oversight in that regard. Also, there is no destruction efficiency testing mentioned in any other requirement of the current permit. The fact sheet for the current permit was reviewed. At the end of the CAM plan discussion for coaters PC-3 through PC-7, the reason for referencing is explained. The common factor among PC-3 through PC-7 and the sources in section 4.3 (Coaters C-1 through C-6) is the same thermal oxidizer (Control Device ID 0001). Thus, any CAM requirements for the common control device would not need to be duplicated in current permit section 7. There is no DE testing requirement, and the condition will not be included in the renewal permit.

VII. Miscellaneous Changes

- a. Conditions 3.1.1. and 3.1.2. have been modified to agree with the current language of 45CSR6.
- b. The citation of authority for condition 3.1.3. has been updated since 45CSR15 has been repealed and 45CSR34 now adopts 40 C.F.R. Part 61.
- c. Condition 3.3.1.d. has been added to the Title V “boilerplate” and the citation of authority has been revised.
- d. The address in condition 3.5.3. is changed from “Office of Enforcement and Permits Review (3AP12)” to “Office of Air Enforcement and Compliance Assistance (3AP20)”.
- e. The requirement in R13-2111, B.1. pertaining specifically to 45CSR§6-6.1. was not included in the current permit. It has been added in the renewal as permit condition 3.1.21.
- f. Current part 1 of 2 permit condition 6.1.15. sets forth the PM limit from 45CSR6 from emission point 1E. This limit is streamlined by the more stringent limit of R13-1458D, condition 4.1.7.a. Therefore, the limits are combined into one condition (6.1.1.) with a streamlining note.

- g. Current part 1 of 2 permit condition 6.1.12. cites both R13-2111, B.1., and 45CSR§6-7.1. The language comes directly from 45CSR§6-7.1.; however, this requirement is not specified by R13-2111A, condition B.1. Therefore, the citation of R13-2111, B.1. will not be included in the renewal permit. Further, since this condition pertains to testing, it has been relocated to permit subsection 6.3. as renewal condition 3.1.22.
- h. The language “for a period of no less than five (5) years” is replaced by “in accordance with condition 3.4.2.” in the next to last sentence of condition 6.2.5.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

- I. **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 requirements of Subpart TT that are incorporated by reference into applicable permit conditions. But permit R13-1458, condition 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.
- II. **Condition 4.1.6. of Permit R13-1458D.** This requirement remained in effect until the Air Preheater F147 was replaced with the MEGTEC Cleanswitch® regenerative thermal oxidizer identified as TO-1. The permittee confirmed in a 4/3/2012 email to DAQ that the replacement has been completed; therefore, this requirement is no longer applicable.
- III. **Condition 4.1.7.f. of Permit R13-1458D.** This requirement was to calibrate the temperature measuring system within 30 days of startup of TO-1. The permittee confirmed in a 6/21/2012 email to DAQ that startup was in March 2010 and the monitoring system has been calibrated twice since then; therefore, this requirement is no longer applicable.
- IV. **Condition 4.1.2. of Permit R13-2295D.** This requirement states that the old coating line LTG C-7 shall be disconnected and permanently removed from service before the new sheet coating line LTG-1 is placed into service. The permittee confirmed in a 4/3/2012 email to DAQ that LTG C-7 has been disconnected and removed from service, and the new coating line LTG-1 is in service; therefore, this requirement is no longer applicable.
- V. **Condition 4.3.1. of Permit R13-2295D.** This requirement was for performance testing to establish the LTG-1 thermal oxidizer combustion temperature limit no later than 180 days after the startup of the new LTG-1 line. This testing has been completed, and there are no ongoing requirements; therefore, this requirement is no longer applicable.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: July 27, 2012
Ending Date: August 27, 2012

All written comments should be addressed to the following individual and office:

Denton B. McDerment, P.E.
Title V Permit Engineer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Denton B. McDerment, P.E.
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1221 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

No comments were received from either the public or U.S. EPA.